

EDUCATION IN SOUTH AUSTRALIA

*Report of the Committee of Enquiry into
Education in South Australia
1969-1970*

ADELAIDE, SOUTH AUSTRALIA

February 1971

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February 1971

The Hon. Hugh Hudson, M.P.,
Minister of Education,
Parliament House,
ADELAIDE.

Dear Mr. Minister,

On 29th January 1969, the Minister of Education at that time, the Hon. Joyce Steele, M.P., appointed us to examine, and to report and make recommendations to the Minister on:

- (i) The whole educational system of the State in order to determine the most effective use of resources available to the State for education;
- (ii) The organisation of the Education Department, including the organisation of teacher training;
- (iii) Means by which curricula and teaching methods of the schools of the Education Department can be kept under continuing review.

On 21st September 1970, at your request, we made available drafts of three chapters relating to the second term of reference, namely the chapters on tertiary education, the preparation of teachers and the organisation of the Education Department. At that time we explained that the draft chapters might need some revision when the Report as a whole was completed; and some amendments have indeed been made.

We now have the honour to submit to you the full and unanimous Report of the Committee.

Yours sincerely,

PETER KARMEL

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CHAPTER 1

Introduction

TERMS OF REFERENCE

1.1 The Committee of Enquiry into Education in South Australia was appointed on 29th January 1969 by the Hon. Joyce Steele, M.P., Minister of Education at that time. The terms of reference of the Committee were:

To examine, and to report and make recommendations to the Minister on:

- (i) the whole educational system of the State in order to determine the most effective use of resources available to the State for education;
- (ii) the organisation of the Education Department, including the organisation of teacher training;
- (iii) means by which curricula and teaching methods of the schools of the Education Department can be kept under continuing review.

1.2 These terms of reference are extremely wide. We have interpreted the first term to comprehend all levels of education from pre-school to tertiary, and both public and private sectors. Faced with the magnitude of the task, we have limited our inquiries to what we have judged to be the issues central to the terms of reference, and we have eschewed many interesting and important topics to which our attention was directed in submissions made to us.

1.3 In our view, the terms of reference required us to concentrate on the assessment of the provision for education in South Australia and on the organisation employed in its management. Thus we have not investigated the content of curricula and syllabuses, the methodology of teaching and learning or the design of buildings used for educational purposes, although we do emphasise the importance of keeping these matters under review and suggest means for so doing.

1.4 We set out in Chapter 2, by way of background, a brief history of education in South Australia. In Chapter 3 we discuss, in broad terms, the purposes of the educational system. Assessment of the effectiveness of the provision for education and of the method of organising and managing the provision can be made only in terms of these purposes. In the same way, our recommendations for change must be designed in the light of what we judge these purposes to be. The first of the terms of reference is dealt with in Chapters 4-15; the second in Chapters 16-17; the third in Chapter 18. In Chapter 19 we draw together our conclusions and summarise our recommendations.

1.5 We have tried to limit our recommendations to major considerations; and we have deliberately refrained from recommending

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on matters of detail. We have, however, freely made suggestions where we deemed them appropriate, particularly in relation to matters arising from our recommendations. We have taken the view that the Report is addressed to the general public, not merely to those whose knowledge of education in South Australia is already considerable. For this reason we have included material describing the present situation in some detail as a contribution to the increased level of community participation in educational affairs which we frequently recommend.

1.6 Our recommendations and suggestions for change are intended to reflect six qualities of an educational system on which we place high value. These are a non-authoritarian approach to educational matters; a concern for the individual child; the equality of educational opportunities; a diversity of educational institutions; a decentralisation of decision-making; and the opening-up of the educational system to a variety of ideas. However, we do not believe that there is any great virtue in change for the sake of change. Consequently we have not recommended major changes unless we have been convinced that, on the balance of advantages, substantial net gains are likely to flow from them; and, in recommending changes, we have had regard to the historical processes leading to the present situation and have tried to avoid suggestions which would be so difficult to implement in present circumstances as to render them virtually impracticable.

1.7 The inquiry has been a relatively long one, extending over nearly two years. As a result, some of the material used in the Report is already a little out of date. We have attempted to update the material as far as possible. However, our projections of student numbers were prepared in 1969, with the year 1968 as a base, in order to provide the Committee with necessary basic information. More importantly, the present period is one of rapid change for educational policies, and the Education Department has been implementing new policies and modifying old ones during the course of the inquiry. Consequently some of our recommendations and suggestions may be rendered superfluous by action already taken by the Department.

PROCEDURE

1.8 The Committee held its first meeting on 24th February 1969. It has met on 26 separate occasions, extending over 42 days. In addition, members of the Committee spent 16 days visiting 44 educational institutions and speaking with many students, teachers and parents. The institutions visited are listed in Appendix K. During 1969, one member was in England and the United States of America for some time and took the opportunity of investigating matters of special interest to the Committee; and the Chairman visited New Zealand to examine some relevant aspects of the educational system of that country.

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1.9 At its first meeting, the Committee resolved to invite, through advertisement in the press, persons and organisations to make submissions to it. In addition, the Committee issued written invitations to 51 organisations which it regarded as having a special and direct interest in education in South Australia. A total of 125 submissions were received in response to the public advertisement and the invitations, and in reply to direct requests from the Committee. The authors of the submissions are listed in Appendix I.

1.10 The Committee did not hear evidence in public or hold discussions with the authors of all the submissions. However, it invited representatives of the authors of 34 of the submissions to discuss with it questions arising from the submissions. A total of 149 persons appeared before the Committee, including some who appeared before it at its express request. The persons who appeared before the Committee are listed in Appendix J. A verbatim record of all these discussions was made, not for the purpose of publication but as an aide-memoire for members of the Committee. The transcript amounted to 488 foolscap pages.

1.11 The Committee's main sources of material were submissions made to it, and publications of the State Education Department and of the Commonwealth Statistician. The Committee received an extensive submission, with supporting attachments, from the Education Department, and had the benefit of access to the South Australian section of the National Survey of Educational Needs prepared by the State Government for presentation to the Commonwealth Government in April 1970. The Committee also drew on many publications on educational matters of both Australian and overseas origin. In addition, the Committee conducted five special surveys relating to: non-government non-Catholic schools; staff turnover and income of government schools; pre-school institutions not affiliated with the Kindergarten Union of South Australia; new tertiary students; and private technical schools. Details of these special surveys are set out in Appendices B, C, E, F and G respectively. The sources of statistical material are attributed at the foot of Tables where the material is taken direct from publications or submissions. Where no source is attributed, the Table has been derived by the Committee, generally from official publications.

ACKNOWLEDGMENTS

1.12 The Committee has served during the administration of three Ministers of Education (the Hon. Joyce Steele, M.P., the Hon. John Coumbe, M.P., and the Hon. Hugh Hudson, M.P.), from whom it has received sympathetic support. The Committee has received the utmost co-operation from the Education Department of South Australia. We are especially grateful to the former Director-General of Education (Mr. J. S. Walker, C.B.E.) and to the present Director-

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General (Mr. A. W. Jones) for the assistance that they have personally rendered to the Committee and for their willingness to provide us with material, often specially prepared, and to allow officers of the Department to have discussions with us.

1.13 The Committee has received a great deal of assistance from officers of the South Australian Office of the Commonwealth Bureau of Census and Statistics and from officers of the computing centre of the University of Adelaide and the Flinders University of South Australia. The Committee is also indebted to Dr. H. H. Penny and Mr. B. K. Hyams for assistance in providing material for Chapter 2, to Mr. L. E. Kiek for material for Chapter 7, and to Mr. L. S. Piddington for material for Chapter 13, to Mr. W. A. Cowan for editing the manuscript, to Mrs. Margaret Southwood for preparing the index and to Mr. R. W. Smith for the typographical design.

1.14 The Committee wishes to place on record its appreciation of the work done by those who served on its secretariat: the late Mr. W. Thompson who served as Secretary of the Committee from its inception until 27th April 1969; Mr. E. C. Wilson who succeeded him as Secretary; Mr. R. R. Hirst, Consultant from the Committee's inception until 15th January 1970; and Mrs. Jean Blackburn, Consultant from 19th April 1969. This Report would not have emerged but for their work; and the Committee wishes to pay a special tribute to Mrs. Blackburn's contribution. Finally, we must express our thanks to the hundreds of people, professional and lay, who made submissions, who took part in discussions with the Committee and who demonstrated their intense interest in what is perhaps the most significant area of activity in society today.

CHAPTER 2

Historical Background

2.1 Formal education in South Australia began with the establishment of the colony in 1836. No British tradition at that time favoured State initiative in education. The main agencies organising schooling in Britain were the churches, which had been helped since 1833 by small government grants. The early church-based schools in South Australia, although they would have preferred to operate independently, could not survive without assistance from public funds. This was first provided to schools in 1847, and later confined to non-denominational schools by the Act of 1852 which set up a Board of Education to administer the grants. The essential features of the present State system of education in South Australia derive from the Act of 1875 which crystallised a quarter of a century of development into a highly centralised organisation through which the State assumed full responsibility for schooling, and State aid to non-government schools was ended. Community participation in education, never strong in South Australia, further declined with the growth of an Education Department. Population distribution and religious diversity played important parts, as in other Australian States, in the assumption of State responsibility and in the centralisation of administration, finance, educational decision-making and the employment and training of teachers. By this means it was hoped to provide equality of opportunity for children in all parts of the State. Standardisation and uniformity were offshoots of this desire for equal minimum provision. Present moves towards diversity and recognition of the need for positive discrimination in favour of disadvantaged groups run contrary to a tradition and an organisational framework built up over nearly a century of public education.

EDUCATION BEFORE 1875

2.2 The founding fathers of the colony were imbued with English middle-class, nonconformist traditions of self-help, which opposed State action in any field where voluntary effort could be relied upon. In addition, coming from a country where an established church enjoyed special privileges from which they as nonconformists were excluded, the colonists saw the separation of church and State as an essential condition of religious freedom. South Australia's founders were thus opposed to State action of any form in education. The direct assumption of State responsibility ran counter to their voluntaryist ideas. Subsidies paid to church schools were seen as a form of State aid to religion and likewise were opposed.

2.3 English traditions often fared badly when transplanted into inhospitable Australian soil. The rigours of settlement, aggravated

HISTORICAL BACKGROUND

by the occasional economic crises that confronted the colony in the early years, served to hasten the retreat from formerly cherished ideals. Given such adverse conditions and given the firm belief of colonial leaders in the value of education, the early entry of the State into education was perhaps inevitable. Governor Robe's Ordinance affording a capitation grant to church schools in 1847 met with vigorous dissenter-voluntaryist opposition. In 1852 a now partly elected Legislative Council agreed to sever the links between church and State. Although the principle of financial assistance to schools was continued, the separation of church and State was asserted through the refusal of subsidy to schools teaching the tenets of a particular sect; only schools teaching non-denominational Christianity could receive aid. South Australia was the first Australian State to limit aid in this way, a reflection of its strongly nonconformist character. After 1852, any teacher of approved character and background who could gather together a reasonable number of pupils and whose religious instruction was non-denominational was to receive some financial support from the Government.

2.4 Although the Act of 1852 was a concession to the idea of State involvement in the provision of education, its actual operation revealed important qualifications to that commitment. The Central Board of Education, appointed to implement the terms of the Act, was a body of part-time amateurs in the administration of education. With two brief exceptions at the start, none of its members could claim any past practical experience as teachers, and even William Wyatt, the first Inspector of Schools, was not an ex-teacher but a former Colonial Surgeon. The Board's relationship with the Government was never clearly defined, although limitations in its influence were from time to time effectively demonstrated in instances such as its repeated failure to secure a teacher-training school and the Legislature's summary reduction of teachers' stipends and their fees from parents in 1860.

2.5 The central function of the Board, aided by the inspector, was the certification of teachers. Any man or woman who could supply a good character reference, provide a classroom and attract 20 or more pupils might apply for the government stipend. The Board's inspector would eventually visit the school, assess the teacher's qualifications, examine attendance records and then recommend on those grounds either the granting or the withholding of a licence to teach. The resultant salary might range from £40 to £100, depending on the teacher's qualifications and on the number of children taught. The remainder of the teacher's income was to be derived from whatever fees he might induce parents to pay. Beyond these arrangements, the Board issued few regulations about the conduct of the school. It said little about the curriculum, disseminated no educational theories and suggested no innovations. It was essentially the paymaster, concerning itself more with detecting attempts to falsify attendance

records (in order to obtain higher stipends) than with questions of the extent and type of instruction children were to receive. Teachers who actually lost their certificates did so less frequently for lack of ability in teaching than for below-minimum enrolment figures and "improper moral conduct", especially drunkenness. The Board at first occupied itself with the supply of teachers but not with the provision of schools. By the end of the 1850's, however, Treasury funds were being used to help in the construction of schoolhouses. These buildings were the joint responsibility of the Board and the local District Councils who had to provide half the cost and become the school trustees. By 1875, 113 of the 268 licensed schools had been provided in this way.

2.6 The architects of the 1852 Act had espoused the cause of universal elementary education, but the measure itself did not guarantee the two essential concomitants that it should be free and that it should be compulsory. The very idea of compulsion was anathema in a colony which was still shedding voluntarist principles only with great difficulty and which required its children for the chores of the farm. The licensed schools had originally been intended for the offspring of lower-class parents and it was hoped that teachers would adjust their fees according to the ability of those parents to pay; indeed, when parents could not pay, the State acted *in loco parentis* with a contribution of sixpence per week for each child. Voluntarists complained now and then that middle-class children were benefiting from the cheap education offered at the licensed schools, and not a few teachers relied for their livelihood on the fees for these pupils to compensate for the uncertain or irregular payments from others. Many poorer parents, however, chose to avoid the indignity of so-called charitable education by refusing to send their children at all.

2.7 The absence of strong, centralised control provided the colonists of South Australia with at least the theoretical opportunity of engaging actively in the affairs of the school. District Councils were empowered to assume control of school buildings where they provided part of the cost of construction. Eventually, many Councils also adopted the practice of nominating the teachers for these schools. It was not clear at first just how far their powers extended, and by the 1870's some Councils had in fact clashed with the Board over the hiring and firing of teachers. Local school trustees might have the right to refuse continued use of the schoolhouse to an intractable teacher, but the Board exercised the ultimate power of licence and salary determination. Apart from these concerns, however, there was little local involvement in school matters. Some District Councils paid fairly regular visits to the schools of their locality and offered encouragement to the teachers, but in most areas apathy prevailed.

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Teachers often complained that even the required annual oral examination of pupils, with the usual refreshments lavishly paid out of the teacher's own pocket, frequently failed to attract a single parent. On the whole there was little evidence of local concern over what went on in the school, unless it related to a specific complaint. In any case, most criticism which did arise focussed not so much on matters of the content or method of instruction as on corporal punishment and on the personal conduct, particularly the insobriety, of the teacher.

2.8 The most effective gauge of parents' attitudes towards schooling was provided by the attendance of their children. Apart from those who received no instruction at all, there were many children who appeared at school only briefly and spasmodically. The mid-century population of South Australia was a rural population and a highly mobile one. Thus the annual pupil turnover reached 50 per cent, and most children received an average of roughly two years' total schooling. But even more disturbing than this was the irregularity of attendance. This was mainly due to the demands of farm-work as well as to the sheer indifference of the parents, while an undisguised reluctance to pay fees also contributed. Family parsimony was often such that if a child was unable to attend school on the Monday, when fees were due, he was kept at home on the following days to avoid payment for the rest of the school week.

2.9 Attendance had a direct bearing on the curriculum. Ostensibly both the subjects taught and the desired level of instruction tended to reflect the social climate of the mid-century. South Australia's foundation had come at the time of a growing realisation by the English middle class of the value of universal elementary education as a means of social stability. If sectarian instruction were to be excluded from the school, then at least it must be replaced by non-denominational religious lessons together with segments of further teaching on "morality". Naturally the teacher was meant to exemplify the moral conduct which his pupils should follow, and so his character and personal habits were deemed important criteria for appointment and dismissal. South Australia gained male suffrage in 1857 and this, too, emphasised the need for an educated vote. Yet it was basic literacy, not intellectualism, that was demanded. Since anything beyond the rudiments was not intended for the masses, the State abstained from providing a higher level of education. Clearly those who should receive it were those who could afford to pay for it, and for this clientele there were already two reputable corporate schools as well as a few expensive and entirely fee-supported private establishments in Adelaide.

2.10 Even these modest objectives which had been set for the elementary schools were qualified by the very limited exposure of the

child to this type of education. Constant absences naturally limited the level attained in every subject. Faced with the severely restricted availability of the pupil, the authorities eventually seemed to be almost obsessed with the aim of trying to squeeze into the child as much knowledge as possible as quickly as possible. By the 1870's efficiency in marshalling facts and mechanical skills had become the goal for all teachers to aim at, and this heritage persisted into eras when there was far more extensive schooling available. Curiously enough, the very method of teaching then employed seemed to militate against the type of high-pressure drill that was desired. The preponderance of very small schools made it almost impossible to use the English monitorial system which simply applied techniques of mass production to the classroom. Teaching in the colony was done individually and usually without any clear grading of pupils. Books used were virtually anything that the teacher could lay his hands on. There was indeed a government book depot to supply the schools, but many teachers were obliged to accept from the parents whatever ancient text they might send with their child. The level of education offered was limited even further by the fact that the teachers themselves were often ill-equipped to handle such adverse conditions. South Australia provided no facilities for the training of teachers. When examinations were instituted for certification purposes, it was the candidate's own level of education that was assessed, not his ability to teach. Some trained teachers found their way into the colony, but the bulk of recruits went into the schools with no prior training. Some were scarcely literate themselves, many chose the poorly paid job as a last resort, while others fled within a short time into clerical occupations which were considerably more remunerative and less onerous.

2.11 In spite of all this, perceptible changes were taking place in the 1860's and 1870's. The mother country and the neighbouring colonies were moving unmistakably in the direction of systematic, State-provided education. In South Australia the support for voluntaryism waned with the growing awareness that it could do little to achieve equal opportunities for children in country districts. Efficient education and equal education were seen to be inseparable from uniform education. In the first place this required a uniform preparation of teachers, and so in the early 1870's a pupil-teacher system was introduced and a Model School, for practice and demonstration purposes, established. A syllabus of instruction was prescribed for the licensed schools, and an increased staff of inspectors was employed to police its implementation. It is interesting to note that, far from decrying these developments, the licensed teachers welcomed them as a means of providing definite directions for what had to be taught. The Education Act of 1875 crystallised these changes. It came at a time of rural prosperity and thus pre-

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disposed hitherto reluctant parliamentarians towards the idea of financing a thorough system of State-controlled education.

THE YEARS 1875 TO 1900

2.12 Legislation passed in the various Australian colonial parliaments in the last three decades of the nineteenth century bequeathed to each State its monolithic structure of education. The 1875 Act in South Australia, like its counterparts elsewhere, also confirmed the secular nature of public elementary schooling, but made it only nominally free and compulsory (to the age of thirteen). In essence, the State assumed control over teachers in respect of the bulk of their income, their recruitment, training and certification and their placement and dismissal. Arrangements were also made for school buildings to be provided and controlled by the State. An amending Act in 1878 continued the emphasis on administrative reform and replaced the controlling committee of laymen with an Education Department, headed by an Inspector-General who was in turn directly responsible to a Minister of Education. At the local level, administrative arrangements were made which remained almost unchanged until 1915. The old District Councils surrendered control of their schools in 1875 to Boards of Advice nominated by the Government. An amendment was made in 1891 allowing at least one-half of the Board members to be elected by parents.

2.13 The control of education, however, rested very much in the hands of one man, first of all John Anderson Hartley, Inspector-General until 1896, and then Alfred Williams, Director from 1906 to 1913. The interval between the sudden death of Hartley and the accession of Williams was filled by a three-man Board of Inspectors and then by Lionel Stanton who was Inspector-General for four years. In the fluid political situation which prevailed in the South Australian Parliament, Ministers of Education came and went with some rapidity, while the chief administrators who stayed on tended to accumulate considerable power. The lack of divisional superintendents of education, together with the reluctance of both Hartley and Williams to delegate much of their authority and work, enabled each of them to exert perhaps an inordinate degree of influence on even minor details of operation of the system. Certainly their personalities made a decisive impact on the course of educational events. Hartley moulded a heterogeneous and loosely-knit collection of schools into a fairly efficient, rigid and uniform system. Much of this was achieved through the use of regulations, with directives issued in the *Education Gazette*, through inspection and examinations, and even by means of local teachers' associations.

2.14 By the end of the 1870's the dozen simple regulations of 1852 had multiplied into several hundred. Rules prescribed in detail the subjects to be studied in each grade, the textbooks to be used and

the levels of attainment expected at a given time. The management of school and class and even the conduct of the teacher out of school received attention in the regulations. The publication of the *Education Gazette*, beginning in 1885, enabled departmental edicts to reach into every school with greater facility. These edicts were in turn reinforced by the mushrooming of local teachers' associations, many of which were sponsored or led by inspectors and were used as a means both of raising the standard of subjects taught and of standardising teaching methods throughout the State. But the major device employed towards these ends was the combination of inspectorial examination of pupils and the partial payment by results. Although the South Australian system of payment by results determined only a small proportion of the teacher's total income, his prospects for advancement within the Department were vitally affected by the examination percentages achieved by his pupils. The inspector's oral questioning of the individual pupil, since it also decided whether a child should be promoted or not, was something of an ordeal for teacher and child alike. However distasteful they may have been, these conditions were destined to persist as long as the Department did not entrust teachers or even headmasters with the responsibility of promoting their own pupils.

2.15 Under this relentless pursuit of efficiency, standards had risen perceptibly by the late nineteenth century and the curriculum had expanded. Children in the First Class were instructed in the three R's, geography, poetry, "object lessons" and needlework. By the Fifth Class other subjects had been added: spelling, composition, grammar and history. In the process, children were expected to accumulate large quantities of facts. In geography, for instance, they were called upon to reel off lists of capes, bays and rivers; in history, they were supposed to memorise such tedious data as the succession of kings and queens of England; and for grammar, the aim was to master the inflexion of the parts of speech, parsing and the detailed analysis of sentences. The differences in percentages achieved in these sorts of areas were said to reflect the zeal and competence of the teacher rather than possible differences in levels of general ability, either between classes or between schools. The resultant pressure on the schools was naturally very great. It is little wonder, therefore, that at least some teachers, when given an opportunity to speak, as they were before the Commission of Enquiry of 1881-1883, complained of the excessive strain placed both on themselves and on their pupils.

2.16 The tenacious struggle for efficiency was all the more remarkable in that it was conducted in the face of formidable odds: parental indifference, oversized classes and other adverse physical conditions of school and classroom. Progress towards giving sound instruction was seriously impeded by frequent absenteeism. The rural occupations of a substantial proportion of the population still kept children away from school for many days of the year, while an unsympathetic Parlia-

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ment for long resisted the clamour of educational leaders for the full implementation of compulsory attendance. Numbers of children seemed to escape schooling altogether, while numerous others managed to pass the Compulsory Certificate at an early stage and thus leave school well before thirteen years of age. Some parents were also careful to follow the letter but not the spirit of existing laws on compulsion; their children would attend not a single day over the prescribed minimum of 70 days for each half-year and then withdraw from school, possibly well before the end of the year. The Boards of Advice, established by the Act, made little impact on the general apathy and were used, not so much as a means of securing communal involvement in educational affairs, but more as the instruments of compulsion at the local level, a task which they relished not at all. Some Boards, particularly those in the city, exercised considerable influence, but others were inactive, and some districts failed to create a Board at all.

2.17 The lack of comfort within the schools was often enough to deter even the most conscientious soul. Although Hartley and Williams pushed through vigorous programmes of building and renovation, there were always serious deficiencies. The Education Department at one stage resorted to the provision of tin buildings which, in the northern regions, were like furnaces in summer, while at another time even tents were used for remote settlements. Inspectors constantly complained of the poor lighting, overcrowding and ineffective ventilation. The size of classes often reached seventy, and it was not until the directorship of Williams that the maximum was officially limited to sixty.

2.18 The type of education designed for South Australia after 1875 also implied a certain type of teacher. Hartley's quest for uniformly efficient instruction in the basic subjects faced a handicap in the teachers, many of whom had entered the ranks in the earlier days of lax standards and unregimented conditions. The obvious solution was their gradual replacement by new batches of recruits, trained by the State. To the apprenticeship system of four years was added a Training School course of preparation, which extended beyond the practical techniques of teaching to which the existing Model School had been confined. Beginning its work in 1876, the new institution offered training to candidates with diverse backgrounds, some of them never having taught before, others with a deal of experience. By 1881, 156 teachers had passed through the Training School, approximately one-half of the permanent departmental staff of head teachers and assistants. By 1884 all young people being admitted to the School had come from the ranks of the pupil-teachers or the so-called provisional teachers.

2.19 The type of training received placed a heavy emphasis on the basic subjects. The one-year course reflected the low level of the

intake of recruits, much of it being merely a continuation of their previous elementary education. Even the scheme of instructing pupil-teachers while still in the schools had failed to bring many of them up to the standards suitable for receiving Training School preparation. One result of this, therefore, was the establishment in 1892 of special classes at the School for the instruction of pupil-teachers in the metropolitan area. Candidates for the largely unqualified and impermanent position of provisional teacher were less fortunate, and had to make do with a mere one-month intensive course while attending either the Training School or an approved public school, before taking up an appointment in one of the outlying districts. In general there was little scope for any training beyond simple primary-school needs. Even the brief effort to provide training in kindergarten methods for prospective infant teachers had foundered by 1881 for the lack of suitable specialised schools or departments in which the trainees could reasonably exploit their knowledge.

2.20 To all intents and purposes the Act of 1875 and its legislative supplements seemed, by the end of the century, to have fulfilled the requirements of a rural colony. By 1898 elementary education was free, yet its cost to the State was also very low. The primacy of farming needs was still recognised by the operation of permissive attendance laws which allowed children to leave school at an early age and to absent themselves at busy times on the farm. The brevity of the child's contact with the school served to place a premium on the swift and intensive cramming of skills and facts, to which the system became geared. Equality of opportunity meant that each pupil should receive the same sort of instruction, and particularly that the country child should suffer no great disadvantage as compared with his city cousin. The central authority exercised a detailed control over the public schools in order to ensure this uniform, efficient and rudimentary education. It also trained, bonded and placed its teachers to implement these objectives.

2.21 Modest as they were, even these simple ideals were far from fully attained. They never could be while not all children were being educated. The 1875 Act did, it is true, create the provisional school for small communities by supplying a less qualified teacher (but not necessarily a schoolhouse) if the pupil enrolment was less than twenty. Even half-time schools came into existence for the more remote settlements. But in spite of this there were still many districts not served by any schooling at all because they contained fewer than the prescribed minimum total of children. Nor did the system achieve the uniform equality which its sponsors had hoped it would. The child in the town might benefit from superior, permanent school accommodation and more highly qualified teachers, but his country counterpart had too often to contend with untrained instructors and temporary and unsuitable premises. The practice of education also failed

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to satisfy the special economic requirements of the State. Admittedly, some moves had been made towards satisfying technical and vocational interests. A foundation was laid with the introduction of elementary drawing in the late 1880's, and the end of the century saw the establishment of an agricultural school in Adelaide, together with technical-agricultural classes in three country centres. But within a few years even these latter cautious ventures had expired, and South Australia was left with very few educational facilities directly related to its agricultural, industrial and commercial needs.

EARLY TWENTIETH CENTURY REFORMS

2.22 By the turn of the century some significant changes had been in the making. For a decade or more, some nations overseas had been experiencing an accumulation of educational reforms which had assumed the appearance of a major movement. This "New Education" stressed the need for attention to the child, to child-centred activities and to child-centred techniques of instruction. In doing so, it underlined elements such as interest, motivation and the relevance of studies to the world outside the classroom. But added to these purely pedagogical stirrings was the further factor of modern, international economic competition. Britain, whose commercial hegemony had for long been unchallenged, had now become concerned that the concentrated educational programmes of her rivals had enabled them to modernise their technologies and thus pose serious threats to her markets and her industries. The spirit of both of these developments, the New Education and the growing appreciation of the national economic importance of education, lent vigour to activities in the Australian colonies. New South Wales, Victoria and Western Australia, in particular, under the guidance of able and energetic directors, were able to initiate progressive and far-reaching educational programmes.

2.23 Eventually South Australia was also to capture some of the enthusiasm. The hardships facing the rural industries and the years of general financial stringency had by now passed away in this State as they had elsewhere throughout the continent. A new economic era had begun, especially with the application of advanced scientific methods to the traditional wheat industry and with the diversification of agriculture into other branches such as fruitgrowing and dairying. The new prosperity which followed made educational reform a more acceptable financial proposition to the parliamentarians who would have to endorse it, and to their constituents who would have to pay for it. When South Australia made its belated forward move it was able to draw upon the examples of some of its more progressive neighbours. But it was also able to employ local talent to carry out the reforms. Alfred Williams's appointment as Director of Education in 1906 produced many of the important changes.

2.24 Williams vigorously instituted curricular changes in the primary schools as a part of his general policy. New subjects such as nature study, manual training and civics were introduced, while attempts were made to refashion old subjects in the style of the New Education. The aims of the reforms were scarcely consistent with the old system of examination, and already there had been some easing of the requirements when a number of schools were given partial exemption from the need to have the inspector examine for pupil promotion. In 1913 South Australia finally fell into line with the other States and allowed the schools themselves to handle promotion. Significantly, however, the change was prompted by a desire to reduce the burden on the inspector rather than to accord the teacher a greater measure of freedom. Indeed, official pronouncements on educational objectives in 1908 had appeared to emphasise much that was virtually non-examinable:

Is the joy of conquering difficulties judiciously fostered? Are the pupils being trained to self-effort, to rely on themselves, to be more eager to surpass their own efforts of yesterday than to defeat their classmates? Are they observant and encouraged towards a questioning attitude?¹

2.25 In 1909 Williams, inspired by his recent voyage overseas, had occasion to refer to the "immense significance of the adolescent period", to the growing attention to the psychology of adolescence and to the need for continued schooling beyond thirteen years of age. This demand reinforced the increasing clamour to improve post-primary and particularly technical education in order to avert the threatened industrial eclipse of the British Empire. The Act of 1875 had made provision, under certain conditions, for the establishment of "advanced" public schools. But, except for the Training School and the Advanced School for Girls, a fee-paying institution established in 1879, the State had given little help to children wishing to carry on to post-primary schooling. In the Hartley era the award of scholarships had begun, but the very few able boys gaining them were obliged to attend one or other of the reputable private schools in Adelaide.

2.26 The extension of post-primary opportunities to a wider segment of the community came with the accession to office in 1905 of the first Labor Government under the Hon. Thomas Price. The new Premier, who was also Minister of Education, supported the development of higher classes in the existing primary schools. The larger schools were obliged by regulation to offer "continuation" (grade VI) classes, and numerous small schools did so voluntarily. In country districts, such classes were concentrated into central schools, helped by modest travel subsidies offered to their pupils. Within a few years, these centres, together with the larger metropolitan schools, had evolved into District High Schools. In the city of Adelaide an amalgamation between the Pupil Teachers' Training School (see paragraph 2.29), the Advanced School for Girls and what had been a boys'

¹ *Education Gazette*, Vol. 24, No. 256, February 1908, p. 47.

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continuation school created in 1908 the Adelaide High School, the first free State high school in Australia.

2.27 These developments in secondary schooling were only one aspect of a general movement towards diversification. Some attention was given also to the pre-primary stage, and after 1906 the work of Lydia Longmore in particular opened the way for the spread and development of the kindergarten method of instruction. However, another important area also in need of attention, that of technical education, was still largely neglected. In 1909, South Australia was the only State in the Commonwealth without an organised system of technical education operating under specialised direction. There were of course individual institutions dating from earlier times, such as the higher-level Roseworthy Agricultural College (1885) and the South Australian School of Mines (1889). Efforts had also been made to provide evening continuation classes for young people already employed in trades, but the instruction offered was virtually at the primary level. In any case, there was no co-ordination of these efforts, and technical education had to await the Act of 1915 for the development of a proper system.

2.28 The new spirit of education envisaged by departmental leaders, together with the higher levels of instruction to be offered, obviously required a new type of teacher. Developments in teacher education which had taken place just before the end of the nineteenth century had in fact seemed to anticipate that need. The old pupil-teacher system and the brief Training School course produced not much more than mechanical efficiency in classroom organisation and in the basic aspects of teaching. Yet in 1908 educational leaders were publicly asserting that "the greatest thing any child can get from school . . . is not information, but the uplift which can come from contact with a finer, greater personality".² The traditional method of teacher preparation was little calculated to create any such possibility, and, indeed, there had come from within the University the description of South Australian teachers as "the least educated teachers in the English-speaking world".⁸ It was scarcely surprising, therefore, that it was the University of Adelaide which seized the initiative to correct the defect. Having at that time both space and funds at its disposal, it offered to assume the entire responsibility of preparing public school teachers. Although the University had to retreat to some extent from its original proposal to remove teachers completely from departmental control during the training period, the scheme which began in 1900 was nevertheless a unique experiment. The University Training College was established on the campus itself and its students attended various university lecture courses, usually for two years, with some eventually proceeding to a degree.

² *Education Gazette*, *ibid.*

⁸ Professor (later Sir) William Mitchell, quoted in *Education Gazette*, Vol. 17, No. 181, November 1901, p. 140.

"Training" was condemned as totally insufficient; "culture" was wanted as well.

2.29 The change was accompanied by a new scheme for training pupil-teachers. For the first two years the candidate was not required to teach, but to attend the Pupil Teachers' Training School, formerly the training institution at Grote Street, which prepared the pupil-teacher for later study at the University Training College. The third and fourth years involved assignment to a school to engage in teaching, and the fifth and sixth years were spent at the University Training College. The course at the Pupil Teachers' School similarly sought to emphasise general education, which was something not achieved under the old system of after-school instruction by the headmaster. The University scheme had functioned uneventfully for several years when, in 1904, misgivings began to be aired. The critics complained that young trainee teachers were concentrating on gaining a degree at the expense of necessary technical knowledge. Culture, it was argued, would be of little avail if its recipient had not also been trained to stand up to classes of 70 pupils. By 1907 these criticisms had caused the pendulum to swing back to some extent towards a greater emphasis on practical preparation, although the strong connection with the University was retained. The practical emphasis continued to flourish, as was shown by the introduction of occasional in-service sessions and by the work of the Observation School which offered a short, intensive course of preparation (six months by 1912) specially designed for teachers of provisional schools.

2.30 The outbreak of the First World War almost coincided with the conclusion of another chapter in the history of educational development in South Australia. The changes initiated by Williams, who had died in 1913, had by then become stabilised, while some of his other reforming ideas were to receive legislative sanction in the Act of 1915. On the whole, the changes effected from 1875 to 1915 had gone far towards providing the State with a well-run, centralised system of education and had extended schooling to within the reach of most of the children in the community. But that same system fell far short of meeting the requirements or of attaining the democratic goals to which its proponents had aspired. Equality of provision in education was still far from being realised. The conditions prevailing in the more remote country schools and, indeed, the failure to provide such schools in a number of localities, were ample proof of this shortcoming. A free high-school system had emerged, but its extent was far from being universal; government secondary school enrolments in 1915 were only 2,785. This figure amounted to 6.2 secondary pupils per thousand of population, as compared with 73 per thousand in 1969. Equally significant was the fact that the actual type of secondary schooling offered served to uphold notions of élitism. Scholarships were granted, but in very limited numbers, and they were not neces-

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sarily won by those whose financial need was greatest. The high-school curriculum did include a few practical subjects, but the orientation was strongly academic and the course was geared generally to university-controlled public examinations. High-school development up to 1939 followed closely the English grammar-school tradition already adopted by other Australian States.

2.31 Community participation in education decision-making continued to be minimal, and the degree of control by the permanent head of the Department continued to grow. The Boards of Advice had not been a great success. They did render some help with enforcing attendance, although a number of them shirked the unsavoury task, and with school repairs. But they did little else. For example, they seldom met the district inspector, except perhaps at the occasional inquiry into complaints against a teacher, and rarely on an educational subject. Many districts remained without a Board altogether. The Education Report for 1915 showed that of the 110 Board districts, 45 had no Board at all and 11 had Boards in which the number of members nominated fell short of the number of vacancies. The 1875 Act did not give substantial control over education to local communities, nor is there evidence of a significant popular desire to use whatever opportunities were available for local involvement.

2.32 The chances of teacher participation in decision-making were also clearly restricted. The New Education had sought to produce changes in the classroom, but too often the authorities assumed that there was only one answer to content and method and that all teachers should follow it. When changes were introduced, the instructions were usually for uniform application of departmental ideas on the matter. Detailed regulations, the *Education Gazette*, the inspectorial system and even the meetings of local teachers' associations all became vehicles for the handing down of desired attitudes and courses of action. The syllabuses were still prescribed in detail and the simultaneous examinations, which had replaced the inspectors' examination of pupils, were set not by the schools but by the Department itself.

2.33 The problem of teacher training remained unsolved. Large numbers of recruits received no teachers college preparation, but were exposed to short courses at the Observation School which concentrated on practical teaching, and were then dispatched to one-teacher provisional schools in the country where they had to rely largely on their own resources. The majority of the recruits were women, since many other occupations were more attractive to the young men of the community. For those with an earnest desire to teach, there was also the temptation to leave for other States, Tasmania and Western Australia in particular, where salaries and pro-

motional opportunities were decidedly more liberal. In these matters, as in others, changes were overdue.

THE YEARS 1915 TO 1945

2.34 New Acts of Parliament and new Directors of Education appear to have been the principal ingredients of educational reform, and the combination of the Education Act of 1915 and the appointment of W. T. McCoy in 1919 is a case in point. In fact, the developments stemming from this combination made adjustments to the 1875 settlement which provided South Australia with a pattern of education that was to persist almost throughout the first half of the twentieth century. Forty years' experience with the operation of the 1875 Act had prompted the call for important refinements, although not for radical departures. One of the more significant aspects of change related to the extent of provision of education. Attendance was at last required for each school day instead of for a mere proportion of the total. Some qualifications were added to this, depending on the child's age and his distance from the school, although the latter difficulty was accommodated to some extent by making six the average minimum attendance figure necessary for maintaining a public school.

2.35 Probably the most significant modifications made by the 1915 Act lay in the organisation of administrative functions. An Advisory Council was established at the centre and school committees replaced the Boards of Advice at the local level. Reorganisation which took place within the Department itself was designed to reduce the extreme concentration of decision-making power which had prevailed in the past. The Director retained an overall responsibility but he delegated power to superintendents, each charged with the management of a Division of education — at first primary, secondary and technical. In addition to these reforms, there were created a Teachers Classification Board and an Advisory Curriculum Board, both providing for the representation of teachers in their membership.

2.36 The full implementation of the Act, which had to await the end of the war, rested with the new Director, W. T. McCoy, who for 10 years directed the course of educational events in South Australia. He had come at a time when the early-century burst of reform had subsided and its practices had tended to become fossilised. McCoy thus found it necessary, for example, to restate the purposes of primary education. In his new Course of Instruction of 1920 he placed particular emphasis on the need for speaking and writing correct English. The three R's were not to be forgotten but attention should also be given to good habits of speech, to conduct and to efforts to develop reason; there was, moreover, a need to move away from the deadening routine of teaching for results, in order to focus more on the task of developing the child's character.

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2.37 The period after 1915 was also one of educational diversification. Special classes were begun for the mentally handicapped in 1925. Infant schools were developed as separate entities. Elementary agriculture was introduced into primary schools. Secondary education further expanded with the emergence by the mid-twenties of a pattern of different post-primary institutions. Known as Central (later Junior Technical) Schools in the city and as Area Schools and Higher Primary Schools in country districts, these served to add a two-year post-primary top to the primary schools with which they were usually intimately connected. Technical education added to this growing diversity. Apart from the vocational orientation of the Central Schools, there was also provision for a compulsory period of continued education of apprentices. Technical centres or schools began to develop after 1916 in both country and metropolitan areas, and by the end of the 1920's the Department was offering agricultural education in a couple of high schools. The Technical Education Division also answered a need of the time in undertaking the rehabilitation of ex-servicemen.

2.38 Progress was made in this period in the supply and preparation of teachers. The category of Junior Teachers who served in the schools for one year before entering the teachers colleges was eliminated. The supply of teachers from the Training College improved so steadily that by the end of the 1920's the employment of supplementary and temporary teachers had almost ceased.

2.39 Objectives and curricular practices remained, as before, a long way apart. The work in the primary school was geared towards high percentages in the Qualifying Certificate examination; percentages became an end in themselves and the results were an excess of drill and a deficiency of freedom in the school. Post-primary education was at last firmly established but its extent was still limited, since it was not compulsory and since entrants to secondary school had first to pass the Qualifying Certificate examination. A distinction made between academic high schools and the less academic Central Schools and Area Schools forced children or their parents into an early educational choice, while even those who attended the Higher Primary Schools in the country found that these institutions were inhibited by their close association with the primary schools which usually housed them.

2.40 The position of the teacher in the Department was one of the elements least likely to produce a dynamic quality of education in the schools. For years the schoolmaster had been conditioned to only a narrow interpretation of the curriculum. Payment by results had gone, but only in name. The inspector was still the assessor rather than the counsellor, and continued to determine the teacher's prospects for advancement. A system of skill marks gave a numerical assessment based on the inspector's judgment of the teacher's ability

and effort. This, together with the factors of seniority and of academic qualifications, decided a teacher's place on the departmental promotion list. However, the skill mark was only marginally better than the old form of efficiency mark. Teachers were still as reluctant as before to trust those who awarded the marks, yet, on the other hand, they still felt bound to chase classroom percentages as a means of demonstrating their worth. Freedom continued to be largely mythical in matters of content and methods of teaching. The teacher was also hemmed in by departmental charges on his time, even his private time, for extra-curricular purposes.

2.41 Perhaps more illusory than anything else were the lay agencies which it was hoped would vitalise South Australian education. The Advisory Council never managed to wield much power. It became little more than an instrument for departmental publicity, a type of lever used by the administration to influence the Minister. Indeed the fact that the chairman was Director of Education tended to make the Council a means of retaining, rather than of reducing, centralised control. At the local end of the scale, the school committees did perform some useful functions. They were able to attend to minor school repairs and improvements and could serve as a means of liaison between home and school, especially since there could now be a committee for each individual school. However, the ideals for these bodies, and a popular participation in general, were never quite realised, certainly not to the extent of the hopes expressed by the Director in 1916 that eventually no parent would pass by the school without looking in, and that "he should know what is being taught and how". It is doubtful whether many teachers and headmasters shared those sentiments; parents, for their part, tended to be rather diffident in their relations with the school, except when aroused enough to criticise individual teachers. On the whole, there was little parental involvement in anything other than the more peripheral activities of the school. The gulf between the laymen and the institution was still very much in existence.

2.42 In the 1930's and 1940's the progress of the system was materially affected by the interruption of serious international crises, first economic, then military. The depression years were accompanied by visible signs of educational retrogression, such as the cutting of expenditure, the reduction of teachers' salaries and the imposition of fees for high school tuition. The Second World War had a similarly disrupting effect on the provision of education, although some striking moves had been initiated even before the end of hostilities. The primary schools were brought to the threshold of a new era with the abolition of the Qualifying Certificate in 1942, and with teacher participation in determining a new curriculum in 1944. A Committee of Inquiry,⁴ whose activities stretched from 1942 to 1949, produced

⁴ Education Inquiry Committee (Chairman, Mr. E. L. (later Sir Edgar) Bean). The Committee's First Report was presented to Parliament on 16th May 1945, its Final Report on 11th August 1949.

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what it was hoped would be a plan for a new age of education. The Committee argued for changes of significance in both technical and secondary education and in the preparation of teachers. It called not only for an extension of education but also for more careful attention to the needs and interests of the pupil. The goal which was being sought was one which was neither new to the community nor yet achieved by it since the inception of the system of public education. These developments, which also overlapped into the post-war period, offered to South Australia the prospects of modifying the settlement of 1875 without really overturning it. The assumptions of that era still held after nearly a century of experience with their operation, namely that uniformity was preferable to diversity in education; that the central authority should exercise overwhelming control over its schools as well as over the professional preparation and everyday work of its teachers; that the administration of educational services was better carried out through bureaucratic procedures than by lay and local participation in the task; and that a fair standard of schooling was feasible in spite of the low levels of remuneration and the consequent difficulty of attracting superior recruits to teaching. Probably few people doubted that a new world emerging after the 1940's would require a new type of education, but the administrative changes envisaged by the Committee preserved the centralised structure.

AFTER THE SECOND WORLD WAR

2.43 The more important changes in South Australian education since the Second World War are covered in the body of this Report. It is necessary to refer here only to those which seem most characteristic of the period. Problems of providing for greatly increased numbers of students at all levels have been in the forefront in this period of increasing population and of rising demands for education.

2.44 At primary level, changes in content and methods have brought somewhat nearer the type of child-centred education desired by a section of the New Education movement at the turn of the century. The pressures and pre-occupation with results once characteristic of the primary system have shifted to higher educational levels, allowing primary schools to give more attention to the child himself. Progression through the primary school into secondary school has become automatic, nearly all children being promoted annually with their age peers. The idea of grade norms, however, persists, and only a few schools allow for pupils, within a single class, to advance in basic skills at different paces.

2.45 Secondary schooling is a stage of education through which all children are now expected to pass, and every year an increasing proportion of the age group is staying to complete its five-year span. As schooling lengthens, problems of providing courses suited to the needs

and abilities of less academically able children become more important, and South Australia, through its technical high and area schools and through the development of alternative courses in high schools, has attempted to answer them. Although it cannot be said that the problems have been solved satisfactorily, we share this deficiency with many other highly industrialised countries. Secondary education of the academic type has undergone surprisingly little fundamental change.

2.46 At the present time attempts are being made to encourage more variety between schools by allowing a greater range of educational decision-making to take place within them, and to encourage a sense of professional responsibility among a somewhat better-educated teaching force. Such changes are inhibited both by shortages of teachers and of supporting facilities and by almost a century of contrary tradition. There have been significant changes in the role of the inspector, whose function as an assessor of teachers is now seen as subordinate to his function as educational adviser. The level of professional assistance to teachers has been raised through the appointment of subject consultants and through the development of an active programme of in-service education.

2.47 Tertiary and further education have been greatly expanded and diversified. Important changes have taken place in the concept of tertiary education, which has been expanded beyond its traditional university bounds to include higher technological and other types of education provided within colleges of advanced education and teachers colleges. Teacher education has been the most rapidly growing part of the tertiary sector, and, although university involvement in the education of teachers remains heavy, a majority of teachers are now educated in colleges under the control of the Education Department.

2.48 Commonwealth financial aid for education has been a feature of the post-war years. Rehabilitation courses for members of the armed forces after the war were undertaken at Commonwealth expense. Commonwealth scholarships have provided assistance to large numbers of tertiary and secondary students. As a result of the Uniform Tax Agreement made during the war, the State is now heavily dependent on Commonwealth grants, giving the Commonwealth an important indirect influence on the quality of education. State responsibility for education, confirmed at Federation, has to co-exist with the limited taxing capacity remaining with the States. Hence, Commonwealth grants have played a necessary part in the considerable and expensive development of tertiary education, although these grants are conditional on certain levels of State contribution. Capital and running costs of universities, and, more recently, of colleges of advanced education, have been heavily underwritten by the Commonwealth. In the case of teachers colleges, including the Kinder-

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garten Teachers College, Commonwealth assistance has been limited to grants for capital purposes. Although financial responsibility for the school system remains with the State, specific Commonwealth science and library grants have been made to ensure certain standards in secondary schools, both government and non-government.

2.49 The denial of State aid to non-government schools, embodied in the South Australian Act of 1875 and strongly confirmed by a referendum in 1896, has been reconsidered. The resumption of aid has been tentative, but both Commonwealth and State Governments have contributed to it. Argument now centres around its scale and purpose, the principle having been accepted by all major political parties.

CHAPTER 3

The Purposes of the Educational System¹

THE SCHOOL AND SOCIETY

3.1 No educational system stands apart from the society which establishes it. It has purposes that must be achieved if that society is to continue. It is embedded in that society, drawing nourishment from it and in turn contributing to its opportunities for growth and renewal. The establishment of the purposes of its educational institutions, and a constant vigil over both their relevance and their realisation, ought to be one of the major continuing activities of a society concerned with the present well-being of all its members and with its own steady improvement.

3.2 We have attempted to set down in this chapter what we take to be the purposes of the *schools* in South Australia. Many of them apply also to education beyond the schools, whether this be full-time or part-time tertiary education, or adult education, or the education of apprentices. Institutions in which these kinds of education are undertaken have, however, additional purposes, and we shall touch on some of them when we discuss later those aspects of the educational system. Some, but not all of them, are related to preparation for employment. Others are concerned with the development of scholars, or of practitioners of professions, who will themselves add to knowledge and to practice and become in their turn responsible for the further development and transmission of their special fields of competence. Still others are related to the satisfaction of personal interests. In what follows we consider first the social context in which schools operate and the purposes which arise from that context, and go on to consider some of the implications of both the social context and the purposes for the organisation, curricula and methods of the schools.

The School

3.3 The school is an institution set up particularly to impart essential knowledge and to develop the skills and abilities necessary for the individual to operate in society. In addition, however, it is now expected to assume an increased share of a number of other purposes of an emotional, social, vocational and personal character. Some of these purposes we shall deal with in what follows. Before we do this, however, we wish to make our position clear on two important issues.

3.4 The first is that we do not accept the view, seldom stated baldly but often implicitly held, that the school has the *sole* responsi-

¹ Statements of this nature often go under titles such as "objectives", "goals" or "aims". We are not concerned in this chapter with a general statement on the aims of education but with the function which schools are expected to fulfil in South Australia.

bility for the intellectual, physical, social, emotional, aesthetic, moral and spiritual development of the children it has in its care. It does a great deal in the (approximately) one-third of a child's waking hours in which it guides his learning. None the less it would be unrealistic not to recognise that family, peer group, social organisations, friends, church and leisure-time activities all have their influence on children. Society itself is uncertain of many of its values and unwilling to provide for children models of behaviour which are accepted and used also by the post-school society, and teachers and school authorities are right to resist pressures that the school take over full responsibility for moral and ethical development. We reject, too, the view that there is a single type of person that the schools should produce, and that all resources in society should assist in producing this person. The school cannot, of course, avoid standing for, and trying to develop, some values. The very nature of its curriculum, organisation and teaching methods, and the relationships between persons which it adopts in practice, express and provide illustrations of values. We touch on this later.

3.5 The second is that we do not accept the view that the purposes should be drawn up by a collation or acceptance of present statements or be based on an analysis of present practices in schools. Statements of purposes at any point of time may represent what is believed to be the best current thinking, or an expression of what is thought possible. Society is constantly changing, and the enunciation of new ideas and the reorganisation of existing ideas are continuous processes in education as elsewhere. What schools are doing now, and the purposes which an analysis of their practices shows that they accept, may not necessarily produce the best statement of what the purposes should be. It may be a compromise between what is desired and what is possible. The means used in imparting knowledge, or in imposing discipline or in organising classes or particular lessons may not be expressed as purposes, but they are a part of the process by which attitudes to learning, to people as individuals and to society are developed. For example, to teach science *solely* as a body of knowledge and skills fixed by authority is not likely to produce many students who are interested in enlarging that body. Or again, if schools are built with rooms of a common size and to a standard pattern it is clear that flexibility in class size is not regarded seriously, and this in turn must lead to considerable doubt about the importance given in planning to coping with individual differences between pupils.

3.6 There will always be a gap between purposes and practices, always something better to be striven for in education. This is also true in other aspects of the life of our society, in such matters for example as public health, social welfare, transport or housing. We do not take the view that everything thought necessary can be done immediately, because we recognise that resources are limited. There

must be some ordering of priorities so that the resources available can be used in the most effective way at any time. This applies to both human and material resources, and within education as well as between education and other social needs and activities.

Social Context of the School

3.7 Some of the most important characteristics of the society in which our schools are embedded and which cannot but affect their purposes are set out below.

(a) The system of government is that of a parliamentary democracy. Those who have the right to vote expect that their representatives will direct the affairs of the State and of the nation in ways which accord with majority views while accommodating as far as possible the views of minorities. The right to influence public opinion in favour of particular or general policies is available to any individual or group. The right to support or to dissent from current policies and particular actions, and to express that support or dissent, is available within the law to all citizens. This is not to deny that at any particular time some individuals and some groups have more power than others.

(b) Although there is still a wide range between the standard of living of the very poor and that of the very rich in South Australia, the average standard is higher than it has ever been. The average home is more convenient and its equipment and material comforts have lessened the need for hard work to run it. The average family is better fed and better dressed. It has more leisure time and more choices available to it of ways to use that leisure. It can, by using its greater affluence, provide a richer quality of living for all its members. The children have available to them more opportunities than their parents had for entertainment, travel, cultural enrichment, education and choice between vocations. We have as a society the ability to live better and to move more rapidly towards those goals in attaining which material wealth is important.

(c) Men and women are expecting more from the services provided for public use, whether these be transport or health, cultural facilities or education. A rising tide of expectation is pressing harder against economic reality than ever before in our history. The establishment of priorities in public and private expenditure is a task of increasing difficulty.

(d) Technological developments in manufacture, transport, communication of ideas and information, entertainment, housing and education itself have created for both children and their parents an environment with extended horizons, distinguished more by change than by permanence and stability.

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(e) The rapid expansion of opportunities for employment for both women and men has been accompanied by a demand for greater skill and maturity in those entering employment. This has meant a demand for more education before employment begins. At the same time there has been an increase in the rate at which people change jobs. The rate of job obsolescence, and the need either for upgrading skills or for developing new ones, have become important as they never were before. Most of those entering jobs can expect to need periods of retraining, or to face constant learning, over their working lifetime, of new skills, new attitudes and even new approaches.

(f) These same developments, leading among other things to the existence in society of a far larger proportion of well-educated people than we have previously had, have induced a much more critical attitude to established customs and institutions. Society has become less disposed to treasure its past and much more disposed to question it. The *status quo* whether in values, social organisation or personal relationships tends to be under constant scrutiny. What exists is no longer readily accepted merely because it is the prevailing mode; it must satisfy a more critical body of participants. Some may reject it completely.

(g) There is a greater tolerance of dissent and reform, and a greater realisation that we are a pluralist society, in which different beliefs, different values and different interests can be accommodated, even though the act of accommodation may be painful, may produce tensions and may require the sharing of privileges once jealously guarded.

(h) Society has become more closely knit. We are much more aware of the effects of change in any of its segments on the lives of those in other segments. The implications of decisions and the weighing of policies require more critical consideration than has been the case in the past. Local, State, national and international affairs, because of the immediacy of communication, demand our attention. We cannot ignore them. We are compelled by their immediacy to decide on our own points of view and to become aware that our consensus or disagreement expressed through organised groups has a direct influence on events.

(i) Families are on the average smaller than in previous generations and less self-sufficient in many ways. By contrast, the size of the communities in which we live, the size of our educational units and the size of the places in which most of us work have all increased. Many of our writers and artists and social commentators have referred to the results as including the loss of the sense of personal identity, frustrations due to a sense of inability to participate in making decisions or to influence events in any significant way and an apparent meaninglessness in life. There appears often in the larger units to

be less scope to be an individual and to express a personal view, and much more pressure to conform, to follow the pattern of behaviour of the crowd. Individual protest and refusal to be "one of the crowd" has become in some ways more upsetting than it was when smaller groups were more common.

(j) The fact that society is composed of *individuals* with needs and wants of all kinds is receiving greater attention than in the past. This change is compounded of the greater acceptance of a pluralist society, a personal resistance to being just "one of the crowd", and a humanist or religious view of the brotherhood of man. It reflects itself increasingly in a greater concern for the handicapped and the underprivileged, and in a closer watch on the effect on the individual of public policies assumed to be for the more general good.

(k) We are no longer limited to the printed page for our knowledge of events. The day's events anywhere in the world are in our ears or before our eyes often, at times, as they occur. The knowledge of the commonness of the human situation, and awareness of our own direct involvement in it, have dissolved barriers not only of distance but of language and ways of life.

(l) As more and more people have become aware of the rapid expansion of knowledge, of the growing interrelatedness of peoples and nations, of the depths of our ignorance about the heritage of ideas and their expression, beyond our own limited ken, they have looked to education of all kinds to equip them better — not only for competence in a vocation but also for personal satisfaction. More education has come to be regarded as a good thing in itself for the individual, whatever its benefits to society may be in more skilled workers and better-informed members of a community.

(m) Our Australian community has accepted and attempted to absorb and to integrate in the last twenty years nearly two million immigrants, both adults and children. They have added to the work force and accelerated the rate of development of the country's resources. Because they have come from many different countries and have brought different ideas and practices and backgrounds they have added to the variety of our society. In simple things like foods or in more complex things like artistic or architectural styles, agricultural practices and technological knowledge, they have without doubt brought benefits both economic and cultural to Australia. At the same time the very differences, particularly in language and, in some instances, in cultural background, have led to problems of assimilation and have required new public policies and new or different educational practices.

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3.8 The two foregoing sections dealing with the school and its social context lead directly to a statement of purposes. We have

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approached this statement by seeing the person in society as having, as a mature citizen, several separate but related activities — those associated with his occupation, those associated with his membership of a community with responsibilities not only as a voter but as an active participant in some form or forms of group activity for the well-being of the groups concerned, and those in which he participates as an individual, choosing with a considerable degree of personal freedom what he will or will not do because this is his own wish and there is on him little or no external compulsion so to act, and no communal expectation that he will do so. Although it is true that preparation for work and participation in group activity become clearer purposes, and play a more important role as the child draws nearer to the upper limit of compulsory schooling, all that he has been doing at school should, whatever else it did, have served to make such purposes more directly attainable. We do not see the foregoing as in any way denying that the first concern in education is the individual child and his maximum personal development. We turn first, therefore, to a discussion of purposes as they concern the individual.

Equality of Opportunity

3.9 We believe it is accepted by our society that one purpose of the schools is to give every child an opportunity of obtaining an education that will enable him to develop any abilities which will give him personal satisfaction without danger to others, to occupy any position and to undertake any vocation that his ability and interest make possible. The schools provided by the State therefore attempt to provide the means to realise an equality of opportunity between children from every kind of home. We regard the issues of equality and opportunity as very important and we deal with them at length in Chapter 14. We do not propose, therefore, to elaborate here on equality between children and on their ability to use the opportunities provided. It is clear that in South Australia there is still much to do to remove, or to compensate for, inequalities. Special provision is still needed by way of accommodation, staffing and equipment for children affected by handicaps of one kind or another.

Developing the Child

3.10 A second purpose of the school is to help every child to make the most of his abilities. This is, of course, not simply a matter of putting a standard educational fare before children and trusting them to digest it. It has many facets, and leads to many goals. We deal with the most important of these below.²

²In what follows, we acknowledge the debt we owe to a statement published in 1965 in a report from Educational Testing Service (Princeton, New Jersey, U.S.A.) to the State Board of Education of the Commonwealth of Pennsylvania. This statement included, under the title *Proposed Goals of Education*, a Statement of Goals for the Commonwealth of Pennsylvania.

3.11 **SKILLS AND ABILITIES.** Apart from the more advanced skills and abilities which many of the students from the schools will have acquired, some of which they will be using directly in their later work or later studies, there are certain basic skills which for one reason or another are required by all citizens in their daily lives in our society. It is a basic function of the school to provide these skills to as high a standard as the ability of the individual child allows. We expect a normal child before leaving school to be able to acquire information and ideas through reading and listening. We expect him to be able to communicate information and ideas both orally and in writing. We expect him to be able to handle at least the simple mathematical operations which occur in daily life. We expect him to know how to be healthy and physically fit and to know a good deal about the functions and structure of his body. We expect him to have some scientific understanding of his environment and an understanding of how science is changing that environment. We expect him to know about, and to have some elementary skill in expressing himself in, some of the arts like music, drama or painting. We expect him to be able to reason with simple logic, to recognise evidence in everyday situations and to use it in making choices and decisions. We expect him to look for evidence and to ask for it when in doubt. We know that the levels reached by children will vary greatly, but we believe that unless schools do emphasise these skills they will not be providing one of the most important services for which they were established.

3.12 These basic skills are necessary for the child or the adult to function at least with minimum competence among his fellows. Additional skills and abilities will be needed by most, and obviously one function of the school is to provide them. Over and above all these, in which we have largely had in mind the roles of adult citizen and worker, there is an area of individual development, of personal satisfaction in doing something for its own sake, which we regard as equally important. If a school has not developed in a student, before he leaves, a taste for doing something, not necessarily well but to the best of his ability, for the enjoyment of doing it, then it has failed to some degree. For some students it is sufficient that they have this enjoyment in activity in their school subjects. The personal satisfactions they gain are real and valuable in their development as mature and well-balanced persons. For others, this kind of satisfaction comes from other forms of self-expression, and they are not necessarily bound to what are loosely called the "creative arts", important though these are to many. Opportunity, and positive encouragement to each individual to exercise initiative and to produce something original in some form of human activity, should play a part in the programme offered by every school.

3.13 **INTEREST IN LEARNING.** It has been one of the defects of schooling in past years that it has given some children a distaste for

learning by excessive drills and unrealistic expectations which had led to many being branded as failures. We think schools much happier places now, but there are still many children who leave them and show no later inclination to continue learning or to follow an interest developed in school. Basic skills and more advanced skills can be acquired without loss of either interest or the motive to go on learning. The self-confidence to which we refer later should produce a positive attitude to learning, and a real enjoyment of it, which will encourage a child to pursue interests after he leaves school, even if they require hard work. If the school does not do this, it has, to some degree at least, failed that child. Learning how to learn is important, but it is not enough. Unless it is accompanied by liking to learn, even in a small area of knowledge or skill that may be relatively insignificant, it will be sterile.

3.14 UNDERSTANDING SELF. It is very important that in making the most of his abilities the child is brought to a realistic understanding of himself. This is a slow but rewarding process. It involves an awareness of personal strengths and weaknesses, and an understanding of what values, hopes and interests he has and how these can be used to make rational decisions about educational, occupational and personal choices. The necessary accompaniment should, we think, be a sturdy but reasoned confidence in the child's own capacity, which he will carry with him into his post-school life. His school experiences should not make him expect failure, but make him confident of success within limits which he is able to recognise. Failure can be accepted under these latter circumstances without loss of self-esteem. Schools operating in this way will not only make the most of their individual members but give them the view that society must be concerned about individuals. Thereafter this will, we hope, be one of their own values. There is a corollary.

3.15 UNDERSTANDING OTHERS. As we have suggested above, an understanding of oneself does not operate in a vacuum. We think it highly unlikely, and perhaps impossible, for a school to adopt self-understanding as a goal without accompanying it with deliberate attempts to help every child to acquire an understanding and appreciation of others. Although the acquisition of this understanding will begin with the child's own school companions, it must be a conscious goal of the school to expand this concern to others, no matter to what cultural, ethnic or social groups they belong. There will, for example, be in each child's school other children with different degrees of intellectual competence. Manners of speech and ways of thinking, home backgrounds and family experiences will certainly differ. Increasingly in Australian schools there is a wider range of cultural and geographical backgrounds. Physical characteristics already differ markedly, and differences in facial appearance and skin colour are more common than they were. *Out of these differences, and the deliberate use of them by the school to lead to an apprecia-*

tion of their normality, without disparagement or criticism, will develop the understanding and tolerance that are necessary both for personal happiness and the operation of a pluralist society and a pluralist world. There will undoubtedly be conflicts between children with dissimilar views and tastes, but one of the purposes of the school will be the development of skills in handling and resolving these conflicts.

3.16 APPRECIATION OF THE ACHIEVEMENT OF OTHERS. It is principally through awareness of the demands made upon us to master some field, to express ourselves effectively and to create something original and personal that we become capable of understanding the original and masterly work of others. There is much to respect in human achievement in the arts, the humanities, the natural and biological sciences, the social sciences, technology, and community living and organisation. Awareness of this human achievement should be an integral part of the education of every child, varying as the understanding of it may be. A respect for the real achievements of the past will not come without study. It is too much to expect from all children in the period of compulsory schooling that they can come to this respect on the basis of personal knowledge in all the fields we mention, but they should do so in at least some. It does not need to be a blind respect. Those who attain it should find scope in the world around them for the exercise of the criteria for quality which it gives them. They may then, in other fields when the application of criteria is called for, be less prone to accept without clearly expressed reasons the estimates of others as criteria for excellence. We are arguing here for teaching and schooling that enable children to transfer their skills beyond the necessarily limited range of subject matter and experiences upon which they are established. A good school must have this as one of its purposes.

3.17 DECISIONS ABOUT VOCATIONS. Part of the understanding of himself that a child should acquire is of his capacity to handle a decision between the various kinds of jobs available to him. The school has a twofold obligation here: to provide adequate information about opportunities and their prerequisites (or to know where this information is available for the students to use) and to provide the necessary preparation for the jobs. The information without the preparation would be worse than useless. The preparation need not be specific. We are not arguing for courses and curricula to prepare for specific occupations. There are few jobs now available for which a specific preparation in secondary schools is desirable. The rate of change of jobs which we mentioned earlier requires the schools to emphasise a broad general education that will make later adaptation to new jobs easier. On the other hand the interest in this kind of general education, and their mastery of it, will be greater for many children near the leaving age if it is built around characteristics of work and the kinds of responsibilities and activities that go with it.

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3.18 UNDERSTANDING SOCIETY. We have referred from time to time to the adult citizen and his activities in the society of which he is a part. He acts in many roles — worker, voter, parent, to name only a few. To act responsibly with regard to the consequences of action in these roles is no easy task. The preparation for such responsible behaviour, which does not imply any single line of action, is only partly the function of the school. There is nowhere else in society, however, where an understanding of how society works can be more readily, more accurately and more objectively given. If the schools do not do this, it can again be counted a failure on their part.

3.19 There are inevitably tensions developed as a result of the study of society. We want our children to be critically minded, to require evidence on important issues and to play their part when they are mature enough in improving our social institutions, habits and customs. Yet we want them also to accept that these have evolved over time, that many of them though still deficient by our own ideals have been won over many painful years, that we have evolved procedures for change that respect the rights of others as well as our own and that only through such honest respect have we attained to what we think is an improvement over many of the institutions, customs and habits that distinguished the past. We cannot encourage the analytic and critical mind and deny it the right to criticise the existing social setting on the basis of its analyses. Yet we must have some stability, some order, in which that criticism can operate. We believe that schools can be expected to help children to acquire the attitudes of mind and the habits of thought and action that are part of a responsible citizenship which accepts evolutionary change as natural. These attitudes and habits should include at least:

- (a) A set of personal values amongst which we include honesty, compassion for the less fortunate, a respect for the individuality of others and a habit of fair dealing.
- (b) A readiness to join with others without thought of personal gain, either as leader or participant, in activities designed to improve community living either within the family or in a wider group.
- (c) An acceptance of the need to operate within institutions and customs observed by the majority, even while bringing to bear on them, when they are perceived to be working less than perfectly, the rational criticism out of which they themselves have sprung.

3.20 PERSONAL VALUES. The sets of personal values that we referred to above may be derived from one or a number of sources. The plural society to which we belong has no single particular philosophy out of which these values flow automatically. For many people the particular religious heritage of the home has provided a basis upon which values have been built. For others there have been other bases. Increasingly, we believe, as the accepted orthodoxies of other years are

called into question, individuals must develop and test their own sets of values. Schools cannot assume now, if they ever could, that the homes from which their pupils come are necessarily all subscribers to a common code of personal and social behaviour, or that the reasons for any apparently common values governing their behaviour are the same. At least the schools of the State cannot generally appeal to the authority of religion as a reason for particular conduct. The task of the schools in helping to build in children a stable set of personal values which will both give personal satisfaction and provide a basis for living in a community is therefore a hard one, but not to be shunned on that account.

3.21 **SEX EDUCATION.** In imparting knowledge about the relations between the sexes and in helping to establish the personal values and attitudes which govern the behaviour of one sex to and with the other, the respective roles of home, school and church are not clear. Public opinion and professional opinion are divided on the nature and extent of the sex education that schools should give. It is therefore not easy for a school to decide what it should include in its curriculum. Knowledge of the structure and functioning of the body, including human reproduction, ought to be a part of the curriculum experienced by every child. This is, or should be, easy for schools to arrange. It is the ethical and social values that are associated with the physical relations between the sexes, and the strong emotions likely to be associated with discussions of these relations, that make it difficult for schools to deal with sex education as they do with, say, drugs or alcohol, diets or general physical fitness.

3.22 It is important for children, and particularly for pre-adolescents and adolescents, to learn the physical facts about sex and to have the opportunity of considering sexual relationships as part of the general pattern of interpersonal relationships through which we express our attitudes to ourselves and to others. This can be done effectively only in an atmosphere where frankness, objectivity, non-prescriptive teaching and a relative absence of emotions can be guaranteed. Not all homes and not all teachers are confident of their capacity to handle sex education in this way. There is no doubt that for some children the atmosphere of the home, the personal values it portrays through the behaviour of the parents to each other and to their children, and the way in which questions are answered or anticipated so that embarrassment and guilt do not accompany either questions or thoughts, make formal sex education an unnecessary part of the school curriculum, apart from studies of the structure and functioning of the body. For other children, no such reliance can be placed on the home, and the possible alternative sources of sex education are the mass media, the peer groups, the school, or the church for those with religious affiliations.

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3.23 We believe that the school must accept an obligation to help many children to acquire the factual knowledge and the values which will enable them to defeat ignorance. It is in a position to provide a more reliable source of information and evaluation than is available in the mass media or the peer group, which will otherwise shape values and establish as "facts" what may in truth be misinformation. We believe that it should not be expected, at least in the near future, that all teachers should be able to take classes in sex education or to act as personal counsellors to children seeking help. Special preparation must be undertaken by teachers selected to teach such courses. Part of the preparation should equip them to undertake the rational discussion of the many controversial issues and hazy ideas that surround sex education. There is no simple or easy formula for this, and the different ages, sexes and backgrounds of the children they teach will require the teachers to possess a high level of skill. We believe, too, that it should be possible for parents to decide whether or not their children will attend classes devoted to sex education, and that they should be given the option of withdrawing their children if they wish to.

3.24 HEALTH. We have said nothing so far on the question of health, although it plays a large part in many statements about the purposes of schooling. The maintenance of personal and community health is only to a small extent the direct responsibility of the school, although the school should teach about health, make clear the conditions necessary for personal health, encourage desirable health habits and provide facilities for the development of good physical and mental health. In doing all these it cannot avoid undertaking studies in human biology and in the effective use of human physical capacities. It is reasonable to expect the schools to teach objectively about smoking, alcohol and drugs so far as these affect health and thereby create personal, interpersonal and social problems. It is, however, not reasonable to expect teachers to inculcate particular attitudes to, and values about, such matters when society itself is not prepared to adopt a clearly expressed policy about them, and when within any group of teachers there may be different views on some of the issues of personal freedom and social values associated with such problems.

SOME IMPLICATIONS OF SOCIAL CONTEXT AND PURPOSES FOR ORGANISATION, CURRICULA AND METHODS

3.25 Organisation, curricula and methods in schools are never static. They change with new understandings of the process of education and with new appreciations of the changes in the society which the schools are serving. The purposes for which the schools are set up change in any one society over time and vary between societies. Schools have been deliberately used in countries like Russia and pre-1939 Germany both to foster a new political system and to build the

attitudes and values which would support its continuation. We use our own schools both to conserve our heritage of those things in our past which we think worthy of retention and to prepare for change. Emphasis on continuity in society has loomed larger at certain times than at others. Conservation, permanence and continuity seem at present to be at a discount, and change, innovation and development are at a premium. It will be clear that, if the purposes discussed above are to be realised in the practice of schools operating in the context we have described, there are many implications for the schools. How should the schools reflect the social context referred to in paragraph 3.7, and realise the purposes discussed in paragraphs 3.8–3.24?

Implications of Social Context

3.26 PARLIAMENTARY DEMOCRACY. It has been taken for granted for a long time that the merits of our system of government are plain for all to see and that those who choose other methods, or even variants of it, are in error. Yet little has been done to develop a thorough knowledge of how the system works, and by what processes of dissent and compromise, dispute and co-operation it has reached its present state. It rests upon the unchecked use of rational discussion and upon the belief that true knowledge and wisdom arise from unfettered discussion of an unlimited range of opinions. If it is to survive or to be replaced by something better, it seems to us that its purposes, its nature and its structure must be taught to children and not left to chance. Teaching about these will not be enough, of course. Criticism of its premises and of the ways in which they have crystallised into institutions and formal procedures, and the difficulties, inequities and inequalities which arise in its operation need to be discussed as well as the opportunities it gives to individuals and the freedom it provides for change and improvement as a continuous process. Nor will this be sufficient.

3.27 A long experience, during the impressionable years of schooling, of overriding authority and of forms and procedures that are unalterable is a poor training for the kind of citizen such a democracy requires. Certainly, complete freedom to control all their activities cannot be envisaged for students at any level of schooling, but, within the limits of order and in those phases of schooling in which it is possible to provide them, schools should introduce their pupils to greater and greater amounts of self-control and self-discipline and give them more and more opportunities to make decisions that affect the organisation of their activities. In this way they will learn to live, work and play together under rules that they have had at least a part in making. Reaction to restriction leads often to licence; experience at school in participating in the activities of self-controlled groups will make it easier to fulfil many of the roles of the post-school years.

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3.28 CULTIVATION OF THE CRITICAL MIND. Educated men and women in our society use knowledge and skills to make reasoned judgments, they seek for and weigh evidence and they ask for proof in doubtful situations where proof is possible. They do not accept authority without question and they subject argument to a critical scrutiny. When knowledge and skill are insufficient, they seek more knowledge and cultivate greater skills, knowing how to use what they already have in the search for more. It is out of this constant ferment of critical appraisal of knowledge and techniques, both in social operations and in commercial and industrial life, that new ideas, new forms of organisation, new knowledge and new technologies are created. It is a process that no form of society yet devised has been able to stop, although some have come close to stopping it. It is a process we like to think can operate at its best in the kind of society we have. If this is so, then it is essential for schools to develop the ability to make critical appraisals, and an attitude towards the use of the critical mind that will make it constructive. If it is to be used in this way, the mind cannot be kept in blinkers during the school years. Knowledge, for example, cannot be seen solely as "given", although at some stages some must be taken on trust. The processes by which new knowledge is obtained must be made known and used. The habits of collecting and weighing evidence, of drawing conclusions and of suspending judgment pending proof or disproof, need to be a part of schooling at every level. Curricula which are collections of facts stated by authority, and methods which encourage simply the assimilation of those facts and their later recall, are not good preparation for intelligent participation in a community which rests for its progress on the ability of its members first to reason, and then to act in the light of reasoned decisions. Curricula and methods therefore must both be examined to ensure that they help the child at school to use his mind in ways in which his out-of-school life will require it to be used, both while at school and after his school days are over.

3.29 RATE OF CHANGE OF OCCUPATIONS. Reference has already been made to the need to acquire new knowledge and skill. The knowledge and skill available to anyone entering a vocation nowadays will be insufficient in a short time. It will need constant updating. In some vocations it will be quickly obsolete, and the individuals concerned will need to be retrained in new skills. New knowledge will need to be made available to them for use in a new vocation. It is a function of other institutions, and not of the school, to provide for this updating and retraining of past students, but the school must prepare students for it. This requires more of the school than that it should avoid specific vocational preparation and provide a broad secondary education not directed at any particular vocation or set of vocations. It requires, as we have stated earlier, knowing how to learn. It requires a readiness to go on learning. It requires a readiness to accept change and to prepare oneself for it.

3.30 So far as the schools are concerned the implications are clear. Their curricula will serve many purposes, some of which will be closely related to the vocations chosen by their pupils. However, for the great majority of their pupils, it seems to us that the schools should, through their approach to their subjects and curricula, be stressing always that knowledge gained and skills learned may be valuable in themselves, but that much of what is learned at school may have no permanent usefulness except as a basis for later learning. The need for adding to knowledge and skill if competence is to be maintained, and the probability of change in many vocations, can be made an integral part of the original learning of the knowledge and skills.

3.31 COMPLEXITY OF SOCIETY, LARGER UNITS, AND INDIVIDUAL IDENTITY. If schools can lead their pupils to an understanding of others, give them enjoyment in learning and give them a willingness to use some of their leisure time in making or doing things which give them pleasure without detriment to others, we do not think that the greater complexity of society, and the larger units of which individuals now find themselves members, will produce the frustrations, the apparent submergence of the individual in the crowd, and the sense of lost identity that some recent writers refer to. We do not wish to under-estimate the dangers of such frustration and sense of lost identity. It is easy for a large commercial or industrial unit, or a large educational institution, to become impersonal. Those responsible for education can do something about their own institutions. We make comments later about size of school, but we are aware that for many children even so-called small schools of 300 or 400 may be large, and even terrifying, institutions. Those in charge of schools must provide defences against the bad effects of size and take offensive measures against it. Educational authorities can do little about other large units in society, but the very size of their own institutions may, if effectively used, show how large units can be organised to provide satisfaction with work, enjoyment of companionship, and integration with wider community interests. This will not happen by accident. The counter-actions taken in a large school to emphasise the importance of the individual and to encourage his initiatives need also to be designed to give the individual the incentive as well as the skills to transfer these counter-actions later into his working life. It is natural that the larger the unit the more variation there will be in the individuals who compose it. This may mean that any particular individual has a greater chance of finding an affinity with others than he would have in a small unit. It may also mean that there is a more obvious clash of interests and values between groups and individuals. Intelligent use of the similar situations that will inevitably arise in the large school will provide examples of rational ways of resolving conflicts, in a setting in which there is an opportunity of examining them more calmly. If they do not arise naturally,

it will be part of the school's task to draw attention to the likelihood of their arising or to deal with reports about them in ways that will help the pupils in their post-school or out-of-school activities.

Implications of Purposes

3.32 **EQUALITY OF OPPORTUNITY.** One purpose of the school is to use its resources to help children, however handicapped, to use and profit by the school's facilities for learning. The resources available to it extend beyond its own buildings, equipment, teachers, curriculum, ethos and general atmosphere. They include those of the school system and those offered by the community as a whole. They include health services, social welfare services, special institutions for the handicapped, and guidance services, as well as the informal educational agencies in the community. Membership of the Boy Scouts, for example, may do as much to remedy a social or emotional handicap as a lengthy course in counselling — but someone in the school must know that there are troops of Boy Scouts in the locality, and, if necessary, take steps to get the boy accepted into a troop, and follow up his progress.

3.33 We discuss a number of implications for schools, relating to the opportunity of using education, in Chapter 14. All we wish to say here is that the first essential in the primary and secondary schools is that the teachers and other staff of the school must know the child as an individual well enough to know if he is handicapped in ways in which they can help him. Diagnoses of many kinds are required: medical, dental, psychological, educational and social. Only the last two of these are normally available within the school, and often a social diagnosis requires outside help. Methods of diagnosis of educational handicap are under critical scrutiny and are steadily improving. The science of social diagnosis is still very crude, and handicaps due to deficiencies in home and social environment may not be readily diagnosed. Medical, dental and psychological diagnoses must, for most children, be obtained from outside the school but be available to, or recorded by, the school. The information obtained from them must be used in the programme provided for each child, just as is the information derived from educational and social diagnoses. This kind of information ought to be available on each child's entry into school. It can be obtained, but to provide it for every child entering a school a change of policy and an expansion of resources will be needed. It will require more liberal staffing of infant departments to make or to use the assessments effectively and to undertake the family visiting, or discussion at school with parents who visit the school, that will be necessary.

3.34 **POTENTIAL OF THE CHILD.** The second general purpose that we discussed was for each child at school to make the most of his abilities. These will differ from one child to the next, and the pro-

vision of school services for the range and diversity of abilities in children of the same chronological age, even from very similar environments, is a challenge to the education and ability of teachers. Some of the data about these differences immediately give rise to questions about age of entry to schools, about the organisation of schools and the relevance of class teaching, about the range and quality of learning materials available to teachers to help them to deal with the variety of learning rates they meet in a normal group of children, about the extent of mastery of a particular individual, about the modes by which learning may best be encouraged for children with such different interests and motives and abilities and about the way teachers are professionally prepared in order to meet the challenge.

3.35 No one from whom we received evidence advocated a complete individualisation of the school programme, with each child proceeding according solely to the speed of his own mastery of the school's immediate purposes. We accept the need for and, indeed, the desirability of children working together on common tasks, for example for each one to help in the pursuit of purposes related to citizenship and to appreciate the contributions of others. The group need not, however, be the class as it is at present used. In subjects where personal skill is needed or where a body of knowledge is to be acquired, there is little if any need for more than a minimum of class or group activities, although there still seems much to be found out about the effect of group activities on the rate of, and motive for, learning of the individual. Grouping by class names should be done mainly for administrative rather than educational reasons when children of apparently equal maturity are at so many different levels in the same subject. We believe that this applies no less to secondary schools than to primary. The range of performance in a subject even at the matriculation level makes it clear that we expect too little of some students and too much of others when we ask them all to do a common course in a given time. The detailed implications of catering adequately for individual differences between children at both primary and secondary levels in regard to such matters as individual and group learning, size of learning groups, transition to the various stages of education (including tertiary), examinations, the education of teachers and the preparation of classroom aids or materials, obviously need constant attention.

3.36 We should think it strange if the variety of individual differences that schools find in their children did not also include differences in preferred means of learning both between children and within the same child for different kinds of learning. To make full use of these for the sake of the child requires a variety of equipment and facilities.

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3.37 There are other implications for the schools in the range and nature of the differences we have referred to above. The differences between children when they first come to school, for example, which will continue even if there is full provision for pre-school education, we think require special consideration. Individual attention to both intellectual and social development at this level is so important, in our view, that much more liberal staffing is required.

3.38 Serious attention to the ability and to the progress of each particular child therefore requires at least:

- (a) Close and continuous liaison between school and home.
- (b) Teachers prepared by their pre-service courses to handle a system which treats the individual as the unit rather than the class or grade.
- (c) A curriculum with clearly defined purposes which can be achieved at different rates or in some cases at different levels according to the ability of the children concerned.
- (d) Time-tables and school organisation which provide for flexible groupings of pupils, for the maximum use of teacher strengths and for the maximum use of the physical facilities of the school.
- (e) A variety of carefully designed learning and teaching aids which the children can use at the relevant times in their progress. Text-books, and workbooks, are a part of this variety but a part only.
- (f) Buildings in which accommodation for individual work, for small groups and even for very large groups is readily available.
- (g) A re-examination by teachers of their expectations of the minimum and maximum levels of achievement of pupils entering what we now call secondary schools. It may be that the current arbitrary separation into school levels has little to commend it.
- (h) A similar re-examination of the rationale and nature of the examinations giving entry to tertiary institutions. If there is a break-away from the idea of grade progression to individual progression, a single "end-of-year" examination on a given set of courses of study is not appropriate either as an evaluation of progress or as a guide to likely performance in later studies. Where annual selection of students goes on, however, and the selection is based on an order-of-merit list, the establishment of the list almost necessitates such an examination.

CONCLUSIONS

3.39 The context in which schools operate, and their general and specific purposes, have implications of many kinds for their establishment and operation. Schools are not microcosms of society and we do not suggest that they should be so, any more than is a home or a factory or a business. They are expected, however, to prepare pupils for their future as well as to equip them for their participation in the

world about them now. The school atmosphere must therefore reflect, to the extent that is possible in a community of teachers and taught, the interpersonal relations that are thought desirable in society at large. The values governing the organisation of the school, and the behaviour of the people in it, should be those that contribute to a society not averse to change but prepared for it to be evolutionary rather than revolutionary.

3.40 Children need curricula adapted to their level of ability while giving them command of commonly needed abilities and skills, and methods which take account of their individuality and foster it while not neglecting their need to be responsible and active members of groups. The conjunction of curricula and methods must give them the ability to learn independently and a willingness to do so, an acceptance of their own strengths and weaknesses and an appreciation of those of others.

3.41 Children will be prepared to accept change and to welcome it by participating in determining its direction. Curriculum, methods, or occasion will be deliberately chosen by the school to provide for children to share in organisations and procedures similar to those by which the community as a whole adapts its organisation and functions, and re-forms its parts in the better interests of its members. Children will be part of an organisation which is distinguished by its concern for its individual members, which is aware of their strengths and weaknesses and which encourages them to be constructive individuals in an increasingly complex world where the value of the individual may easily be lost without special efforts to retain it. Part of the process by which this concern will show itself will be the constant diagnosis of progress and prompt remedial action where it is needed. Part of it will be to make clear to each individual what he may aspire to in the choice of a vocation and what he must do to realise that aspiration.

3.42 It will be clear that the purposes discussed earlier have a number of specific implications for accommodation, other physical facilities and staffing. Many of these are taken up in Chapter 13 (Special Education) and in Chapter 14 (Equality of Opportunity in Education). In addition, there are specific implications relating to curriculum, to methods and organisation of the schools and to the availability of post-school education, of which the most important are as follows:

(a) School programmes organised in such a way that the child experiences success rather than failure, obtains from his performance in school tasks a realistic picture of his abilities and interests and arrives at an understanding of his values.

(b) Courses of study which allow children to move steadily towards increasing competence in those skills associated with reading, writing,

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listening, speaking, and handling numbers and measures, which are regarded as basic educational skills; courses organised to allow for the different rates of learning of the children concerned; more educational aids and materials in the classroom to help the teachers to provide adequately for the different needs and different rates of development of the children in their care.

(c) Approaches to teaching and learning which encourage the use of reason, logic and the search for evidence and which are based on the belief that the child learns best by activity rather than by passive acceptance of others' wisdom.

(d) Approaches to teaching and learning which develop a desire to learn more, a pride in performance, and a willingness to use knowledge or skill for the pleasure derived from its use.

(e) Experiences in working with others and learning about others, which will lead to tolerance, to the recognition of the pluralist nature of our society and to appreciation of the worth of others.

(f) Experience of excellence in some field or fields of human endeavour which will set personal standards and provide a respect for such endeavour.

(g) Information about vocations and about modes of entry, qualifications needed, and preparation for them.

(h) A broad general education rather than a specific vocational or pre-vocational one, although this broad general education should include the world of work. It may include work experience, and should certainly provide courses of study which prepare the child to face the major conditions of his work with confidence.

(i) Teaching about society so that the child understands it and is prepared for active participation in its operations and activities both while he is engaged in full-time education and later. The teaching will not eschew criticism. It will acknowledge differences in views and beliefs, but will deal also with the modes by which differences are reconciled, compromises accepted and change accommodated.

(j) Planned development of those attitudes and values which are necessary for the maintenance of a community in which the worth of each separate individual is emphasised and in which organisation is directed to making the most of each individual's interests and abilities.

(k) Opportunities after leaving school to acquire new skills, to bring knowledge and skill up to date and to improve existing skills. These may require both full-time and part-time courses.

CHAPTER 4

Numbers in Primary Education

RETENTION AND PARTICIPATION RATES

4.1 Throughout the post-war years the abnormal growth in numbers of students has presented educational administrators with problems of great urgency. It has dominated much policy-making, compelling the adoption of short-run solutions to meet the exigencies of the latest emergency in staffing or accommodation. These pressures are abating in the primary sector, but not for long. Our projections indicate that, in the late 1970's, the growth in numbers of pupils in primary classes will again accelerate and reach annual rates of growth in excess of those in the early 1960's. In this chapter our purpose is to examine the past growth in pupil numbers in South Australian primary schools, and to forecast future growth.

4.2 School populations change because, some years earlier, there has been a change in the number of births or in the level of migration or in the demand for education exemplified by pupils staying longer at school. All these factors have contributed to the growth in pupil numbers in South Australia but the last has more relevance to the secondary sector. The fundamental reasons for the change in the pace of pupil numbers in the primary sector are demographic, reflecting changes in the number of births some years earlier or in the rate of net migration.

4.3 We have used two main concepts to analyse the pupil numbers in the primary and secondary educational systems of the State, although their main relevance is to the secondary sector which is discussed in the following chapter. They are *participation rates* and *retention rates*. Participation rates are defined as the proportion of persons in particular age groups who are at school. Retention rates are defined as the proportion of persons of one age or grade who continue their education in the next age or grade. Theoretically, participation rates will be 100 per cent for the compulsory ages 6-14 years, but, in practice, they vary marginally from this level because there are always some children who are seriously ill, some who have exemptions from attendance at school, and others who are in transit between schools. In addition, the data are often imperfect. For example, the age distributions of State populations are only estimates for intercensal years; and the school and State populations are measured on different dates, viz., August for school censuses and June for population estimates.

4.4 When children are under compulsion to attend school, participation rates and retention rates approximate 100 per cent. Attendance is optional for children five years old and this is reflected in

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the participation rates for this age group. Currently, the participation rate for the 5-year age group is rather higher than 80 per cent, as Table 4.1 shows. However, it is rising in response to more liberal policies of admission to primary schools and a growing demand from parents for early schooling for their children. Few exemptions from attendance at school are granted. In total, they amount to less than one-half of one per cent of the children under compulsion, but they are concentrated among the pupils with less than six months of compulsory schooling remaining and they account for the participation rate of 14-year-old pupils being less than that of the 13-year-olds, although both age groups are under compulsion. Changes in numbers in primary schools are therefore less affected by participation rates than by demographic features of the population, particularly the birth rate and net migration.

Table 4.1

PARTICIPATION RATES OF PUPILS, FIVE YEARS OLD, BY SEX
SOUTH AUSTRALIA 1955-1968

	Males per cent	Females per cent
1955	76.7	76.0
1961	76.3	78.5
1962	79.4	79.5
1963	79.7	78.8
1964	80.7	81.0
1965	81.8	82.3
1966	81.5	81.3
1967	81.9	83.2
1968	83.4	84.2

4.5 Retention rates measure the progress of students through the educational system, either by age or by grade. They are defined as the proportion of children of one age or grade who continue their education in the next age or grade. However, the method by which retention rates are in practice calculated does not correspond precisely to the theoretical definition. Every year net migration adds to the number of students of all ages in South Australian schools. Consequently, in these circumstances, retention rates have an upward bias when calculated as the number of children at school in one year, relative to the number in the previous year one year younger, or one grade lower.¹ When retention rates are affected by migration they reflect not only the demand for further education from the existing population, but also the addition of new migrant children to the school population. Accordingly, such retention rates for the compulsory ages are greater than 100 per cent; and cohorts, whose progress is measured by age, will increase in size as they pass through the compulsory ages in the primary classes. When retention rates are measured between grades, they are affected also by school promotion policies. A liberal-

¹ See Appendix A, paragraphs A.12-A.13.

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isation of promotion between grades will raise retention rates by grades. In the primary sector, retention rates (as calculated) by age normally exceed 100 per cent, but by grades will not necessarily exceed 100 per cent because promotion is not automatic.

4.6 Retardation is declining in the primary schools so that grade retention rates will tend to rise for this reason. Table 4.2 illustrates this trend in government primary schools over a decade. In this Table, retardation is measured as the proportion of pupils in a grade who are one year older than the modal age for the grade. A random group of 100 grade VII pupils in 1967, compared with a similar group in 1957, would have four fewer students who had lost a year. The decline in retardation rates raises grade retention rates, and reduces the total number of pupils at primary school by accelerating their progress through school.

Table 4.2

PROPORTION OF GOVERNMENT PRIMARY SCHOOL PUPILS RETARDED ONE YEAR

SOUTH AUSTRALIA 1957, 1962 AND 1967

	1957	1962	1967
	per cent	per cent	per cent
Kindergarten	4.0	2.2	1.9
Grade I	6.2	4.6	3.0
II	10.9	8.4	5.0
III	15.3	11.9	7.4
IV	17.0	13.7	9.4
V	15.0	15.9	11.6
VI	16.2	18.3	13.4
VII	19.3	17.3	15.5

Source: Annual Reports of the Minister of Education.

PAST AND PROJECTED MOVEMENTS IN NUMBERS OF PUPILS

4.7 There has been an unprecedented increase in the number of pupils in South Australian schools in the post-war years and most of this growth has occurred in the metropolitan area. There has been some growth in the number of children enrolling for the first time in government primary schools outside the metropolitan area but it is dwarfed by the growth in new enrolments which has occurred in the metropolitan area, especially in the period 1959-1964. Moreover, as all schools on the southern periphery of Adelaide south of the Marion municipal area are classified as country schools, the metropolitan classification understates the enrolments from the region which in recent years might be regarded as urban Adelaide.

4.8 Table 4.3 sets out the number of pupils aged 5-12 years in South Australia for each year since the census of 1954, and the projected numbers of students of these ages for the period 1969-1981. Projections are only as reliable as the assumptions on which they are based. In preparing estimates of the future numbers of pupils of

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primary school age, it is necessary to project the demographic conditions of the population from which the primary school pupils will be drawn; in particular it is necessary to assume future rates of fertility, mortality and net migration. As the children who will enter primary schools up to 1974 have already been born, there is little that is conjectural in the estimates for the next five years, but thereafter the reliability of the projections depends particularly on the accuracy of the assumed levels of fertility between 1969 and 1975 and the rates of net migration for the whole period of the projection.

4.9 As no records are available of pupils by grades for all South Australian schools before 1963, the number of pupils aged 5-12 years has been used as a proxy for the number of pupils in primary grades. Pupils of primary school age, 5-12 years, exceed the number of pupils in primary grades because some children aged 12 have passed into the secondary system, but they are almost offset by students older than 12 years still in primary classes. Thus the discrepancy in measuring the primary sector as the number of pupils aged 5-12 years is small. In South Australia in 1968, for example, there were 176,000 pupils of all ages in primary classes and 179,500 pupils aged 5-12 years; of the latter 173,000 were in primary schools. Thus the number of pupils aged 5-12 years is a good approximation for the number of primary school pupils, and changes in the number of pupils aged 5-12 provide an equally good indicator of movements in the total number of pupils in primary grades. The projected numbers of pupils aged 5-12 set out in Table 4.3 are derived in Appendix A. They assume fertility conditions throughout the period of the projection equal to the average experience of the three years 1965-1967, and a rate of net migration into the State of 10,000 persons per annum.

4.10 Pupils of primary school age increased in number in each year of the period 1954-1968. In the first post-war years the number of children in primary schools was doubling in a decade. In the ten years from 1955 the rate of increase was less rapid, amounting to some 4,500 new pupils each year or an average annual increase of 3 per cent, but since then the absolute increase in primary pupils has fallen further to about 2,000 children per annum. While the annual rate of increase in the total number of children of primary school age, 5-12 years, has varied considerably, the trend in the rate of growth has been declining and the pace of growth has been less in the 1960's than it was in the 1950's. The more recent deceleration since 1965 is the consequence of the decline in fertility in the 1960's which has caused a reduction, after a lag of five years, in the intake of new students in primary schools. This decline in fertility persisted until 1967 and levelled off in 1968, so that the annual rates of increase of primary numbers will continue to decline in the early 1970's. It is expected that there will be a decline in absolute numbers in primary

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schools before the downward trend is reversed. Thereafter, for the period of the projection, total numbers of primary pupils will increase,

Table 4.3

NUMBER OF PUPILS AGED 5-12 YEARS AND ANNUAL RATE OF INCREASE
SOUTH AUSTRALIA 1954-1981

	Number	Annual Rate of Increase
<i>Actual</i>	'000	per cent
1954	116.8	—
1955	125.5	7.4
1956	133.9	6.7
1957	139.2	4.0
1958	144.4	3.7
1959	149.7	3.7
1960	151.1	0.9
1961	154.1	2.0
1962	156.9	1.8
1963	159.5	1.7
1964	164.3	3.0
1965	170.0	3.5
1966	174.9	2.9
1967	177.8	1.7
1968	179.5	1.0
<i>Projected</i>		
1969	182.1	1.4
1970	183.0	0.5
1971	183.5	0.3
1972	182.5	-0.5
1973	182.4	-0.1
1974	182.7	0.2
1975	184.5	1.0
1976	187.5	1.6
1977	191.9	2.3
1978	197.8	3.1
1979	205.0	3.6
1980	213.6	4.2
1981	221.6	3.7

and at an increasing pace, towards the end of the 1970's, attaining rates of increase in excess of the experience of the 1960's. The changing rates of growth of numbers of primary pupils are illustrated in Chart 5.1 in the following chapter.

4.11 Two factors will contribute to the expected reversal in both absolute numbers of pupils in primary schools and their rate of increase. First, it has been assumed in these projections that fertility will not decline further after 1968 but will stabilise at the average experience of the 1965-1967 period. If fertility does in fact continue to decline after 1968 the upturn in student numbers which is shown in Table 4.3 as occurring in 1974 will be delayed. Secondly, the forecast of increasing numbers of pupils of primary age in the late 1970's is an "echo effect" generated from the large number of births which

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occurred some 30 years earlier in the period following the Second World War. The increased births at this time increased primary school enrolments after a lag of some five or six years and will subsequently increase the primary school intake 30 years later when the children of the post-war babies enrol at primary schools.

4.12 Two significant results follow from this analysis. For the first time in the post-war years, the number of pupils of primary age will cease to grow in the early 1970's. This will provide the primary schools with a respite from the continuous pressure which they have experienced to find additional accommodation and staff for growing numbers of children. Secondly, this pause in growth will be relatively short-lived, and will cease as the "echo effect" from the earlier generation of post-war babies increases the number of new entrants in the primary schools in the late 1970's. It has been forecast in Table 4.3 that 1974 will be the turning-point between falling and rising rates of growth but this reversal could be deferred for several years if fertility continues to decline after 1968. The growth rates which are expected in the late 1970's are comparable with the rates of expansion of the late 1950's and significantly higher than the average rate of growth of the 1960's.

4.13 Appendix A contains a detailed account of the methods by which we projected future numbers of primary school pupils for each year until 1981. The projections were made late in 1969 and were based on data up to 1968. A comparison of projected enrolments for 1969 and 1970 with the actual enrolments which are now known is given in paragraph A.29. In any year the number of primary school pupils is closely related to the size of the group aged 5-12 years in the population, which in turn is determined by demographic conditions of fertility, mortality and net migration. Mortality is the least important of these factors as it is low in the school-going ages and more predictable than rates of fertility and net migration. Calculations based on alternative assumptions of net migration and fertility have been made to test the sensitivity of the projections to variations in these parameters and the results are summarised in Table 4.4.

4.14 The fertility assumptions used in our projections were adopted from published population projections of the Commonwealth Bureau of Census and Statistics. In these projections it is assumed that the future level of fertility for the period of the projection will be the average experience of the years 1965-1967. Fertility in this context relates the number of births to the number of women of child-bearing age. The gross reproduction rate which is the basic measure of fertility in this sense has been declining since 1961, although it now appears to be stabilising (see Table A.2 of Appendix A). The population projections have been recalculated to test the effects of higher levels of fertility on the population of primary school-

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going age. In this test the annual number of births was assumed to rise above the original estimate by 2, 4, 6, 8 and 10 per cent

Table 4.4

EFFECTS OF VARYING THE MIGRATION AND FERTILITY ASSUMPTIONS ON THE
PROJECTED NUMBER OF CHILDREN AGED 5-12 YEARS

SOUTH AUSTRALIA 1969-1981

	Projected Number of Children Aged 5-12 Years, Assuming	Percentage Variation Resulting From:	
	Net Migration: 10,000 p.a. Fertility: 1965-1967 Average	Net Migration of 5,000 p.a.	10 per cent Increase in Fertility (a)
	'000	per cent	per cent
1969	185.8	-1.0	—
1970	186.5	-1.4	—
1971	186.7	-2.1	—
1972	185.6	-2.6	—
1973	185.4	-3.2	—
1974	185.8	-3.7	0.2 (b)
1975	187.5	-4.3	0.7
1976	190.5	-4.8	1.5
1977	194.8	-5.3	2.5
1978	200.7	-5.6	3.7
1979	207.7	-6.0	4.9
1980	216.3	-6.2	6.0
1981	224.2	-6.5	7.1

(a) Fertility is assumed to increase by 2 per cent per annum between 1969 and 1973, attaining a 10 per cent increase in 1973, and remaining constant thereafter.

(b) The assumed increase in fertility affects the 5-12 age group with a lag of five years.

respectively for the five years 1969-1973, after which births remain 10 per cent higher than with the basic assumption. The results of this test are given in Table 4.4. Within the period of the projection the higher fertility assumption results in a maximum increase in the estimated population of about 7 per cent in 1981. Since the first additional children resulting from this assumption will be 12 years old in 1981, having been born in 1969, the impact of the higher fertility assumption is limited to the primary schools for the period of the projection.

4.15 The net effect of migrants entering and leaving South Australia has been to increase the number of children of primary school age in each of the post-war years. The annual level of net migration has been highly variable. In view of past rates and future prospects of net migration, 10,000 and 5,000 persons per annum have been adopted as upper and lower bounds respectively to expected rates of net migration for the projected period. The most plausible view of the average level of migration for the next decade is a rate in the upper half of this range. In order to test the sensitivity of the

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numbers in the school-going population to variations in the rate of net migration, projections of pupil numbers have been calculated using both migration assumptions. Within the period of the projection the changed assumptions produce a maximum difference in these estimates of the numbers of the population, aged 5-12, of approximately 6½ per cent, which occurs in the terminal year. Thus the hypothetical variations in the fertility and net migration assumptions produce effects of roughly the same magnitude in the terminal year of the projection, 1981, amounting in each case to roughly a 7 per cent difference in the number of children aged 5-12. The discrepancy arising from varying the rate of net migration increases with the passage of time; the maximum difference in pupil numbers will occur in the terminal year if the new migration rates remain unchanged for the whole period of the projection. A cut in migration will have less effect in the first half of the 1970's than in the second. It will also increase the amplitude of the dip in pupil numbers in the early 1970's which will hardly be perceptible if net migration approaches 10,000 person per annum.

4.16 It was pointed out in the analysis of the fertility and migration assumptions in paragraphs 4.14 and 4.15 that the pause in the growth in the number of primary school pupils in the early 1970's cannot be interrupted by an increase in fertility, because the children who will enter primary schools in this period have been born. The expected pause in the growth of numbers of primary age is the consequence of the decline in fertility since 1961. Nor is it likely that a change in the rate of net migration will disturb this pause. An immediate increase in net migration will increase numbers of students at school but the effects in the early stages of the changed rate of migration will be limited to the number of new arrivals aged 5-12; greater effects stem from a changed rate of net migration when the children born to the new migrants enter the schools and this will not occur in significant numbers until much later. The effects on the rate of growth in the number of children aged 5-12 years of changing the assumed levels of migration and fertility are shown in Table 4.5. A reduction from 10,000 to 5,000 migrants per annum lowers the rate of growth in the number of primary students, and an increase in fertility has the opposite effect. However, the higher level of fertility affects student numbers after a lag of five years, but it has a greater impact in the late 1970's on the rate of growth of student numbers than has the halving of the number of migrants.

Number of Pupils by Grades

4.17 The projections of the school population for each year of the period, 1969-1981, were converted from ages to grades by assuming that the 1968 age-grade relationships applied throughout the period of the projection. Thus the 11-year-olds, for example, were allocated to grades in the same proportion as occurred in 1968. It is unlikely

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that the age-grade table of a school population will remain stable from year to year, because variations in births and migration will change the relative age distribution and the relative numbers in each

Table 4.5

ANNUAL RATE OF GROWTH OF THE PROJECTED NUMBER OF CHILDREN AGED 5-12 YEARS
WITH VARIOUS MIGRATION AND FERTILITY ASSUMPTIONS

SOUTH AUSTRALIA 1969-1981

	Net Migration: 10,000 p.a. Fertility: 1965-1967 Average	Net Migration: 5,000 p.a. Fertility: 1965-1967 Average	Net Migration: 10,000 p.a. Fertility: 10 per cent Increase (a)
	per cent	per cent	per cent
1969	—	—	—
1970	0.5	0.1	0.5
1971	0.3	-0.4	0.3
1972	-0.5	-1.1	-0.5
1973	-0.1	-0.7	-0.1
1974	0.2	-0.4	0.4
1975	1.0	0.4	1.5
1976	1.6	1.1	2.4
1977	2.3	1.8	3.4
1978	3.1	2.7	4.3
1979	3.6	3.2	4.8
1980	4.2	3.9	5.3
1981	3.7	3.4	4.8

(a) Fertility is assumed to increase by 2 per cent per annum between 1969 and 1973, attaining a 10 per cent increase in 1973, and remaining constant thereafter.

grade. In addition, promotion policy has reduced retardation in schools in recent years, with the effect of raising the proportion of pupils in the more advanced grades for each age. However, these limitations are unlikely to be serious. The projections of pupils by grades are summarised in Table 4.6. They are given in detail in Tables A.24-A.32 in Appendix A.

4.18 The trends discussed in paragraphs 4.10-4.12 are also apparent in Table 4.6 which shows actual and projected primary school enrolments by grades. The declining rates of growth in number in the next few years are expected to reduce marginally the number of pupils in primary classes in the first two or three years of the 1970's, before the trend is reversed. In paragraph 4.15 it was observed that this pattern of deceleration succeeded by acceleration is present in the estimates of pupil numbers for the two migration assumptions, and that the level of migration is likely to affect the amplitude of variation in pupil numbers rather than the trend. The larger migrant inflow of 10,000 persons per annum dampens the decline in numbers in the early 1970's and quickens the rate of growth in the late 1970's. The detailed figures of Table A.12 in Appendix A illustrate this difference. The significance of the early 1970's for the primary schools lies not so much in the absolute decline in the numbers of pupils,

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which is relatively small, but rather in the pause in the growth of primary numbers, after the sustained growth for the whole post-war period.

Table 4.6

NUMBER OF PRIMARY PUPILS BY GRADES, ASSUMING A NET MIGRATION RATE OF 10,000 PERSONS PER ANNUM

SOUTH AUSTRALIA 1963-1981

	Kinder. I-II	III-V	VI-VII	Total (a)	Annual Change
	'000	'000	'000	'000	per cent
<i>Actual</i>					
1963	52.8	66.4	42.0	161.2	—
1964	54.0	68.0	43.4	165.4	2.64
1965	55.9	69.7	44.0	169.6	2.53
1966	57.8	70.8	45.2	173.7	2.45
1967	58.2	71.5	45.9	175.5	1.03
1968	57.3	72.3	46.4	176.0	0.27
<i>Projected</i>					
1969	57.2	73.8	47.5	178.6	—
1970	56.4	74.3	48.7	179.6	0.56
1971	55.6	74.1	50.0	179.7	0.10
1972	54.6	73.3	50.8	178.8	-0.53
1973	55.4	72.3	50.9	178.6	-0.12
1974	57.6	71.0	50.5	179.2	0.33
1975	60.5	70.5	49.9	180.9	0.99
1976	63.3	71.5	49.1	184.0	1.69
1977	66.1	74.0	48.3	188.5	2.42
1978	68.9	77.3	48.0	194.3	3.12
1979	71.6	80.6	49.3	201.6	3.72
1980	74.3	83.8	51.4	209.6	3.97
1981	76.8	87.0	53.6	217.4	3.76

Columns do not add to totals because of rounding.

(a) Excludes ungraded pupils in special schools.

4.19 The numbers in each grade decline for the first few years of the projection and rise subsequently. However, the significance of these early years lies in the provision of a few years of relative stability, when numbers of primary pupils cease to rise. The lowest number of pupils in each grade for the projected period comprises the children born in 1967 as they progress through the classes of the primary system. The trough in student numbers is caused by the fall in the number of births between 1961 and 1967, but the rate of fertility assumed for 1968 and later is the average level experienced in the years 1965-1967, which is higher than the fertility for 1967. The nadir in the number of students in the early grades occurs in 1972 and somewhat later in the higher grades.

Interstate Comparisons

4.20 All States have experienced substantial growth in the demand

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for primary education over recent years. This is illustrated in Table 4.7, which compares movements in the number of pupils aged 5-12 years in the six States over the period 1960-1968. South Australia's high rate of growth is attributable to demographic factors, and it ranks second only to Western Australia in the increase in number of pupils in all schools. Moreover, because numbers in non-government schools have actually fallen, South Australia has had to face an even larger expansion in the demand for places in government schools than would otherwise have been the case.

Table 4.7
INCREASES IN NUMBER OF PUPILS OF PRIMARY SCHOOL AGE
AUSTRALIAN STATES 1960-1968

	N.S.W. per cent	Vic. per cent	Qld. per cent	S.A. per cent	W.A. per cent	Tas. per cent
Government Schools	16.3	21.8	14.9	23.0	27.0	14.0
Non-Government Schools	9.2	9.5	22.8	-0.8	-2.8	16.8
All Schools	14.6	18.5	16.5	19.3	20.4	14.5

Government and Non-Government Schools

4.21 Table 4.8 examines at intervals of seven years the distribution of pupils of primary school age between government and non-government schools. Before 1961, government and non-government schools shared the increase in the number of primary pupils and grew at about the same rate. Since 1961, however, both the total numbers in non-government schools and the numbers in their primary sections have ceased to grow. Indeed the numbers in the primary classes of non-government schools have actually been falling. This means that government schools are now expanding at a greater rate than the growth of student numbers at the primary level as the numbers in the primary sections of the non-government schools decline.

Table 4.8
NUMBER OF PUPILS OF PRIMARY SCHOOL AGE 5-12 YEARS
SOUTH AUSTRALIA 1947-1968

	Government		Non-Government		All	
	Number '000	Increase per cent	Number '000	Increase per cent	Number '000	Increase per cent
1947	60.0	—	11.3	—	71.3	—
1954	98.3	63.8	18.5	64.1	116.8	63.8
1961	129.7	31.9	24.4	31.2	154.1	31.9
1968	156.2	20.5	23.3	-4.7	179.5	16.5

4.22 Table 4.9 divides the non-government schools into more homogeneous groups — the Catholic and the non-Catholic schools — and shows recent movements in their enrolments. Only a small change has occurred in the total number of children attending non-govern-

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ment schools over this period, but this change in aggregate numbers masks larger compensatory changes in the primary and secondary sections. There has been a marked decline in pupil numbers in the primary section of Catholic schools which has been largely offset by rising numbers in the secondary classes of non-government schools. It is expected that this trend in the balance between primary and secondary pupils in non-government schools will continue as higher retention rates increase the number of pupils in the secondary sections, and primary numbers stabilise or decline.

Table 4.9

CHANGES IN THE NUMBER OF PUPILS IN THE PRIMARY AND SECONDARY SECTIONS OF NON-GOVERNMENT SCHOOLS

SOUTH AUSTRALIA 1963-1968				
	Number of Pupils			Change
	1963	1967	1968	1963-1968
Primary				
Catholic	20,167	19,299	18,671	-1,496
Non-Catholic	4,510	4,491	4,355	-155
Total Primary	24,677	23,790	23,026	-1,651
Secondary				
Catholic	5,988	6,712	6,791	+803
Non-Catholic	6,366	6,757	6,808	+442
Total Secondary	12,354	13,469	13,599	+1,245
Total Non-Government	37,031	37,259	36,625	-406

4.23 The future distribution of the South Australian school population, aged 5-12 years, between government and non-government primary schools is more difficult to assess because of the declining trend in the number of pupils in the non-government primary section, which was illustrated in Table 4.9, and because of the uncertainty of the consequences of recent government policies directed towards arresting this trend. If we assume that current government policies prevent any increased drift of children from non-government to government primary schools and that the primary section of non-government schools continues to contract at the rate of the recent past, the numbers in the primary division of government schools will increase by some 4,000 students by 1981 as a result of the contraction of the non-government sector. Table 4.10 shows the estimated distribution of pupils of primary age for selected years based on this assumption.

CONCLUSIONS

4.24 Many of the data presented in the preceding paragraphs have been summarised in Table 4.11 to show the sources of the estimated

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growth in number of pupils of primary school age in the period 1969-1981. It is expected that this increase in demand for primary school places will be met by additional accommodation in government schools. If a further drift of pupils from non-government schools

Table 4.10

DISTRIBUTION OF THE PROJECTED NUMBER OF PUPILS AGED 5-12 YEARS
SOUTH AUSTRALIA 1968-1981

	Government	Non-Government		Total	Total
		Catholic	Non-Catholic		
	'000	'000	'000	'000	'000
1968 (a)	156.2	18.8	4.5	23.3	179.5
1973	160.8	17.4	4.2	21.6	182.4
1977	171.6	16.2	4.1	20.3	191.9
1981	202.6	15.0	4.0	19.0	221.6

(a) Actual.

does occur, the increase in numbers in the primary classes of government schools over the period 1968-1981 will be about 10 per cent higher than the estimate of Table 4.11. The expected increase amounts to approximately one-quarter of the 1968 primary enrolments in government schools, and almost all of it will take place after 1975. It is apparent from this analysis that, in the case of a 10,000 net migration rate, nearly two-thirds of the expected growth in numbers of children of primary school age is attributable to migration and only 6 per cent represents an increase in participation in education. At a lower migration rate of 5,000 persons per annum, migration, natural increase and higher participation will account for 46.9 per cent, 44.9 per cent and 8.2 per cent respectively of the increase for the same period. Australia's migration policy imposes many subtle and hidden costs on the community and Table 4.11 quantifies one cost measured in terms of the number of primary school places. The policy requires

Table 4.11

SOURCES OF PROJECTED GROWTH IN NUMBER OF PUPILS AGED 5-12 YEARS
ASSUMING NET MIGRATION OF 10,000 PERSONS PER ANNUM

SOUTH AUSTRALIA 1969-1981

	'000	per cent
Net Migration and Births Arising from Net Migration	25.1	63.6
Natural Increase other than from Migrants	12.0	30.5
Rise in Participation Rates of Five-Year-Olds	2.3	5.9
Total Increase 1969-1981	39.4	100.0

State Governments to increase the capacity of their educational facilities, and, as a consequence, resources are absorbed in providing more places rather than in improving the quality of education. If it is assumed that the numbers of pupils and the resources they absorb

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vary proportionately, Table 4.11 suggests that additional educational resources to be used over the period 1969-1981 for migrants and their children, not yet in this State, will be almost twice as great as the additional resources required by the growing number of the indigenous population and the greater participation in primary education. This is not to deny the considerable and widespread benefits that flow from the migration programme. It does, however, underline one of the costs.

4.25 The following conclusions emerge from the above analysis:

(a) The very rapid growth in numbers of pupils in primary schools experienced in the 1950's abated in the 1960's, and growth will almost cease in the period to 1975. This will afford an opportunity to the educational authorities of devoting their efforts to improvements in the quality of education instead of having to concentrate on quantity. This relief should be particularly welcome to the Education Department, which in recent years has had to cope with a greater relative increase in primary pupil numbers than has the Department of any other Australian State, except that of Western Australia.

(b) The elimination of growth in the early 1970's is a reflection of the falling number of births after 1961. However, if, as appears likely, fertility stabilises at the 1965-1967 level, or rises, the number of births will rise; and numbers in primary schools will rise quite rapidly after 1975. Indeed the rate of growth of primary numbers will, in the late 1970's, rise to about 3 to 4 per cent per annum, which is a level higher than those of the 1960's, although not as high as those of the 1950's.

(c) The government sector will probably have to expand to cope with about 10 per cent more than the total increase in numbers of primary pupils if the number of places provided by the private sector continues to contract.

(d) The number of places in primary schools in 1968 was 176,000. If net migration averages 10,000 per annum, probably about 40,000 additional places in primary schools will have to be provided by 1981; and nine-tenths of these will have to be provided during the period 1976-1981. About two-thirds of these extra places arise from migration, both directly and through the natural increase of migrants brought to South Australia after 1969. However, if net migration averages only 5,000 per annum, about 27,000 additional places will have to be provided. The whole increase will take place after 1976, and about one-half of it will be attributable to migration.

CHAPTER 5

Numbers in Secondary Education

DEFINITION OF SECONDARY EDUCATION

5.1 Secondary schools are defined in this chapter as those schools providing full-time education from grade VIII to grade XII. They include high and technical high schools, and the secondary classes of both the government area schools and the non-government fee-paying institutions. The modal ages of students in grades VIII and XII at the August census are 13 and 17 years respectively. In addition to the full-time education provided by the secondary schools many young people aged 16-18 years attend the universities, teachers colleges and other colleges of advanced education (see Chapter 11).

RETENTION AND PARTICIPATION RATES

5.2 The number of pupils attending South Australian secondary schools has increased very rapidly in the post-war years, even more rapidly than those in the primary sector. Two factors have contributed to the faster growth of the secondary educational system. In the first place the age group of the South Australian population seeking secondary education, namely those aged 13-18 years, has grown more rapidly than the age group attending primary schools. Between 1954 and 1968 the population of South Australia aged 13-18 years doubled while the primary age group, 5-12 years, increased at only half that rate. In the second place pupils are staying at school longer. The increased demand for secondary education is apparent in the rising participation and retention rates beyond the school-leaving age, which have risen more in the senior grades of the secondary schools than in the junior grades where demographic conditions are more influential in determining pupil numbers. Table 5.1 quantifies for South Australia the effects during 1956-1968 of population growth and rising retention rates for two groups of pupils aged 14-15 years and 16-18 years respectively, which broadly correspond to the ages of students in the junior and senior grades of secondary schools. During this period the number of pupils aged 14-15 increased by 25,000. If retention rates had remained unchanged for the whole period at the 1956 level, the number of pupils of these ages would have risen by 13,600 or 55 per cent of the actual growth. Thus, on this calculation, the rising propensity to stay at school accounted for 45 per cent of the growth in the number of pupils of junior secondary school ages. Given the same assumption of constant 1956 retention rates for the period 1956-1968, the number of students aged 16-18 would have increased by 4,400 or 30 per cent of the actual increase of 14,500 students; in other words, 70 per cent of the observed increase in the number of senior students aged 16-18 years is attributable to rising retention rates.

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5.3 Many influences have contributed to the rise of retention and participation rates. Parents want a better education for their children and with rising living standards they can afford to support their children longer at school. Institutions of higher education are

Table 5.1

ACTUAL NUMBER OF PUPILS AGED 14-15 AND 16-18 YEARS AND THE EXPECTED NUMBER,
ASSUMING CONSTANT RETENTION RATES AT THE 1956 LEVEL

	14-15 Years		16-18 Years	
	Actual	Expected	Actual	Expected
1956	14,465	—	3,450	—
1957	16,261	16,000	4,215	3,700
1958	18,692	17,600	4,714	4,200
1959	21,514	19,400	5,746	4,600
1960	23,884	20,700	6,855	5,100
1961	28,490	24,200	7,726	5,600
1962	31,030	25,200	9,325	6,000
1963	31,585	24,600	12,027	7,100
1964	34,400	25,500	12,995	7,200
1965	36,287	26,400	13,394	7,200
1966	37,232	26,900	14,038	7,400
1967	38,730	27,700	16,138	7,600
1968	39,525	28,100	17,931	7,800

more demanding in the standards they require of applicants for places. Technological progress is producing an industrial structure which requires an increasingly skilled and sophisticated work force; and employers are demanding higher educational standards of applicants for jobs. Schools are offering an increasing number of courses to suit the differing aptitudes, ability and needs of pupils. But short-run influences are apparent also, particularly the availability of jobs. When jobs are harder to obtain, as in 1962, participation rates, particularly of the older age groups, tend to rise above the long-term trend and in the subsequent periods to return to the trend as business conditions improve. The rising trend of participation rates for recent years is illustrated in Chart 5.1. The participation rates for students aged 14-18 years in Table 5.2 and Chart 5.1 are shown in greater detail in Table A.6 of Appendix A.

5.4 In 1954 almost all boys and girls aged 13 and under 14 were at school, but of those aged 14 and under 15 about 30 per cent had left school. A decade later the whole structure of school attendances had advanced by more than one year, with the participation rates of the 14-year-olds almost at saturation level and about 30 per cent of the 15-year-olds no longer at school. If current trends continue, it is estimated that by the late 1970's almost all students will remain at school until they turn 16, whereas some 20 years earlier a complete generation remained at school only up to the age of 14 years. Except for the younger ages, where increased retention is constrained as participation approaches saturation levels, the increase in participation

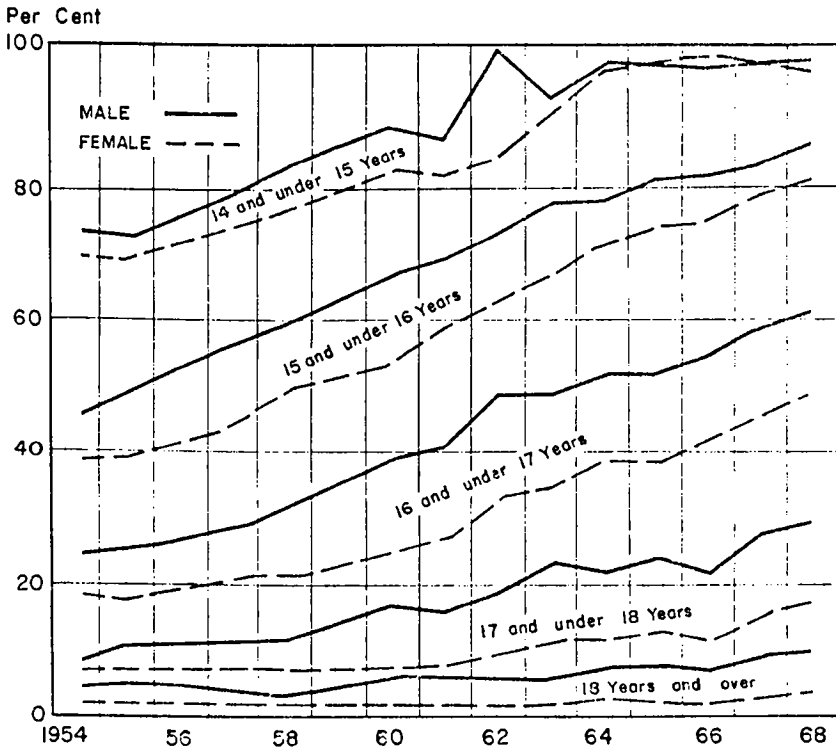
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rates has been larger in the second seven-year period, 1961-1968, as compared with the first, 1954-1961. These comprehensive participation

Chart 5.1

SCHOOL PARTICIPATION RATES

SOUTH AUSTRALIA 1954-1968



rates relate to the total population of the State and conceal wide differences in the use of educational facilities which will be discussed later in this chapter in paragraphs 5.7-5.11.

5.5 Retention rates for all secondary school ages have shown a marked upward trend similar to participation rates. Increasing numbers of pupils are continuing their education from one year to the next beyond their fifteenth birthday, the compulsory-age limit. This is illustrated in Table 5.3 which shows retention rates for boys and girls for selected years. For example, 67 per cent of the 14-year-old boys at school in 1954 were still at school in the next year, 1955, one year beyond the compulsory-age limit, whereas by 1968 this percentage had risen to 87. These data have been derived from Table A.6 of Appendix A which contains more detail.

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5.6 Age retention rates indicate the propensity of pupils to stay at school for a further year. Grade retention rates, on the other hand, measure the progress of pupils through the educational system and reflect not only the propensity to stay at school but also the promo-

Table 5.2

SCHOOL PARTICIPATION RATES FOR AGES 13-18 BY SEX

SOUTH AUSTRALIA 1954-1968

	13	14	15	16	17	18
	per cent	per cent	per cent	per cent	per cent	per cent
<i>Males</i>						
1954	97.6	73.4	45.6	24.4	7.9	5.1
1961	99.0	87.9	69.6	40.5	15.8	5.8
1964	101.9	98.1	78.1	51.6	21.4	7.1
1968	99.1	99.3	86.7	61.7	29.6	9.7
<i>Females</i>						
1954	97.5	69.7	38.8	18.5	6.4	1.7
1961	97.9	82.2	58.4	26.7	7.2	1.2
1964	100.7	97.5	71.3	38.2	11.4	2.2
1968	100.8	98.0	81.0	48.6	16.8	3.1

tion policies adopted in the schools. The highest level of retardation in government schools occurs at grade VIII as a consequence of more pupils than usual being required to repeat their first year of secondary education. This contributes to the high retention rates for grade VIII which are evident in Table 5.4. In the junior grades of secondary schools most pupils are under compulsion to attend, and, with promotion between grades IX and X almost automatic, retention rates for grades IX and X are close to 100 per cent. The sharp decline at

Table 5.3

SCHOOL RETENTION RATES FOR AGES 14-18 BY SEX

SOUTH AUSTRALIA 1955-1968

	14	15	16	17 ¹	18 ¹
	from 13	from 14	from 15	from 16	from 17
	per cent	per cent	per cent	per cent	per cent
<i>Males</i>					
1955 from 1954	74.1	67.0	55.1	43.8	64.3
1961 from 1960	91.4	77.8	60.6	40.6	35.2
1968 from 1967	98.0	87.3	73.5	50.7	36.2
<i>Females</i>					
1955 from 1954	71.5	57.2	45.6	36.3	25.6
1961 from 1960	83.2	70.5	49.7	29.6	16.9
1968 from 1967	97.7	81.9	61.2	37.6	21.4

¹ Retention rates in government schools have been characteristically lower than those in private schools. Between 1955 and 1961 the expansion in the number of students in government schools was much greater than in private schools. This resulted in a fall in retention rates for all students, in spite of their rising in the government and non-government sectors separately.

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grade XI is the consequence of the lower participation rate for 16-year-olds, particularly girls, and the external Intermediate examination which has checked the progress of weaker pupils in the past. With the abolition of the Intermediate examination in 1968 it is to be expected that retention rates between grades X and XI will rise rapidly to the level of the retention rates of the preceding grades. There are two main reasons for this expectation. In the first place, the abolition of the Intermediate examination will facilitate automatic promotion between grades X and XI and permit greater flexibility of courses in schools. Secondly, students will have to complete grade XI if they wish to obtain an external examination certificate.

Table 5.4

SCHOOL RETENTION RATES BY GRADES AND BY SEX

SOUTH AUSTRALIA 1964-1968

	VIII from VII per cent	IX from VIII per cent	X from IX per cent	XI from X per cent	XII from XI per cent
<i>Males</i>					
1964 from 1963	105.7	92.4	93.4	57.9	40.9
1966 from 1965	106.1	89.6	92.8	58.3	39.5
1968 from 1967	102.4	93.5	93.3	66.9	50.3
<i>Females</i>					
1964 from 1963	104.6	93.9	91.3	48.8	27.6
1966 from 1965	104.0	92.1	89.0	47.8	28.0
1968 from 1967	102.3	93.8	90.4	57.5	37.5
<i>Persons</i>					
1964 from 1963	105.1	93.1	92.4	53.6	35.3
1966 from 1965	105.1	90.8	91.0	53.2	34.5
1968 from 1967	102.3	93.7	91.9	62.4	44.6

Differential Retention Rates

5.7 Differential retention rates reflect differences in educational opportunity and environment. However, they must be interpreted with caution where there is movement between groups, because a transfer of students raises the retention rate of the group gaining students and has the opposite effect on the group losing them. Students often transfer from rural to metropolitan schools in the senior secondary grades and from government to non-government schools at the end of their primary schooling.

5.8 Table 5.5 illustrates the differences in retention rates of pupils of government schools in the country and in metropolitan areas in recent years. The retention rate in excess of 100 per cent for grade VIII in metropolitan schools reflects in part the transfer of students from other schools — non-government and rural — and the high retardation rate referred to in paragraph 5.6. Retention rates in government schools in country districts have been lower than those in the metropolitan

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area for all grades for the whole period 1962-1968. The greatest discrepancy between metropolitan and country retention rates occurs at the fifth year, the consequence of many country schools not catering for matriculation classes. For every 1,000 students entering grade VIII in government secondary schools in metropolitan and country districts in 1965, 520 and 420 respectively were in grade XI three years later. One thousand students of the cohort entering grade VIII three years earlier in 1962 were reduced by 1965 to 440 and 290 respectively in grade XI. The difference in retention rates between metropolitan and country districts is narrowing in the junior secondary grades, but there is no evidence from this limited period of the country schools' retention rates overtaking those of the metropolitan schools in the senior grades.

Table 5.5

RETENTION RATES BY GRADES IN METROPOLITAN AND COUNTRY AREAS IN GOVERNMENT SECONDARY SCHOOLS

SOUTH AUSTRALIA 1962-1968					
	VIII from VII per cent	IX from VIII per cent	X from IX per cent	XI from X per cent	XII from XI per cent
<i>Metropolitan</i>					
1962 from 1961	101.4	—	—	—	—
1963 from 1962	103.6	90.4	—	—	—
1964 from 1963	110.8	96.7	93.4	—	—
1965 from 1964	111.3	92.4	88.8	52.0	—
1966 from 1965	108.2	91.6	90.3	53.1	35.9
1967 from 1966	106.6	93.4	90.7	58.3	41.6
1968 from 1967	106.1	95.4	92.0	62.2	44.7
<i>Country</i>					
1962 from 1961	96.5	—	—	—	—
1963 from 1962	87.3	79.4	—	—	—
1964 from 1963	95.4	88.7	86.6	—	—
1965 from 1964	94.8	86.7	87.2	44.2	—
1966 from 1965	114.8	87.4	87.1	42.6	18.8
1967 from 1966	101.5	79.0	89.1	47.7	23.4
1968 from 1967	98.2	90.0	88.0	53.9	26.1
<i>Total</i>					
1962 from 1961	99.4	—	—	—	—
1963 from 1962	96.8	86.1	—	—	—
1964 from 1963	104.6	93.7	91.0	—	—
1965 from 1964	105.0	90.3	88.2	49.3	—
1966 from 1965	110.7	90.1	89.2	49.4	30.6
1967 from 1966	104.7	87.7	90.2	54.6	36.0
1968 from 1967	103.1	93.4	90.6	59.4	39.1

5.9 Table 5.6 compares the retention rates of government and non-government schools for the non-compulsory ages. It demonstrates that the retention rates for the ages up to 17 years in the non-government schools are in advance of those of government schools by more than a decade. This relationship holds for both sexes. These broad groups,

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government and non-government, are by no means homogeneous and retention rates within each group vary widely. Table 5.7 indicates the dispersion of retention rates by grades for the Catholic and non-Catholic schools in the non-government sector. Retention rates of the Catholic schools generally lie between those of the government and the non-government non-Catholic schools.

Table 5.6

RETENTION RATES BY AGE AND BY SEX IN NON-GOVERNMENT AND GOVERNMENT SCHOOLS

SOUTH AUSTRALIA 1956-1968

	15 from 14		16 from 15		17 from 16		18 from 17	
	M	F	M	F	M	F	M	F
	per cent		per cent		per cent		per cent	
1956 from 1955								
Non-Government	78.7	72.3	64.9	62.2	44.5	33.4	40.0	27.4
Government	66.6	54.6	48.2	41.4	33.2	22.8	28.1	5.0
Total	69.3	59.8	53.1	48.8	37.9	28.1	32.7	21.3
1957 from 1956								
Non-Government	85.9	73.7	83.7	70.1	57.6	48.9	64.3	29.1
Government	70.9	57.1	52.1	40.4	33.3	27.6	30.7	36.9
Total	74.0	61.4	60.1	51.0	44.5	37.3	43.8	32.3
1958 from 1957								
Non-Government	86.8	85.1	72.9	63.2	48.8	40.1	23.8	19.3
Government	73.9	61.2	51.4	40.2	38.4	26.8	33.2	28.5
Total	76.5	67.1	56.6	47.4	42.1	33.3	28.3	23.0
1966 from 1965								
Non-Government	92.8	86.7	87.6	66.3	55.0	36.4	26.5	12.3
Government	82.6	75.3	64.0	53.1	38.8	27.6	27.7	14.5
Total	84.0	77.3	67.7	55.8	42.3	29.8	27.3	13.8
1967 from 1966								
Non-Government	91.4	84.9	84.7	70.0	65.4	45.1	43.7	16.5
Government	84.5	78.6	68.7	57.0	44.9	32.9	34.5	19.9
Total	85.4	79.7	71.2	59.6	49.1	35.9	37.1	18.8
1968 from 1967								
Non-Government	97.4	92.9	89.1	74.8	69.6	46.1	39.8	20.9
Government	85.9	80.2	71.1	58.2	46.6	35.1	35.7	21.6
Total	87.4	82.2	73.8	61.2	51.0	37.6	36.8	21.4

5.10 Differences in retention rates within the government sector are well illustrated by comparing high and technical high schools. The retention rates of the high schools have been consistently higher than those of the technical high schools. The discrepancy is more noticeable in the more advanced grades. At grade IX the retention rates of the technical high schools lag behind those of the high schools by about three years, but the lag increases with the grade, so that in grades X and XI the lag in retention rates is eight years and more than ten years respectively. Grade XII has been introduced in some technical high schools in recent years. The numbers of students remaining for a fifth year in these schools are still small but they are increasing rapidly. When grades IX, X and XI of Table 5.8 are

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equated with the 15-, 16- and 17-year-olds respectively of Table 5.6 (since they are the modal ages of these grades), the lag in retention rates between the two types of government secondary schools is almost as great as the difference between the government and non-government schools, especially in the senior classes.

Table 5.7

RETENTION RATES BY GRADES IN NON-GOVERNMENT AND GOVERNMENT SCHOOLS

SOUTH AUSTRALIA 1966-1968

	IX from VIII per cent	X from IX per cent	XI from X per cent	XII from XI per cent
1966 from 1965				
<i>Non-Government:</i>				
Catholic	89.3	91.7	55.9	32.5
Other	101.2	129.7	80.4	52.2
<i>Government</i>	90.2	89.2	49.3	30.7
1967 from 1966				
<i>Non-Government:</i>				
Catholic	91.4	94.0	60.8	58.7
Other	101.9	105.8	90.9	61.5
<i>Government</i>	96.0	90.2	54.6	36.2
1968 from 1967				
<i>Non-Government:</i>				
Catholic	91.0	95.4	62.7	49.2
Other	101.1	103.0	90.9	70.3
<i>Government</i>	93.4	90.6	59.5	39.3

Table 5.8

RETENTION RATES BY GRADES IN HIGH AND TECHNICAL HIGH SCHOOLS

SOUTH AUSTRALIA 1956-1965

	IX from VIII		X from IX		XI from X		XII from XI	
	H	T	H	T	H	T	H	T
	per cent		per cent		per cent		per cent	
1956 from 1955	82.6	73.3	81.1	66.7	48.7	23.3	32.4	—
1960 from 1959	87.2	87.7	84.3	77.6	52.6	28.1	37.2	—
1964 from 1963	92.8	88.0	92.1	81.3	56.7	34.6	39.0	3.6
1968 from 1967	95.9	91.4	94.5	84.7	66.4	47.1	50.3	15.6

5.11 An interstate comparison of participation rates in Table 5.9 shows virtually 100 per cent participation for the population aged less than 15 years for all States in 1968. With the exception of Victoria, South Australia has the highest participation rates for the 15- and 16-year-olds and this is the case for both sexes. In the senior secondary classes, South Australia's participation rates for the 17- and 18-year-old age groups of the population have been below the Australian average in recent years, and this difference is more marked for girls than for boys. South Australia's participation rates, at these ages, exceed the rates for Queensland, Western Australia and Tasmania, but the relatively high participation rates of Victoria and New South Wales raise the Australian average for these ages and for both sexes.

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As a consequence of the Wyndham Scheme the New South Wales participation rate for 17-year-old boys increased in 1967 to 29.1 per cent from 16.1 per cent in 1966 and has risen to 32.2 per cent in 1968. The Victorian participation rates for these ages have been above the Australian average throughout the 1960's. It should be remembered that a proportion of the older students are enrolled in tertiary institutions.

Table 5.9

SCHOOL PARTICIPATION RATES BY STATES

AUSTRALIA 1968							
Age	N.S.W. per cent	Vic. per cent	Qld. per cent	S.A. per cent	W.A. per cent	Tas. per cent	Aust. per cent
<i>Males</i>							
14	97.0	99.3	98.1	99.3	97.2	99.7	98.0
15	78.3	84.7	72.0	86.7	71.7	77.9	79.4
16	52.7	62.0	39.5	61.7	37.7	42.1	52.7
17	32.2	33.3	19.9	29.6	18.2	19.5	28.9
18	13.0	12.9	5.5	9.7	6.3	7.5	11.0
<i>Females</i>							
14	96.5	98.5	97.6	98.0	95.2	98.0	97.1
15	76.1	81.4	67.5	81.0	66.8	76.9	75.9
16	42.9	54.2	32.1	48.6	30.8	35.5	43.7
17	22.9	26.1	13.8	16.8	14.2	12.8	20.8
18	6.7	5.5	2.8	3.1	2.7	2.5	5.0

Projected Retention and Participation Rates

5.12 Projected retention and participation rates have been derived by extrapolating trends in the rates since 1954. The methods adopted in the preparation of these projections are discussed in detail in Appendix A, paragraphs A.14-A.22. The Appendix makes use of two assumptions about retention rates in the senior grades. Except where stated to the contrary, the projections used in this chapter are based on the "medium" assumption, which we regard as the more plausible. The "high" assumption is discussed in Appendix A, paragraph A.21. Males and females have been treated separately as their experience is significantly different. The past trend and the projected levels of participation rates for males and females are given for selected years in Table 5.10. The participation rates for 14-year-old boys and girls have been virtually 100 per cent since 1963 and 1966 respectively. In 1968, 87 and 81 per cent of boys and girls respectively, aged 15, were at school at the August census. It is forecast that these participation rates will rise to 100 per cent by 1977, so that in the late 1970's almost all boys and girls less than 16 years old will be at school.

5.13 The participation rates of 16- and 17-year-old boys were 62 and 30 per cent respectively in 1968. These rates have been rising rapidly, especially for the 17-year-olds, and it is forecast that the par-

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participation rates for boys will reach about 100 per cent and 60 per cent respectively by 1981. It is expected that the rates for 16- and 17-year-old girls in 1981 will be more than 90 and 40 per cent respectively as it becomes the practice for pupils not proceeding to tertiary institutions to have at least four years of secondary education rather than the three years which have been the norm in the recent past.

Table 5.10

PAST AND PROJECTED SCHOOL PARTICIPATION RATES BY SEX

SOUTH AUSTRALIA 1958-1981

	Age 15 per cent	Age 16 per cent	Age 17 per cent	Age 18 per cent
Males				
<i>Actual</i>				
1958	59.7	31.5	11.9	3.1
1963	77.7	48.9	22.8	5.4
1968	86.7	61.7	29.6	9.7
<i>Projected</i>				
1973	95.9	78.2	42.0	17.5
1978	100.0	95.6	54.5	22.4
1981	100.0	100.0	61.5	25.6
Females				
<i>Actual</i>				
1958	49.0	20.7	6.7	1.6
1963	66.4	34.6	10.5	1.1
1968	81.0	48.6	16.8	3.1
<i>Projected</i>				
1973	96.6	66.0	25.9	5.0
1978	100.0	85.5	35.6	6.9
1981	100.0	94.9	43.8	8.9

5.14 The estimated participation rates discussed in the two preceding paragraphs imply specific retention rates as retention and participation rates are interdependent. The relationship between these two rates is discussed in paragraph A.12 of Appendix A. Of the boys and girls aged 14 years in 1967 some 87 and 82 per cent respectively returned to school in 1968, when they were 15 years old. Three-quarters of the boys aged 15 in 1967 stayed on in 1968 after their sixteenth birthday and roughly half of these remained after their seventeenth birthday, and these retention rates will rise further as pupils stay at school longer. The retention rates implicit in our estimates of participation rates are given in Table 5.11. Thus it is projected that by 1981 all boys and nearly all girls will continue their full-time education beyond their sixteenth birthday, and roughly half the girls and 60 per cent of the boys will stay at school for at least a further year. These projections relate to the whole population but there are likely to be larger changes for those groups whose participation and retention rates are currently low, because the more favoured students

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have already reached saturation levels or will do so sooner than is predicted for the population as a whole.

Table 5.11

PAST AND PROJECTED SCHOOL RETENTION RATES BY AGE AND BY SEX

SOUTH AUSTRALIA 1968-1981

	Age 15 from 14	16 from 15	17 from 16
	per cent	per cent	per cent
<i>Males</i>			
1968 from 1967 (a)	87.3	73.5	50.7
1973 from 1972	95.0	84.0	56.0
1981 from 1980	100.0	100.0	60.0
<i>Females</i>			
1968 from 1967 (a)	81.9	61.2	37.6
1973 from 1972	97.0	76.0	40.0
1981 from 1980	100.0	95.0	47.0

(a) Actual.

5.15 Table 5.11 refers to the proportion of each age group which remains at school. It is also useful to consider the proportion of boys and girls entering secondary school who persist to the highest grades. Table 5.12 sets out estimates of these proportions for boys and girls entering secondary schools in 1964 compared with the projected proportions implied in our projections of participation and retention rates for those entering in 1971 and 1977 (see Appendix A, paragraphs A.22-A.23).

Table 5.12

PAST AND PROJECTED (a) PROPORTIONS OF SECONDARY SCHOOL ENTRY PERSISTING TO GRADES XI AND XII IN SELECTED YEARS

SOUTH AUSTRALIA 1964-1977

Year of Entry	To Grade XI	To Grade XII
	per cent	per cent
<i>Males</i>		
1964 (b)	53	26
1971	75	44
1977	90	60
<i>Females</i>		
1964 (b)	44	16
1971	67	31
1977	85	45

(a) On the basis of medium retention rates.

(b) Actual.

5.16 It can be seen from the Table, taking males and females together, that, whereas on current experience only about one-half of the entry to secondary schools persist to grade XI and one-fifth to grade XII, by the end of the period of the projection the proportions will have increased to about nine-tenths and one-half respectively. By way of comparison, it is interesting to note that currently in the

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United States of America about four-fifths of the students entering grade V persist to grade XII, the final year of high school. This is even higher than our projections based on the assumption of high retention rates (see Appendix A, Table A.11). Moreover, in the United States there is no marked differential between the persistence of males and females.

PAST MOVEMENTS IN NUMBERS OF PUPILS

5.17 Statistics of the numbers of all pupils by age and grade in South Australian schools are available only since 1963. Consequently, the numbers of pupils aged 13-18 years have been used in this section as a proxy for the numbers of pupils in secondary schools. Table 5.13 examines the trends and the annual rates of change in these data since the mid-1950's. The numbers of pupils aged 13-18 years give a close approximation to the numbers of pupils in secondary schools because those pupils in this age group still at primary school are offset

Table 5.13

NUMBER OF PUPILS AGED 13-18 YEARS AND ANNUAL RATE OF INCREASE

SOUTH AUSTRALIA 1954-1981

	Males	Females	Total	Annual Rate of Increase per cent
	'000	'000	'000	
<i>Actual</i>				
1954	13.7	12.0	25.7	—
1955	15.1	12.9	28.0	8.9
1956	16.5	14.1	30.6	9.2
1957	18.8	15.8	34.6	13.3
1958	21.0	17.9	38.9	12.4
1959	23.8	19.7	43.5	11.7
1960	27.8	23.2	51.0	17.4
1961	30.1	25.0	55.1	8.0
1962	32.5	26.9	59.4	7.8
1963	34.9	28.8	63.7	7.2
1964	36.6	31.3	67.9	6.7
1965	38.0	32.5	70.5	3.8
1966	39.2	33.7	72.9	3.4
1967	41.1	35.4	76.5	4.9
1968	42.7	36.5	79.2	3.4
<i>Projected</i>				
1969	44.5	38.2	82.7	4.5
1970	46.5	40.0	86.5	4.6
1971	48.3	41.6	89.9	3.9
1972	50.5	43.6	94.1	4.7
1973	52.4	45.6	98.0	4.1
1974	54.7	47.5	102.2	4.3
1975	56.4	49.2	105.6	3.3
1976	58.0	50.0	108.0	2.3
1977	59.2	50.7	109.9	1.8
1978	59.9	50.9	110.8	0.8
1979	59.9	51.1	111.0	0.2
1980	59.7	50.1	109.8	-1.1
1981	59.5	52.5	112.0	2.0

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by the more advanced pupils who enter secondary schools before they are 13 years old and consequently are excluded in this proxy measure. In 1968, for example, there were 79,150 pupils 13 years of age or older; of this number, 5,300 were attending primary schools but there were 6,400 pupils in secondary schools younger than the proxy age group 13-18 years. Thus in 1968 this method of estimation understated the 80,300 students in secondary schools by 1,100 or 1.4 per cent. Table 5.13 also contains for the years 1969-1981 the projected pupil numbers which have been derived from Table A.13 of Appendix A. This projection assumes a net immigration rate of 10,000 persons per annum and medium retention rates in the senior secondary classes.

5.18 The population aged 13-18 years more than doubled from 60,000 to 128,000 persons in the period 1954-1968, and at the same time the average length of schooling has increased. These two developments have increased the number of pupils aged 13-18 years almost threefold between 1954 and 1968 and almost all these pupils have attended secondary schools. In the decade and a half since 1954, the proportion of the population aged 13-18 years still at school has increased from 47 per cent to 62 per cent. While this increased participation has caused a general expansion of the secondary system, the most rapid increase in pupil numbers has been in the senior grades XI and XII. The annual rates of growth in the secondary system since 1954 have far exceeded those of the primary system, which are set out in Table 4.3 of the previous chapter. The highest growth rates for the secondary system occurred in the late 1950's; since that period, rates of growth of pupil numbers have moderated, but, even so, they remained relatively high throughout the 1960's, as Chart 5.2 illustrates.

Table 5.14

INCREASES IN NUMBER OF PUPILS OF SECONDARY AGE

AUSTRALIAN STATES 1960-1968						
	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.
	per cent	per cent	per cent	per cent	per cent	per cent
Government Schools	46.5	62.4	34.0	65.8	61.6	24.2
Non-Government Schools	30.9	39.0	33.0	26.5	38.6	19.5
All Schools	42.2	55.4	33.7	57.6	55.1	23.2

5.19 The substantial increase in the number of secondary students in recent years, as reflected in Table 5.13, has occurred in varying degrees in all the Australian States. This is shown in Table 5.14, which compares movements in the number of pupils aged 13 years and over in the six States, over the period 1960-1968. Over the period under consideration, South Australia has experienced the highest growth in secondary pupil numbers of all the States; Victoria and Western Australia have had similar rates of growth, but the

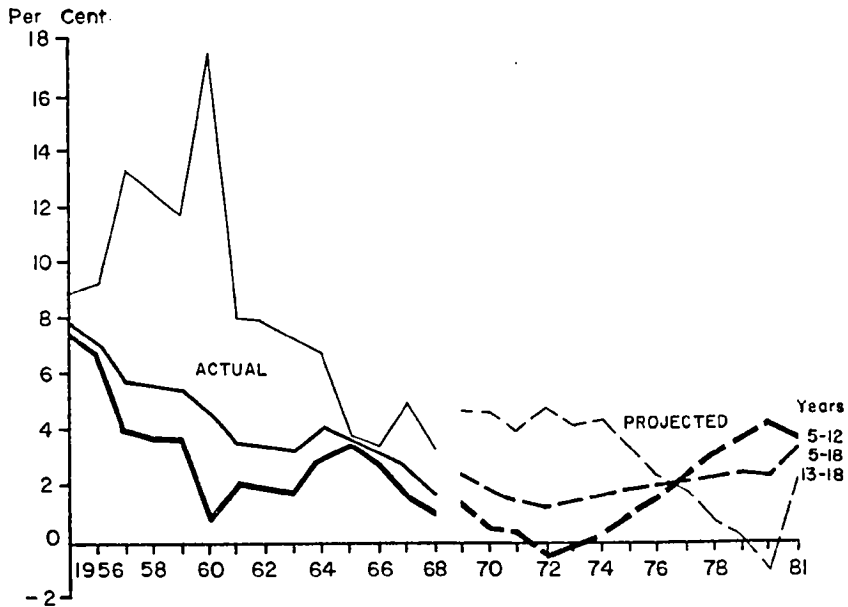
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other States have had smaller ones. South Australia's relatively high rate can be accounted for by its rapid population growth and by increasing retention of pupils in the secondary schools. Because of the slower growth in the number of places in private schools, the impact of growth has been all the greater on the government system. Table 5.14 should be read in conjunction with Table 4.7 which indicates that South Australia has also had high growth rates in the numbers of primary pupils relative to the other States.

Chart 5.2

ACTUAL AND PROJECTED ANNUAL RATES OF GROWTH OF PUPILS IN CERTAIN AGE GROUPS

SOUTH AUSTRALIA 1955-1981



5.20 It was observed in paragraph 4.21 that the total number of pupils in non-government schools in the 1960's has remained almost constant. However, this stability in the total figures has masked a decline in numbers in the primary grades and some expansion in the secondary sector, although the rate of increase of pupils aged 13-18 years in non-government schools has been slower in the seven years 1961-1968 than it was in the preceding seven years 1954-1961. In aggregate the non-government schools meet only a small part of the total demand for secondary education, and in the 1960's the government secondary schools have accommodated almost 90 per cent of the total increase in numbers of pupils entering secondary grades. The relative expansion of the government secondary sector since 1961 is

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apparent in Table 5.15, which shows that the number of pupils aged 13-18 years at non-government schools declined in the period 1954-1968 from 27 per cent to 17 per cent of all pupils aged 13-18 years.

Table 5.15

NUMBER OF PUPILS AGED 13-18 YEARS IN GOVERNMENT AND NON-GOVERNMENT SCHOOLS

SOUTH AUSTRALIA 1954-1968

	Government	Non-Government	Total	
		A	B	A/B
	'000	'000	'000	per cent
1954	18.7	7.0	25.7	27.2
1961	43.5	11.6	55.1	21.1
1968	65.8	13.4	79.2	16.9

Sex Differences

5.21 Table 5.16 examines the differences by sex in the number of pupils aged 13-18 years in government and non-government schools. The masculinity ratio, that is, the number of males per 100 females, varies between age groups in the population but, for the ages 13-18 years, the masculinity ratio of the population is approximately 105. Table 5.16 shows that the overall ratio of boys to girls of this age group at schools is higher than this and has shown little change in the aggregate over the period 1954-1968. The high masculinity ratio among pupils reflects the higher participation and retention rates for boys, which is illustrated in preceding Tables, especially Tables 5.2, 5.3 and 5.6. The ratio of boys to girls in the non-government schools approximates the average for the population of these ages and is significantly higher in government schools.

Table 5.16

NUMBER OF PUPILS AGED 13-18 YEARS BY SEX
IN GOVERNMENT AND NON-GOVERNMENT SCHOOLS

SOUTH AUSTRALIA 1954-1968

	Government			Non-Government			Total		
	M	F	Masculinity	M	F	Masculinity	M	F	Masculinity
	'000	'000	(a)	'000	'000	(a)	'000	'000	(a)
1954	10.3	8.4	123	3.4	3.6	95	13.7	12.0	114
1961	24.1	19.4	124	6.0	5.6	107	30.0	25.0	120
1968	35.8	30.0	119	6.9	6.5	108	42.7	36.5	117

(a) Males per 100 females.

5.22 These figures emphasise the difference between the sexes in the use of educational facilities. The lower ratio of boys to girls in the non-government schools reflects the socio-economic differences between the families sending their children to non-government and government schools. The lower participation in education of girls is

also apparent in the differences in participation and retention rates for boys and girls which have been illustrated in Tables 5.2, 5.3 and 5.6. This would appear to be wasteful of potential talent, and the figures in Table 5.17 confirm this viewpoint. In this Table, a comparison is made of the scaled marks obtained by boys and girls in their best five subjects at the 1968 Leaving examination conducted by the Public Examinations Board. The three quartile scores which divided all the candidates into four equal groups of 25 per cent were applied separately to the results of the boys and girls who sat for this examination. If the performance of the boys and girls had been identical these three scores would have divided the distribution of the boys and the girls also into four equal groups of 25 per cent each. In fact, 29.1 per cent of all girls and 22.0 per cent of all boys obtained marks in excess of the first quartile mark for all candidates, and, similarly, 58.1 per cent of all girls and 44.8 per cent of all boys obtained marks better than or equal to the second quartile or median mark for all candidates. The performance of the girls remained consistently superior, no matter how the total candidates were divided into sub-groups. The results of the sub-groups, metropolitan, country, high school, technical high school and non-government, have been included in Table 5.17 to illustrate this observation. It might be argued that those girls who leave school earlier are weaker students

Table 5.17

QUARTILE DISTRIBUTION OF AGGREGATE SCALED MARKS FOR THE BEST FIVE SUBJECTS
OF EACH CANDIDATE IN THE LEAVING EXAMINATION

SOUTH AUSTRALIA 1968

	Proportion of Candidates Obtaining Scaled Marks Between:			
	Top Mark and Q_1 per cent	Q_1 and Median per cent	Median and Q_3 per cent	Q_3 and Lowest Mark per cent
<i>Metropolitan</i>				
Males	22.5	22.7	25.8	29.0
Females	30.7	29.7	23.1	16.5
<i>Country</i>				
Males	21.1	23.9	25.7	29.3
Females	25.4	27.2	26.7	20.8
<i>High Schools</i>				
Males	23.5	22.5	26.3	27.7
Females	29.6	28.7	23.8	17.8
<i>Technical High</i>				
Males	12.2	26.5	29.1	32.2
Females	24.6	25.1	25.7	24.6
<i>Non-Government</i>				
Males	21.7	23.6	23.4	31.3
Females	29.7	31.2	23.8	15.2
<i>All Schools</i>				
Males	22.0	22.8	25.7	29.4
Females	29.1	29.0	24.0	17.9

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and that the general performance of girls is thereby raised. More evidence is needed to test this hypothesis but it would be surprising if the differential persistence at school was based solely on academic performance. It is not uncommon, for example, for parents who cannot afford to give all their children a long and expensive education to provide the boys of the family with better opportunities than the girls, although there may be little difference in their school records.

PROJECTED MOVEMENTS IN NUMBERS OF PUPILS

5.23 The projected numbers of secondary school pupils aged 13-18 years, for the period 1969-1981, are presented in Table A.13 of Appendix A, and in Table 5.13. Table 5.18 summarises the data contained there and is based on a net migration rate of 10,000 persons per annum and medium retention rates in the senior secondary grades. As was the case for primary school pupils the projections were made on the basis of data up to 1968; a comment on the more recent data which has become available is given in paragraph A.29.

5.24 It is predicted that the number of pupils aged 13-18 years will continue to rise for the next five years at the rate experienced in the last quinquennium, but for the remainder of the 1970's the secondary school population will increase less rapidly. This is illustrated in Chart 5.2. The levelling-off in aggregate numbers in the secondary system is the consequence of a decline in the rate of growth of the population aged 13-18 years in the second half of the 1970's. Ultimately there will be an absolute decline in this age group of the population late in the 1970's. Since the people of this age group have already been born, any future change in the level of fertility will have no influence on this trend. However, the trend will be somewhat affected if the level of immigration in the intervening period differs from the assumed rate of 10,000 per annum. Throughout the 1970's participation rates will rise but the effects that they will have on pupil numbers later in the decade will be dampened by demographic conditions. Moreover, the significance of increasing participation

Table 5.18

ACTUAL AND PROJECTED NUMBER OF PUPILS AGED 13-18 YEARS

SOUTH AUSTRALIA 1963-1981

	Males '000	Females '000	Total '000	Annual Change per cent
<i>Actual</i>				
1963	34.9	28.8	63.7	—
1968	42.7	36.5	79.2	4.4
<i>Projected</i>				
1973	52.4	45.6	98.0	4.4
1978	59.9	50.9	110.8	2.5
1981	59.5	52.5	112.0	0.4

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must diminish as participation in successive age groups approaches saturation.

Projected Numbers of Pupils by Grades

5.25 The secondary educational system has been divided into junior and senior sectors, the former including grades VIII to X and the latter grades XI and XII. Table 5.19 shows the actual and estimated pupil numbers and their rates of growth for the period 1963-1981 and the numbers and rates of growth for grade XII. The projected numbers are based on a migration assumption of a net inflow of 10,000 persons per annum, and medium retention rates in the senior grades. These projections are given in greater detail as Projection B in Tables A.27-A.29 of Appendix A.

Table 5.19

ACTUAL AND PROJECTED NUMBER OF PUPILS IN
JUNIOR AND SENIOR SECONDARY GRADES (a)

SOUTH AUSTRALIA 1963-1981

	Junior Secondary		Senior Secondary		Grade XII	
	No.	Annual	No.	Annual	No.	Annual
	'000	Change	'000	Change	'000	Change
		per cent		per cent		per cent
<i>Actual</i>						
1963	50.9	—	9.5	—	2.2	—
1964	54.7	7.5	10.4	9.5	2.6	18.2
1965	57.9	5.9	11.1	6.7	2.7	3.8
1966	60.4	4.3	11.6	4.5	2.9	7.4
1967	62.6	3.6	13.8	19.8	3.7	27.6
1968	63.8	1.9	16.2	18.7	4.5	21.6
<i>Projected</i>						
1969	65.9	3.3	17.7	7.3	5.3	17.8
1970	68.0	3.2	19.2	8.5	5.8	9.4
1971	70.1	3.1	20.8	8.3	6.4	10.3
1972	72.3	3.1	22.6	8.7	7.1	10.9
1973	74.5	3.0	24.4	8.0	7.8	11.0
1974	76.6	2.8	26.2	7.4	8.6	10.3
1975	77.9	1.7	28.3	8.0	9.4	9.3
1976	78.4	0.6	30.1	6.4	10.2	8.5
1977	78.3	-0.1	32.1	6.6	11.0	7.8
1978	77.5	-1.0	33.7	5.0	11.9	8.2
1979	76.5	-1.3	34.9	3.6	12.6	5.9
1980	75.8	-0.9	35.7	2.3	13.1	4.0
1981	76.6	1.1	36.3	1.7	13.6	3.8

(a) The estimated number of pupils is derived from Projection B, which assumes a net migration rate of 10,000 persons per annum, and medium retention rates in the senior grades. Ungraded students in special schools are excluded.

5.26 High rates of growth are forecast for the senior secondary classes until 1975, and thereafter somewhat lower rates of increase for the period of the projection. Although, when measured against the pace of the last five years, these projected increases appear moderate,

they will add to an already strained situation in the secondary schools, so that the declining rates of growth in the late 1970's are unlikely to afford much relief from the pressure on resources in the senior grades of the secondary sector. It is estimated that another 20,000 places will be necessary in the senior secondary grades over the years 1969-1981, the required expansion being evenly spread over most of the period. Some 9,000 of these places will be in grade XII, which is expected to increase almost threefold by 1981. Rapid as this rate of growth is expected to be, it is moderate when compared with the expansion of grade XII in some recent years which is detailed in Table 5.19. The junior secondary grades will require another 13,000 places by 1976, which is a smaller rate of expansion than in the recent past, and for the remainder of the 1970's numbers in the junior secondary grades are expected to decline slightly.

5.27 Two other projections of student numbers have been prepared (Projections A and C) which are summarised in Table A.12 of Appendix A; Projection C is repeated in Table 5.20. The details of these projections are contained in Tables A.24-A.26 and A.30-A.32 respectively. In the case of Projection A a net migration rate of 5,000 persons per annum with the same medium retention rates in the senior classes as in Projection B is assumed. In the case of Projection C the same net migration rate as for Projection B (10,000 persons per annum) is assumed, but with high retention rates in the senior classes. Variations in the assumed level of migration become more important with the passage of time as the migrants and the children born to them accumulate in numbers over the years, but, in the first half of the 1970's, changes in the net migration rate make little difference to the numbers of pupils in the junior or the senior sections of the secondary system as set out in Table 5.19. The difference becomes more significant in the late 1970's, especially in the junior secondary system which is more sensitive to changes in demographic conditions; halving the migrant inflow reduces the estimated enrolment in the junior secondary sector by approximately 7 per cent in 1981.

5.28 Pupil numbers are more sensitive to variation in retention rates, which produce more immediate effects than changes in migration rates. In addition, the impact of retention rates is limited to the non-compulsory ages so that their effect is concentrated in the senior secondary grades. The two Projections B and C, which differ only in their retention rates, steadily diverge over the projected period, showing a difference of 10 per cent in 1971 and 16 per cent by 1981. Moreover, the greatest effect of generally rising retention rates occurs in the most senior classes since a general rise in retention rates has a multiplicative effect through the educational system. This is apparent from Tables A.33-A.35 in Appendix A which list the expected enrolments for grades XI and XII resulting from the three Projections A, B, and C. The data of the last two Projections are summarised in Table 5.20.

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5.29 Student numbers for the senior grades, XI and XII, are the most difficult to forecast. Various recent structural changes in the educational system will impinge on the future enrolments in these grades so that past rates of growth may not be appropriate guides to the future. These structural changes result from the new matriculation requirements which were introduced in 1966, the development of more tracks in the senior classes in the government schools, and the abolition of the Intermediate examination which has resulted in the Leaving examination becoming the first external examination which gives a certificate. Participation rates have risen rapidly for the specific age groups of students in these grades and they will continue to rise, but the speed at which they will increase is speculative. The high retention rates of Projection C assume that retention rates will rise at a pace similar to the average rate experienced in the recent past when these structural changes occurred. However, some of these effects are likely to be once-for-all rather than continuous, so that a projection based on their extrapolation is likely to over-estimate the future rate of change.

Table 5.20

PROJECTED NUMBER OF PUPILS IN GRADES XI AND XII

SOUTH AUSTRALIA 1969-1981

	Projection B		Projection C	
	XI	XII	XI	XII
	'000	'000	'000	'000
1969	12.4	5.3	12.8	5.7
1970	13.4	5.8	14.2	6.3
1971	14.4	6.4	15.6	7.3
1972	15.5	7.1	17.1	8.4
1973	16.6	7.8	18.3	9.5
1974	17.7	8.6	19.6	10.6
1975	18.9	9.4	21.1	11.7
1976	20.0	10.2	22.1	13.0
1977	21.1	11.0	23.2	14.1
1978	21.9	11.9	23.8	15.3
1979	22.3	12.6	24.2	16.2
1980	22.6	13.1	24.4	17.0
1981	22.8	13.6	24.5	17.7

5.30 The numbers in the senior grades in Projection C rise more rapidly than those in Projection B. While the growth in numbers from this projection is very rapid it is not as high in the periods 1968-1973 and 1973-1978 as it was in the years 1963-1968. The growth rate for the last period was 11.3 per cent per annum compared with the expected rates based on high retention rates in senior classes of 10.5 per cent and 5.4 per cent per annum for 1968-1973 and 1973-1978 respectively. After 1978 demographic conditions will offset to some degree the rising retention rates, and the pace of expansion should decelerate further. Movements in numbers of students in the senior grades have a special significance since they have a direct effect

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on the numbers wishing to carry on with tertiary education at universities, colleges of advanced education and teachers colleges.

Government and Non-Government Schools

5.31 Table 5.21 examines the implications for government and non-government schools of the projected increases in numbers of primary and secondary students. It has been assumed that enrolments in non-government schools will remain roughly unchanged at 37,000 over the projected period, but the composition of this aggregate will change as primary enrolments fall (see paragraph 4.23) and as higher retention rates along with greater transfer from government primary to non-government secondary schools raise the numbers of pupils in the secondary classes. The somewhat slower rate of increase in the senior classes of non-government schools, when compared with the government schools, as shown in Table 5.21 is to be expected, because retention rates are already high in the non-government sector.

Table 5.21
PAST AND PROJECTED (a) NUMBER OF PUPILS IN
GOVERNMENT AND NON-GOVERNMENT SCHOOLS
SOUTH AUSTRALIA 1963-1981

	Primary '000	Junior Secondary '000	Senior Secondary '000	Total '000
Government				
<i>Actual</i>				
1963	138.1	41.3	6.7	186.1
1968	155.3	54.4	12.3	222.0
<i>Projected</i>				
1973	159.9	63.8	19.7	243.4
1978	177.5	65.6	28.5	271.6
1981	201.7	64.0	30.9	296.6
Non-Government				
<i>Actual</i>				
1963	24.7	9.6	2.8	38.1
1968	23.0	9.7	3.9	36.6
<i>Projected</i>				
1973	21.3	11.0	4.7	37.0
1978	19.6	12.2	5.2	37.0
1981	18.7	12.9	5.4	37.0
All Schools (b)				
<i>Actual</i>				
1963	162.8	50.9	9.5	223.2
1968	178.3	64.1	16.2	258.6
<i>Projected</i>				
1973	181.2	74.8	24.4	280.4
1978	197.1	77.8	33.7	308.6
1981	220.4	76.9	36.3	333.6

(a) Based on Projection B.

(b) Includes ungraded students in special schools.

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5.32 The estimated pupil numbers in the three levels of the government sector, contained in Table 5.21, have been obtained by deducting the numbers for the private sector from the total estimates. The growth in the number of pupils in the primary classes of government schools until the mid-1970's is expected to be less rapid than it was in the years 1963-1968, when pupil numbers increased by 2.4 per cent per annum. For the remainder of the projected period, 1976-1981, the numbers of pupils in the primary sector are expected to grow relatively rapidly, as Table 4.3 shows. The junior secondary classes of government schools have increased by 5.6 per cent per annum in the last five years and it is expected that they will increase at a slower pace (3.3 per cent per annum) in the next five years, after which the rate of expansion will ease further, with projected enrolments between 1978 and 1981 possibly declining.

5.33 Estimated numbers in the senior secondary classes of government schools are the most speculative as they are dependent on the speed at which retention rates rise in the near future, as well as on the level of enrolments of senior secondary students at non-government schools. In the senior classes in recent years, the proportion of students in non-government schools has been relatively high, being 30 per cent in 1963 and 24 per cent in 1968. Consequently, changes in the preferences of parents between the two systems can significantly affect the numbers in the senior classes in government schools. The figures in Table 5.21 are based on the assumption of medium retention rates in senior classes. It is expected that the numbers of students in these classes in the non-government schools will continue to rise, but not as rapidly as the total number of students in senior classes; and, consequently, the government schools will cater for most of the increased demand. Thus the numbers of senior secondary students in government schools are expected to increase over the periods 1968-1973 and 1973-1978 by 9.9 per cent and 7.7 per cent per annum respectively. These high rates of growth are less than the pace of the period 1963-1968 when the number of senior students in government schools increased by 12.9 per cent per annum. In the last three years of the projected period, 1978-1981, the rate of increase is expected to decelerate further to 2.7 per cent per annum as the age group 13-18 years of the population declines, offsetting the effect of rising retention rates on student numbers in the senior classes of government schools.

CONCLUSIONS

5.34 The underlying trends in the data presented in the preceding paragraphs have been summarised in Table 5.22 which analyses the sources of the estimated growth in the number of pupils of secondary school age, 13-18 years, in the period 1969-1981. The increase in the population aged 13-18 years in this period is due entirely to net immigration which more than offsets the decline in natural increase caused by the fall in fertility in the 1960's. If the indigenous and the

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migrant components of the age group 13-18 years seek secondary education equally, 35 per cent of the increased number of pupils over the period 1969-1981 will originate from migrants not yet in Australia. Without migration and improved participation rates, pupil numbers in the secondary sector would decline by more than 1,000 because of the fall in numbers of the age group 13-18 years of the indigenous population. By far the most important source of expansion of the secondary system is the propensity to stay at school longer, which accounts for more than two-thirds of its growth.

Table 5.22

SOURCES OF PROJECTED GROWTH OF NUMBER OF PUPILS AGED 13-18 YEARS,
ASSUMING NET IMMIGRATION OF 10,000 PERSONS PER ANNUM

SOUTH AUSTRALIA 1969-1981

	'000	per cent
Calculated at 1968 Participation Rates:		
Net Immigration	10.3	35.3
Natural Increase (Change in the Age Group 13-18 Years Excluding Immigration)	-1.2	-4.0
Rise in Participation Rates	20.1	68.7
Total Increase 1969-1981	29.2	100.0

5.35. The following conclusions emerge from the above analysis:

(a) The secondary system grew most rapidly in the late 1950's and its rate of growth has decelerated throughout the 1960's. Rates of growth of student numbers are expected to stabilise at between 4 and 5 per cent per annum until the mid-1970's and decline thereafter until 1981. The slackening in the rate of growth will afford some relief to the problems of the educational authorities and some opportunities to improve the quality of education, although the numbers in the senior secondary grades will continue to rise steadily at a rate of 8 to 10 per cent per annum until the late 1970's. As in the case of the primary system, this relief should be particularly welcome to the Education Department, which in recent years has had to cope with very high rates of increase in secondary pupil numbers compared with some of the other Australian States.

(b) Participation and retention rates for the non-compulsory ages have shown marked upward trends which are expected to continue for at least the next decade, although they are bound to level off as participation approaches 100 per cent. These trends have been largely responsible for the growth of numbers of students in senior secondary classes. By 1981, it is likely that virtually all boys and girls will stay on at school past their sixteenth birthday, that more than 60 per cent of boys and more than 40 per cent of girls aged 17 years will be at school, and that roughly the same proportions as these will persist to the final year of secondary schooling.

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(c) There are significant differences in retention rates between government and non-government schools, country and metropolitan schools, high and technical high schools and male and female students.

(d) South Australian participation rates exceed the Australian average for both sexes for the ages 14-16 years but are significantly lower for older girls.

(e) The number of places in the junior grades of secondary schools in 1968 was 64,000. If net migration averages 10,000 per annum probably about 14,000 additional places will have to be provided by 1976. Thereafter until 1981 the number of places required is expected to decline slightly. The number of places in the senior grades in 1968 was 16,200. About 20,000 additional places will have to be provided in these grades by 1981 — almost one-half of these in grade XII. However, if net migration averages 5,000 per annum, the increase in secondary places would be about 6,500 fewer, mainly in the junior grades.

(f) The allocation of projected secondary school pupils between the government and non-government sectors is highly speculative in view of recent changes in government policy towards the latter. Given this uncertainty, a reasonable working hypothesis is that total enrolments in non-government schools will stabilise near present levels and the numbers in their secondary grades will increase somewhat. The implication of this forecast is that most of the extra places referred to above will have to be provided in government schools.

CHAPTER 6

Teachers

6.1 Important indicators of the quality of a school system are the qualifications and experience of its teachers, and their numbers in relation to those of the pupils they will be required to teach. As the number of entering pupils rises and the span of school attendance lengthens, difficulties may be encountered in maintaining the quality of the system and in improving it in terms of a rising level of education of its teachers and a reduction in the size of its teaching groups. This is especially so if, because of lower birth rates in an earlier period, the numbers entering school are higher than those of the group from which their teachers must be drawn, and vocations other than teaching attract potential teachers. South Australia has recently been passing through a period of difficulty in manning the schools because demographic factors and employment opportunities of this kind have added to the problem of growth in school numbers. However, the age group from which teachers may be drawn is now reflecting the increased birth rate of the post-war years; and increasing school retention, although it is raising the numbers to be taught, is also augmenting the pool from which trainee teachers may be drawn. These facts and the lower rate of increase in pupil numbers over the next decade provide the possibility of a greater supply of better-qualified teachers in relation to the future school population if training facilities are expanded and conditions of service are such as to attract and retain teachers.

PUPIL/TEACHER RATIOS

6.2 The numerical relationship of pupils to teachers is the crudest measure of the staffing position of a school system. It is useful in providing a simple method of determining staff needs, although it gives little indication of the class size which any given child or teacher may experience, and is an imperfect guide even to average class size. Different figures can be arrived at in calculating the pupil/teacher ratio for a particular school system in a given year according to the time of year chosen to record the numbers of pupils and teachers and according to whether teacher numbers are taken to include only those teachers actually engaged in class teaching or all teachers in the schools including those engaged part-time or full-time in administrative duties; the ratios will also vary according to whether teachers on extended leave or seconded to other duties are included in teacher numbers.

6.3 Table 6.1 gives an indication of the general movement in pupil/teacher ratios in South Australia for selected years since 1951. In all school types except high schools the ratio in 1969 was more favourable than in 1951, having reached this position after a period

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of initial deterioration. All ratios in Table 6.1 would have been slightly higher had the teacher numbers excluded those not actually present in the schools. The number of teachers on leave of various types is increasing yearly, and in 1969 had reached a total of 3.5 per cent of teachers employed.

Table 6.1

PUPIL/TEACHER RATIOS IN GOVERNMENT SCHOOLS (a)

SOUTH AUSTRALIA 1951-1969

	Primary Schools	Area Schools	High Schools	Technical High Schools
1951	33.1	27.0	18.1	17.3
1954	34.3	28.8	20.4	18.7
1957	35.0	28.3	22.6	19.7
1960	33.8	26.9	23.4	20.3
1963	30.8	22.0	22.8	17.5
1966	29.8	22.1	20.8	16.6
1969	28.3	20.6	20.5	15.4

Source: Education Department.

(a) Pupil numbers at August census; teachers employed at end of year.

6.4 Schools providing primary education are divided into nine groups. Heads, Class I to Class V, are placed in charge of schools varying in the size of their enrolments, Class I heads generally being in charge of the largest schools. Between them these schools accommodate the great majority of primary students. In addition there are demonstration schools which play a special part in teacher education and small rural schools which may have one or two teachers. Special rural and area schools, also in country districts, provide both primary and secondary education in the same school. Separate infant schools generally exist in schools where more than 250 pupils are enrolled in infant classes. Table 6.2 gives the pupil/teacher ratio in all these types of schools; the relative importance of each type in terms of enrolments is indicated by pupil numbers, infant schools being included.

Table 6.2

PUPIL/TEACHER RATIOS IN GOVERNMENT PRIMARY SCHOOLS

SOUTH AUSTRALIA, FEBRUARY 1969

School Type or Classification of Head	No. of Pupils	No. of Teachers	Pupil/Teacher Ratios
Demonstration	9,516	350	27.2:1
Class I	48,841	1,565	31.2:1
Class II	47,036	1,550	30.4:1
Class III	25,276	826	30.6:1
Class IV	7,723	280	27.6:1
Class V	4,021	170	23.6:1
Area	10,138	375	27.0:1
Rural and Special Rural	1,956	116	16.9:1
	154,507	5,232	29.5:1

Source: Education Department.

6.5 In secondary schools, figures for general secondary teachers, which include the teachers of all academic subjects and of music and physical education, are shown separately from those of art and craft teachers in the statistics collected at the beginning of each school year. Classes in art and craft are smaller than those scheduled for other subjects. Consequently the number of teachers employed for a given number of pupils will be higher in this area, though craft teachers on average teach slightly more periods than do secondary general teachers. This largely explains the lower pupil/teacher ratios for technical high schools than for high schools in Table 6.1; 30 per cent of teachers employed in the former are teachers of art and craft as against 15 per cent in the latter.

6.6 Since 1965 detailed statistics of pupil/teacher ratios for high schools have been collected. Similar figures are available for other secondary schools only since 1968. These statistics show general and art and craft teachers separately and include only those teachers actually present in the schools, including those not taking classes. Pupil/teacher ratios are shown in three ways, relating pupil numbers to all teachers, to secondary general teachers and to the number of art and craft teachers. Part-time teachers are adjusted to full-time equivalents. Table 6.3 shows pupil/teacher ratios for the different types of secondary schools in each of these three ways. To give some indication of the relative importance of school types the number of teachers in each in 1969 is included.

Table 6.3

PUPIL/TEACHER RATIOS IN GOVERNMENT SECONDARY SCHOOLS

SOUTH AUSTRALIA, FEBRUARY 1968 AND 1969

School Type and No. of Teachers (a)	No. of Pupils per Teacher		No. of Pupils per Secondary General Teacher		No. of Pupils per Art & Craft Teacher	
	1968	1969	1968	1969	1968	1969
High Schools (2,223)	21.5	21.3	25.5	25.6	136.7	127.9
Technical High Schools (1,239)	16.6	16.6	26.3	25.9	45.2	46.1
Area (364)	13.6	13.1	18.9	18.6	48.4	44.6
Special Rural and Higher Primary (b) (28)	10.5	10.2	10.7	10.9	(c)	(c)
All Secondary	18.98	18.95	25.03	24.95	21.53	21.55

Source: Education Department.

(a) At February 1969.

(b) Northern Territory schools, now known as area schools.

(c) Not included because numbers too small.

6.7 The geographical distribution of the population is important in interpreting the significance of pupil/teacher ratios. To give adequate staffing to small country schools, and especially to permit

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small secondary schools to include a reasonable range of subjects, the ratio of pupils to teachers in small schools must differ from that in large schools. As the proportion of small schools varies in different parts of the State, there are therefore variations in the ratios from area to area. In particular, there are marked variations between areas of high and low population density which make any general pupil/teacher ratio a misleading guide. This is illustrated in Table 6.3 by the lower ratios of area, special rural and higher primary schools. In general, the smaller the school the lower will be its pupil/teacher ratio, and larger schools are likely to be found in the Adelaide metropolitan area.

Interstate Comparisons

6.8 The comparison of pupil/teacher ratios between education systems is difficult because of differences in population distribution and varying methods of compiling teacher statistics. The Commonwealth Bureau of Census and Statistics collects figures for pupil and teacher numbers in August of each year. These figures do not list primary and secondary teachers separately, and Table 6.4 relates all students to all teachers in government schools by States. The Table does not indicate striking differences between States, though it places South Australia slightly above the Australian average for each year. For 1968, the pupil/teacher ratio for New South Wales government secondary schools was 16.8:1,¹ and for Western Australia 19.6:1,² compared with the South Australian figure of 19.0:1.

Table 6.4

OVERALL PUPIL/TEACHER RATIOS IN GOVERNMENT SCHOOLS

AUSTRALIAN STATES AND TERRITORIES 1966-1968

	1966	1967	1968
New South Wales	23.6:1	23.4:1	23.0:1
Victoria	23.6:1	23.1:1	22.1:1
Queensland	27.9:1	27.5:1	26.3:1
South Australia	25.2:1	24.4:1	24.1:1
Western Australia	28.0:1	27.3:1	26.5:1
Tasmania	22.3:1	22.0:1	22.2:1
Northern Territory	24.3:1	24.1:1	22.0:1
Australian Capital Territory	23.6:1	24.3:1	23.9:1
Australia	24.6:1	24.1:1	23.5:1

Source: Commonwealth Bureau of Census and Statistics.

Changes in Pupil/Teacher Ratios

6.9 The improvement in pupil/teacher ratios in all school types except high schools over the period of rapid expansion of pupil

¹ Report of the Committee Appointed to Investigate and Advise on Class Size and Teaching Loads in Government Secondary Schools in New South Wales (the Scott Report), 1969.

² Secondary Education in Western Australia (the Dettman Report), 1969.

numbers in South Australia since 1951 represents a considerable achievement in view of the difficult circumstances in which it was effected. The late 1950's and early 1960's were the period of least favourable ratios for all school types; since then there has been a gradual improvement. However, present ratios are still unfavourable in terms of the class sizes with which they are associated.

CLASS SIZE

6.10 The unit of teaching has traditionally been, and for all practical purposes remains, the stable class group and the individual teacher. Changes in teaching methods which provide for independent work carried on individually by students and instruction in flexible groups of varying size according to the nature and purpose of the activity being undertaken are finding their way into South Australian schools, but class size is still generally accepted as one of the best indications of the quality of the education system. It gives a more accurate picture of life in schools than does the pupil/teacher ratio because it presents the number of pupils in the groups being taught, i.e., it is the true picture of the teacher's task.

6.11 Average class size in a system gives a quick overview of the size of teaching groups and is particularly valuable as an indicator of movement in class size over a period. Table 6.5 covers only the larger primary schools in South Australia and shows changes for selected years since 1954. Infant departments are listed separately for the schools where they exist. The exclusion from the Table of area, rural and special rural schools makes the average more representative of the schools where most children are taught. Demonstration schools, because of their special responsibilities in teacher training, are staffed on a special basis and for this reason are not included. The Table shows the gradual decline in average class size over 15 years.

Table 6.5
AVERAGE CLASS SIZE IN PRIMARY SCHOOLS
SOUTH AUSTRALIA 1954-1969

	Class I Schools		Class II Schools		Class III Schools	Class IV Schools	Class V Schools	Class I-V Schools
	Prim.	Inf.	Prim.	Inf.				
1954	45.1	42.2	44.3	40.3	41.9	38.4	30.8	41.3
1957	43.9	40.7	43.0	40.6	41.4	38.5	32.9	40.7
1960	42.6	39.2	41.2	38.1	39.6	33.9	28.4	38.7
1963	37.6	36.3	37.8	36.3	35.8	32.2	26.0	35.5
1966	36.6	35.9	36.5	36.9	35.8	29.9	24.4	35.2
1969	35.5	35.2	35.2	34.8	34.2	27.9	22.9	33.9

Source: Education Department.

6.12 It is more difficult to gain a general picture of class size in secondary schools through averages, since the size of teaching groups varies from subject to subject, particularly in the upper school, according to the subjects available for study. The usual basis of statistics is the home class or grouping for administrative purposes, which

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in the earlier years will normally be the unit of teaching for all except craft subjects. In the upper classes, the unit is a class in a compulsory subject, usually English. Figures on class size are not available prior to 1968 for area and technical high schools, and are available only from 1965 for high schools. Table 6.6 shows average class size, based on home classes, for secondary schools over the years 1965-1969.

Table 6.6
AVERAGE CLASS SIZE IN GOVERNMENT SECONDARY SCHOOLS
SOUTH AUSTRALIA 1965-1969

	1965	1966	1967	1968	1969
High Schools	36.0	35.0	35.0	35.0	34.6
Technical High Schools	N.A.	N.A.	N.A.	32.0	31.3
Area, Special Rural and Higher Primary Schools	N.A.	N.A.	N.A.	18.1	18.8

Source: Education Department.

6.13 Average class sizes, although more satisfactory than pupil/teacher ratios in giving a general picture of the numerical relationship of staff to students, also have their limitations. An average class size of 34.6 in high schools, for example, hides the existence in South Australia of many smaller and many larger classes.

6.14 Material was made available to the Committee by the Education Department showing changes in the distribution of class sizes for primary schools with Class I and II heads and the infant schools attached to them for the period 1954-1969. This material, although it covers only the largest schools and gives no detail for classes of fewer than 35 pupils, is of considerable historical interest. Tables 6.7 and 6.8 reproduce the information given.

Table 6.7
CLASS SIZES IN PRIMARY SCHOOLS WITH CLASS I AND CLASS II HEADS (a)
SOUTH AUSTRALIA 1954-1969

	Classes 35 and under per cent	Classes 40 and under per cent	Classes 41-45 per cent	Classes 46-50 per cent	Classes 51 and over per cent
1954	5.4	21.4	34.4	30.1	14.1
1957	4.8	27.8	37.5	26.3	8.3
1960	11.1	35.9	38.1	20.7	5.3
1963	28.4	68.7	27.4	3.9	—
1966	36.7	88.5	10.7	0.7	—
1969	49.7	94.5	5.3	0.2	—

Source: Education Department.

(a) Includes infant where there is no distinct infant school.

6.15 In the largest primary schools where large classes are most likely to occur, classes of over 45 pupils have been virtually eliminated. Over 50 per cent of classes, 1,046 in number, still had more than 35 students in 1969, though the improvement over 1954, when 94.6 per

cent of classes exceeded this figure, is notable in a period when the number of classes concerned increased from 800 to 2,030. A similar change took place in the sizes of infant school classes, where 46 per cent of classes, numbering 298, still had more than 35 pupils in 1969. A higher proportion of pupils than classes will, of course, be in classes of more than 35 pupils.

Table 6.8
CLASS SIZES IN INFANT SCHOOLS
SOUTH AUSTRALIA 1954-1969

	Classes 35 and under per cent	Classes 40 and under per cent	Classes 41-45 per cent	Classes 46-50 per cent	Classes 51 and over per cent
1954	14.1	40.6	32.5	22.7	4.2
1957	16.9	45.2	37.7	15.1	2.1
1960	28.1	63.1	26.3	9.6	1.0
1963	42.9	84.2	14.6	1.3	—
1966	39.7	89.8	9.6	0.4	0.1
1969	53.9	95.9	3.6	0.4	—

Source: Education Department.

6.16 More detailed information, covering a wider range of primary schools and demonstration schools, is available for class size in 1969. The figures in Table 6.9 include infant schools with the figures for primary schools with which they are associated. More than three-quarters of all classes were in the 31-40 range, and nearly one-fifth had 30 or fewer pupils. The percentage of classes over 40 was small, though 188 classes in which about 8,000 children were taught were in this group.

Table 6.9
DISTRIBUTION OF CLASS SIZES IN PRIMARY SCHOOLS WITH CLASS I-V HEADS
INCLUDING INFANT SCHOOLS

	No. of Classes	Proportion of Classes per cent	Proportion of Pupils per cent
Under 21	101	2.6	1.2
21-25	186	4.8	3.3
26-30	442	11.5	9.5
31-35	1,471	38.1	37.1
36-40	1,471	38.1	42.7
41-45	182	4.7	6.0
46-50	6	0.2	0.2
Total	3,859	100.0	100.0

Source: Education Department.

6.17 For secondary schools, Table 6.10 gives the distribution of class sizes in 1969. Figures are not available which would allow us to look at classes in each secondary year separately, except for fifth-year classes. The most common class size was that of 36-40 pupils, and this was

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also the mode for high schools, which are numerically the most important type of secondary school. The percentage distribution of

Table 6.10

NUMBER OF CLASSES BY SIZE IN GOVERNMENT SECONDARY SCHOOLS

SOUTH AUSTRALIA 1969					
	High Schools	Technical High Schools	Area, Special Rural and Higher Primary	Total	Proportion of Classes per cent
Below 26	156	140	197	493	21.5
26-30	186	91	43	320	13.9
31-35	294	219	21	534	23.3
36-40	482	151	5	638	27.8
41-45	220	52	3	275	11.9
Over 45	34	3	—	37	1.6
Total	1,372	656	269	2,297	100.0

Source: Education Department.

class size for high schools is set out in Table 6.11. Although the changed basis of the statistics for 1969 makes comparison of the smaller classes over the period difficult, the percentage of classes with fewer than 30 pupils declined somewhat between 1966 and 1968. One-quarter of all classes had 30 or fewer pupils in 1969. There has been a clear reduction in the percentage of classes of over 40 pupils, though the class size of 35-39 pupils remains the most common over the four years, and, as the very large classes were eliminated, accounts for a higher proportion of classes in 1969 than in 1966.

Table 6.11

CLASS SIZES IN HIGH SCHOOLS

SOUTH AUSTRALIA 1966-1969

Class Size	1966		1967		1968		Class Size	1969		
	No.	per cent	No.	per cent	No.	per cent		No.	per cent	
Below 25	{				103	8	Below 26	156	11	
25-29		244	22	239	20	133	10	26-30	186	14
30-34		228	20	241	20	287	23	31-35	294	21
35-39		305	27	354	30	371	30	36-40	482	35
40-44		275	25	297	25	307	25	41-45	220	16
45 and over		66	6	52	5	62	5	Over 45	34	3
Total		1,118	100	1,183	100	1,263	100		1,372	100

6.18 The annual survey of class sizes carried out by the South Australian Institute of Teachers, which covered over 92 per cent of high schools and all technical high schools in the first week of second term 1970, shows class sizes by years of secondary schooling. In applying the criteria that the maximum desirable class size should be 30 for first, second and third years, 25 for fourth year and 20 for fifth year, the Institute found that:

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(a) 1ST, 2ND AND 3RD YEARS: Seventy per cent of all classes, and 88 per cent of classes at this level in metropolitan high schools, were above 30.

Table 6.12

NUMBER OF FIFTH-YEAR CLASSES BY SIZE IN ALL HIGH AND TECHNICAL HIGH SCHOOLS,
AND IN METROPOLITAN HIGH SCHOOLS

SOUTH AUSTRALIA, JUNE 1969

All High and Technical High Schools

	Class Sizes									Total
	<10	11-15	16-20	21-25	26-30	31-35	36-40	41-45	>45	
English	2	4	13	28	21	32	11	5	—	116
Latin	22	2	1	—	—	—	—	—	—	25
French	16	6	5	4	—	—	—	—	—	31
German	4	2	—	—	1	—	—	—	—	7
Japanese	—	1	—	—	—	—	—	—	—	1
Ancient										
History	10	5	1	1	2	1	—	—	—	20
Modern										
History	4	14	14	14	11	8	3	—	—	68
Classical										
Studies	—	—	3	—	—	—	2	—	—	5
Economics	5	2	3	6	—	3	1	—	—	20
Geography	8	11	17	10	3	5	3	—	1	58
Maths. I	3	3	9	14	18	22	24	7	4	104
Maths. II	2	2	13	13	16	14	19	7	3	89
Physics	—	7	9	16	8	16	13	6	4	79
Chemistry	1	5	9	15	16	15	10	5	3	79
Biology	6	20	8	16	14	5	2	—	—	71
Music	4	—	—	—	—	—	—	—	—	4
Total	87	84	105	137	110	121	88	30	15	777
Per cent	11.2	10.8	13.5	17.6	14.2	15.6	11.3	3.9	1.9	100.0

Metropolitan High Schools

English	1	2	4	16	14	26	9	3	—	75
Latin	14	2	1	—	—	—	—	—	—	17
French	6	6	5	4	—	—	—	—	—	21
German	2	2	—	—	1	—	—	—	—	5
Japanese	—	—	—	—	—	—	—	—	—	—
Ancient										
History	2	1	1	1	2	1	—	—	—	8
Modern										
History	1	1	6	9	11	7	2	—	—	37
Classical										
Studies	—	—	—	—	—	—	2	—	—	2
Economics	—	—	1	5	—	1	1	—	—	8
Geography	—	2	12	7	2	4	3	—	1	31
Maths. I	1	1	3	6	12	13	21	7	4	68
Maths. II	—	1	7	5	8	12	16	7	2	58
Physics	—	1	3	10	4	13	12	6	3	52
Chemistry	—	—	2	8	13	13	10	3	3	52
Biology	1	2	5	11	13	4	2	—	—	38
Music	4	—	—	—	—	—	—	—	—	4
Total	32	21	50	82	80	94	78	26	13	476
Per cent	6.7	4.5	10.5	17.2	16.8	19.8	16.4	5.5	2.7	100.0

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(b) 4TH YEAR: Seventy-one per cent of all classes had 25 or more pupils, and in metropolitan high schools 88 per cent were above 30.

(c) 5TH YEAR: Seventy-two per cent of all classes, and 81 per cent in metropolitan high and technical high schools, had more than 20 pupils.

6.19 At the request of the Committee, the Secondary Division of the Education Department carried out a survey of class size and teacher qualifications by individual subjects in fifth-year secondary classes, most of which are matriculation classes, in June 1969. Table 6.12 sets out the results. The most common size of fifth-year secondary classes was between 21 and 25 for all schools including metropolitan high schools, and between 31 and 35 for metropolitan high schools. The largest classes were in English, mathematics, physics and chemistry. In these subjects class sizes reflect the shortage of well-qualified teachers. Considerable strain has been placed on staffing at this level because of the rapid increase in retention rates. Although 35.5 per cent of all fifth-year classes had fewer than 20 students, and 57.3 per cent of classes 30 or fewer, the situation in the most popular subjects was markedly different, as is illustrated in Table 6.13.

Table 6.13

PROPORTION OF FIFTH-YEAR CLASSES IN ENGLISH, MATHEMATICS, PHYSICS & CHEMISTRY ABOVE STATED SIZES

SOUTH AUSTRALIAN GOVERNMENT SCHOOLS, JUNE 1969

	Classes with more than 20 Pupils		Classes with more than 30 Pupils	
	All Schools per cent	Metropolitan High Schools per cent	All Schools per cent	Metropolitan High Schools per cent
English	83.6	90.6	41.3	50.7
Maths. I	85.5	92.6	54.8	66.2
Maths. II	80.9	86.2	47.2	64.0
Physics	79.7	92.3	49.3	65.4
Chemistry	71.0	96.2	41.7	55.8

Source: Education Department.

6.20 The May 1970 survey conducted by the South Australian Institute of Teachers, which covered 45 high schools and 10 technical high schools having fifth-year classes, uses different class intervals from the 1969 survey conducted by the Department, making direct comparison between them impossible. According to the Institute survey, the percentage of fifth-year classes in the most popular subjects which had 30 or more pupils was as follows: English, 37; mathematics, 53; physics, 36; chemistry, 39. There were 10 classes in English, 27 in mathematics, 7 in physics and 10 in chemistry which had 40 or more pupils at fifth-year level. These figures indicate an apparent improvement in 1970 over 1969. However, a high proportion of fifth-year secondary classes is still large. In subject fields where qualified teachers are in short supply, notably science, mathematics and English, the heaviest teaching loads operate. This in turn discourages people

qualified to teach at senior levels in these areas from entering teaching, so perpetuating the teacher shortage.

Interstate Comparisons

6.21 Interstate comparison of class sizes is difficult in Australia because few State departments make official figures available, although teachers' organisations annually conduct surveys. The Victorian Education Department publishes details of primary class sizes, but the basis of the statistics differs from that used in South Australia, making comparison impossible. For primary schools the Committee was unable to gain sufficient evidence to make interstate comparisons possible.

6.22 For secondary schools the Scott Committee drew attention to similar difficulties in New South Wales. It was able to compare New South Wales secondary class sizes with the average for five States, including New South Wales, but figures for individual States were not available for publication. Table 6.14 places South Australian percentages for secondary classes in English beside those quoted in the Scott Report and those for Victorian high schools in 1969. The 1969 figures are used for South Australia because the class sizes of the 1968 statistics do not correspond to those used in the Scott Report. Secondary classes in South Australia included a higher proportion with 41 and more pupils, and a lower proportion with fewer than 36 than New South Wales or the average of the five States. The position appears to have been considerably better in Victoria than in South Australia in 1969, and the fact that both Victoria and New South Wales have a six-year secondary system and South Australia a five-year one makes the South Australian position even less favourable in relation to these States than the above figures suggest.

Table 6.14

SIZES OF ENGLISH SECONDARY CLASSES OF SOME AUSTRALIAN STATES

	N.S.W. (1968)	Five Australian States (a) (1968)	S.A. (1969)	Victorian High Schools ^a (1969)
	per cent	per cent	per cent	per cent
35 and under	65.2	66.2	58.7	70.1
36-40	28.8	26.8	27.8	29.9
41 and over	6.0	6.8	13.5	

Source: Scott Committee and South Australian Education Department.

(a) Including N.S.W.

Changes in Class Size

6.23 Very large classes of 46 or more pupils have been all but eliminated in primary schools, where in 1954 they represented 44 per

^a Figures published by Statistics Branch, Victorian Education Department. The average size of classes for compulsory subjects in Victorian high schools was 31.6 in 1969, and for other types of Victorian secondary schools 25.2. High schools are numerically the most important type of Victorian secondary schools, covering 4,780 classes in 1969, as against 141 in other types of secondary schools.

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cent of all classes. However, 81 per cent of all classes in primary schools still had 31 or more pupils in 1969. In secondary schools a reduction in the number of very large classes has also occurred, but the most common class size in secondary schools in 1969 was that of 36-40 pupils, 28 per cent of all classes falling in this group. In high schools, 54 per cent of all classes had 36 or more pupils, and 75 per cent 31 or more. Fifth-year secondary classes in English, science and mathematics were particularly large in metropolitan high schools. To sum up, it may be said that the number of classes with 31 or more pupils remains high in both primary and secondary schools, although very large classes have been reduced to an insignificant proportion of the whole in both cases. In relation to desirable levels, as will be discussed later, class sizes in South Australian schools in 1969 remained high, and at fifth-year secondary level the situation was particularly disturbing if the need at this level for classes smaller than those of the early secondary years is accepted.

TEACHING LOAD OF SECONDARY TEACHERS

6.24 The Committee studied the number of periods taught in 1970 by teachers of various levels in a stratified sample of 12 high schools chosen from the 64 schools of this type grouped according to size taken from a full record supplied by the Education Department.

Table 6.15

PROPORTION OF TOTAL PERIODS TAUGHT BY TEACHERS EMPLOYED AT VARIOUS LEVELS
IN A SAMPLE OF 12 SOUTH AUSTRALIAN HIGH SCHOOLS 1970

School	Teachers Employed	Head per cent	Deputy Head per cent	Seniors (Gen.) per cent	Assistants (Gen.) per cent	Senior (Craft) per cent	Assistant (Craft) per cent	All Teachers per cent
1	12	45.0	—	76.3	77.9	—	78.8	74.8
2	15	43.3	—	71.6	80.7	—	76.4	75.8
3	19	44.0	—	71.5	77.2	—	80.5	75.0
4	27	30.7	58.8	71.8	84.8	—	88.0	80.2
5	27	48.6	64.2	73.0	83.2	—	82.6	78.7
6	39	0	38.8	67.9	79.6	—	—	73.6
7	42	10.0	27.5	62.1	73.2	—	75.0	68.8
8	43	32.5	68.8	71.5	81.3	62.5	84.1	78.2
9	48	12.5	35.0	64.2	80.6	65.0	79.6	74.3
10	66	0	15.8	63.2	79.5	63.2	75.6	73.6
11	69	5.0	38.7	71.7	77.0	67.5	79.4	74.6
12	78	0	37.5	69.3	75.0	55.0	81.0	72.7
Average		22.6	43.1	68.4	78.4	61.4	80.1	74.3

The number of periods into which the teaching week was divided varied somewhat between schools, making the use of percentages necessary for purposes of comparison, though seven of the 12 schools used a 40-period division. In Table 6.15 the schools are ranged according to size, beginning with a small country high school. The percentage of periods taught is an average for teachers of that group employed in the school where more than one is employed. On the basis of a 40-period week, the average number of periods taught by all

teachers including heads was between 29 and 30, that for secondary general assistants between 31 and 32, and for general seniors between 27 and 28. In the smaller schools both heads and deputy heads do a considerable amount of teaching, and the heaviest average teaching load was that of art and craft assistants who usually teach smaller groups. The number of extra spare periods available to senior masters as compared with assistants is small. For assistants as well as for seniors a considerable amount of work beyond school hours would be required to keep abreast of preparation and correction. It needs also to be taken into account that duties of teachers during school hours extend beyond periods taught and that teachers are frequently required to teach in their "spare" periods as replacements for colleagues who are absent. The pattern of workloads in South Australia is similar to that operating in secondary schools in New South Wales in 1969 as shown in the Scott Report, which also found little variation in this regard between the Australian States.

QUALIFICATIONS OF TEACHERS

6.25 Academic qualifications do not of themselves make good teachers, but, other things being equal, teachers holding formal qualifications of a reasonably high level are more likely to exemplify the intellectual skills which it is the unique function of the schools to promote. Hence the academic level, including the level of professional preparation, reached by teachers is an important factor in estimating the quality of a school system.

Primary Teachers

6.26 The only information collected by the Education Department about the qualifications of primary teachers relates to awards made by a university or by the Roseworthy Agricultural College and to the diplomas available since 1965 through the teachers colleges. Table 6.16 shows, for selected years since 1954, the percentage of primary teachers holding such qualifications. The percentage shown with "degrees, etc." includes teachers holding the sub-graduate university qualification of Associateship of the University of Adelaide and diplomas gained through the Roseworthy Agricultural College. The proportion of primary teachers holding university qualifications has fallen over the period. An unknown number of teachers holding teachers college diplomas also held university qualifications. The total of these two categories in 1969, assuming that the number of teachers involved is the same as the number of qualifications held, was 22 per cent of all primary teachers, a higher proportion than that shown as holding "degrees, etc." in 1954. Among the primary teachers who held university qualifications in 1968, the 157 who held degrees constituted fewer than 3 per cent of all primary teachers. No person holding a degree in science was employed in the Primary Division of the Education Department at any level. This disturbing fact emphas-

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ises the difficulty primary schools have had in retaining teachers well qualified in fields where there was a shortage in secondary schools.

Table 6.16
QUALIFICATIONS HELD BY PRIMARY TEACHERS
SOUTH AUSTRALIAN GOVERNMENT SCHOOLS 1954-1969

	Degrees, etc. per cent	Teachers College Diplomas per cent
1954	14.0	—
1957	12.3	—
1960	12.1	—
1963	11.7	—
1966	10.9	7.6
1969	9.0	13.5

Source: Education Department.

6.27 The Education Department places teachers in a particular classification according to qualifications and experience. The classification of primary teachers therefore gives a rough guide to the level of their qualifications. The requirements for classification have been changing, and, beyond the lowest level, experience and skill marks have been taken into account as well as academic background. Before 1966, subjects gained in Public Examinations Board examinations were accepted as units in establishing qualifications for classification purposes. For a period between 1966 and 1969 both secondary-school examinations and tertiary units were accepted as well as such subjects as needlework, conducted and examined by the Department. The system is now based entirely on tertiary units gained through study at university, teachers college or other tertiary institution. The academic qualifications for employment at the various levels within the assistant range, including the category of unclassified assistant which was abolished in September 1970, are as follows:

(a) **UNCLASSIFIED TEACHERS** hold qualifications below those required for classification at B level.

(b) **CLASSIFICATION B** requires four classification units, including certain units of professional study in the theory and practice of education or qualifications which are accepted as equivalent in the case of direct entrants to teaching who have not come through a teachers college, and a skill mark of 21.

(c) **CLASSIFICATION A** requires five classification units, including the same specified units in education and some experience of teaching and a skill mark of 31.

(d) Teachers may be *certificated* if they hold six units, including the same requirements of professional study in education and some experience as a classified teacher. The required periods of service range from six months for a teacher who has completed three or more years at a teachers college to two years for a teacher with two years' training. A skill mark of 41 is required of a certificated teacher; skill marks are awarded on the basis of assessed teaching abilities.

Table 6.17 shows the percentage of primary and infant teachers at each level in 1967, 1969 and 1970. Since experience as well as formal qualifications influences the level at which teachers are classified, only limited conclusions may be drawn from this Table. The proportion of teachers lacking the four units necessary for classification was twice as high among women as among men teachers, and approximately one-eighth of all primary teachers were unclassified in February 1970. This proportion is slightly lower than that in December 1967, when 14 per cent of all teachers at primary level were in this category. The number of unclassified teachers rose between December 1969 and February 1970, and at a total of 735 at the latter date still constitutes a considerable number of teachers. Since no untrained teachers have been recruited into the primary branch over recent years, we may assume that the more recently employed of these unclassified teachers have come into the schools from the re-employment of previously employed teachers and from poorly qualified exit students from the colleges. Many unclassified teachers will have been recruited in periods of more extreme teacher shortage and will now have had considerable experience which must be balanced against their low levels of formal qualification.

Table 6.17

DISTRIBUTION OF QUALIFICATIONS OF PRIMARY TEACHERS
(PER CENT)

SOUTH AUSTRALIAN GOVERNMENT SCHOOLS 1967, 1969 AND 1970 (a)

	1967			1969			1970		
	Males	Females	Total	Males	Females	Total	Males	Females	Total
Teach. Cert.	58.3	26.8	36.7	63.8	33.1	43.2	61.4	30.2	40.3
Classn. A	16.4	23.8	21.5	15.2	25.4	22.2	14.2	22.7	19.9
Classn. B	18.0	32.2	27.8	14.9	27.8	23.5	17.1	32.4	27.5
Unclassified	7.3	17.2	14.0	6.1	13.7	11.1	7.3	14.7	12.3
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Education Department.

(a) December 1967 and 1969, February 1970.

6.28 The survey conducted by the South Australian Institute of Teachers in May 1970 showed the number of classification units held by primary teachers. Unlike the actual levels of classification, these are not influenced by experience and are therefore a more direct guide to qualifications held. The survey showed 3.6 per cent of teachers in these schools as holding degrees, and 14.4 per cent as holding sub-graduate diplomas, including diplomas in teaching. There had been an increase in the percentage of primary and infant teachers holding diplomas in teaching since the Institute's previous survey in 1968, and the percentage of teachers holding fewer than six classification units had fallen; the percentage of graduates showed little change. The particular interest of Table 6.18 is the high proportion of teachers insufficiently qualified to become certificated. A majority of infant teachers and 45 per cent of primary teachers were

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in this category, since they held fewer than six classification units. Most primary and infant teachers have had only two years' training, making it impossible for them to gain a diploma in teaching during their pre-service period and causing many to move out of the colleges into the schools with poor qualifications, as discussed in Chapter 16.

Table 6.18
QUALIFICATIONS OF TEACHERS IN GOVERNMENT PRIMARY SCHOOLS
SOUTH AUSTRALIA, MAY 1970

	Infant Schools per cent	Primary Schools per cent	Rural Schools per cent
Degree and Dip.Ed.	2	3	—
Degree only	—	1	—
Dip.T. only	6	10	15
A.U.A. and Dip.T.	5	4	1
A.U.A. only	—	1	—
10 Classification Units	1	3	—
6-9 Classification Units	24	32	41
5 and fewer Classification Units	62	45	44
Total	100	100	100
Number of Teachers	667	3,636	76

Source: South Australian Institute of Teachers.

Secondary Teachers

6.29 Rising retention rates and higher pupil numbers have increased the difficulty of providing suitably qualified staff in secondary schools in recent years. In the immediate past, the major increases have occurred in the fourth and fifth years of secondary schooling, as is shown in Table 6.19. For the increasing numbers in senior classes academically well-qualified and professionally trained teachers are essential and their provision will draw away well-educated teachers from more junior classes unless the overall supply of qualified teachers is increasing at a fast enough rate. To the problem of obtaining sufficient numbers of teachers is added that of ensuring that enough are available in the various subject fields.

Table 6.19
INCREASE IN ENROLMENTS IN GOVERNMENT SECONDARY SCHOOLS
SOUTH AUSTRALIA 1968 TO 1969

	Number	per cent
Grade VIII	492 (a)	2.4
Grade IX	167	0.9
Grade X	583	3.4
Grade XI	1,222	12.3
Grade XII	766	24.4
Total	3,230	4.6

Source: Education Department.

(a) 181 of these would have been retained in primary schools in special classes for slow learners prior to changed promotion procedures in 1969.

6.30 Although some teachers of art and craft have university qualifications, the more relevant qualification for such teachers is a specialist diploma gained through a teachers college in conjunction with studies at the School of Art, the South Australian Institute of Technology or a technical college. The Education Department estimates that about 60 per cent of art and craft teachers hold a diploma in teaching. The recruitment of well-qualified teachers of academic subjects has presented greater difficulty in the period of rapid secondary expansion, and for these teachers university qualifications or a diploma in teaching (secondary) in science or humanities gained through a teachers college are appropriate. For these reasons Table 6.20 relates to qualifications of secondary general teachers only.

Table 6.20

QUALIFICATIONS OF SECONDARY GENERAL TEACHERS IN
GOVERNMENT SECONDARY SCHOOLS

SOUTH AUSTRALIA 1968 AND 1969

Qualifications	High Schools		Technical High Schools		Area, Special Rural and Higher Primary Schools		All Secondary Schools	
	1968	1969	1968	1969	1968	1969	1968	1969
<i>Graduate</i>								
2 Degrees	25	26	6	9	1	1	32	36
1 Degree and Diploma	537	637	173	196	56	53	766	886
1 Degree	301	277	74	75	18	14	393	366
Total	863	940	253	280	75	68	1,191	1,288
As percentage of Gen. Teachers	48.0	49.2	31.5	33.9	24.6	23.2	41.0	42.5
<i>Non-Graduate Diplomat (a)</i>								
2 Diplomas	101	112	65	65	35	35	201	212
1 Diploma	256	313	176	220	71	81	503	614
Total	357	425	241	285	106	116	704	826
As percentage of Gen. Teachers	20.0	22.2	30.0	34.5	34.1	39.6	24.2	27.2
All Qualifications	1,220	1,365	494	565	181	184	1,895	2,114
As percentage of Gen. Teachers	68.0	71.4	61.5	68.4	58.7	62.8	65.2	70.7

Source: Education Department.

(a) Diplomas shown in Table include diplomas in teaching gained from study at a teachers college.

6.31 In both graduate and other qualifications general teachers in high schools are somewhat better qualified than those in technical high schools, reflecting the greater importance of fifth-year classes in high schools. Table 6.21 shows the progressive improvement in the pro-

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portion of graduates and diplomates in high schools from 1965 to 1969. Comparable details for the earlier years are not available for other types of secondary schools.

Table 6.21

QUALIFICATIONS OF GENERAL TEACHERS IN HIGH SCHOOLS SOUTH AUSTRALIA 1965-1969

	Graduates as Proportion of General Teachers	Diplomates as Proportion of General Teachers	Graduates and Diplomates as Proportion of General Teachers
	per cent	per cent	per cent
1965	45.9	17.4	63.3
1966	45.4	18.6	64.0
1967	47.3	20.6	67.9
1968	48.0	20.0	68.0
1969	49.2	22.2	71.4

Source: Education Department.

6.32 An examination of the available data over a longer period shows that the recent improvement in the proportion of secondary teachers holding university qualifications represents a reversal of a strong downward trend. The longer-term record of qualifications is not strictly comparable with the more detailed one collected since 1965. The category of "degrees, etc." includes, as for primary teachers, sub-graduate university qualifications and qualifications gained from the Roseworthy Agricultural College. Since 1966, teachers college diplomas have to some extent become an alternative to sub-graduate university qualifications, which are no longer available. However, when the percentage appearing in Table 6.22 as holding teachers college diplomas is added to that holding "degrees, etc." for the period since 1966, the total percentage is greater than that shown in the detailed surveys made in recent years, indicating a considerable overlap between the two categories with concomitant double-counting.

Table 6.22

QUALIFICATIONS OF GENERAL TEACHERS IN HIGH AND TECHNICAL HIGH SCHOOLS SOUTH AUSTRALIA 1954-1969

	High Schools		Technical High Schools	
	Teachers College		Teachers College	
	Degrees, etc. per cent	Diplomas per cent	Degrees, etc. per cent	Diplomas per cent
1954	65.9	—	51.7	—
1957	64.1	—	50.1	—
1960	46.4	—	39.0	—
1963	46.5	—	32.5	—
1966	48.9	21.9	34.2	33.9
1969	49.5	40.3	30.4	39.4

Source: Education Department.

This reservation must be borne in mind when considering the qualifications of secondary teachers since 1954 as set out in the Table. In

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both high and technical high schools there has been a substantial decline in the percentage of teachers holding university qualifications. It is not possible to assess the extent to which this has been compensated for in more recent years by the percentage holding teachers college diplomas. There are some puzzling discrepancies between the figures prepared for the Minister's Report as shown in Table 6.22 and those collected by the secondary branch as shown in Tables 6.20 and 6.21. The Tables relate to teachers employed at different times of the year, but this would appear to be an insufficient explanation of the differences between them.

6.33 The May 1970 survey conducted by the South Australian Institute of Teachers gives figures that are not directly comparable with those supplied by the Department, since it includes art and craft as well as secondary general teachers. Table 6.23 shows qualifications held by all teachers in high and technical high schools covered by the Institute's survey. Teachers holding fewer than 10 classification units would not be eligible for promotion beyond the rank of assistant. Twenty-eight per cent of teachers in high schools and 36 per cent in technical high schools were in this position. The survey showed that the qualifications of teachers of all types had improved since the Institute made its last detailed survey in 1968.

Table 6.23

QUALIFICATIONS OF TEACHERS IN GOVERNMENT SECONDARY SCHOOLS

SOUTH AUSTRALIA, MAY 1970

	High Schools per cent	Technical High Schools per cent
Degree and Dip.Ed.	30	18
Degree only	15	7
Dip.T. only	16	27
A.U.A. and Dip.T.	5	6
A.U.A. only	4	3
10 Classification Units	2	2
6-9 Classification Units	14	17
5 and fewer Classification Units	14	19
Total	100	100
Number of Teachers	2,102	1,127

Source: South Australian Institute of Teachers.

6.34 A detailed study of the qualifications of fifth-year secondary teachers was undertaken by the Secondary Division of the Department in 1969. Table 6.24 sets out the results. Most fifth-year classes are matriculation classes and their teachers are well qualified. The qualification levels, as set out in Table 6.24, are considerably higher than those revealed by a sample survey of 15 per cent of Australian teachers conducted by the Australian College of Education in 1963.⁴

⁴ Australian College of Education, *Teachers in Australian Schools*, 1967.

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At that time one-sixth of all teachers of matriculation subjects had no university qualifications in the subject which they taught. An analysis of the qualifications of teachers of fifth-year secondary classes in metropolitan and country high schools and technical high schools showed a remarkable evenness between the three school types in the qualifications of teachers at this level.

Table 6.24

UNIVERSITY QUALIFICATIONS OF FIFTH-YEAR SECONDARY TEACHERS (a)

SOUTH AUSTRALIA 1969

	No. of Classes	No. of Classes Taught by a Graduate (b)	Years of University Study of all Teachers in Subject Taught				
			0	1	2	3	Hons.
English	116	98	—	3	10	88	15
Latin	25	23	1	—	3	19	2
French	31	25	1	1	4	21	4
German	7	4	1	1	1	2	2
Japanese	1	—	1	—	—	—	—
Ancient History	20	17	1	2	2	11	4
Modern History	68	54	—	—	4	51	13
Classical Studies	5	4	—	1	—	3	1
Economics	20	10	3	2	2	11	2
Geography	58	38	—	1	5	47	5
Maths. I	104	90	—	1	18	78	7
Maths. II	89	80	—	1	15	68	5
Physics	79	69	—	8	12	56	3
Chemistry	79	76	—	—	4	72	3
Biology	71	53	1	18	16	34	2
Music	4	2	—	—	1	3	—
Total	777	643	9	39	97	564	68
Percentage of Total Classes		82.8	1.2	5.0	12.5	72.6	8.7

(a) In high and technical high schools.

(b) Subjects taught are not necessarily included in degree taken.

6.35 It is likely that the best-qualified teachers will be used in fifth-year classes. We have no means of knowing the effect on lower classes of this concentration of the best-qualified teachers, except for science subjects, where two surveys conducted by the South Australian Science Teachers Association give information. The 1969 position as revealed in those surveys showed some improvement over that of 1968. Table 6.25 gives details for 1969. An overall 68 per cent of teachers of science below fourth-year level in government secondary schools had no degree, and 16 per cent had no tertiary science units.

Sixty-eight per cent of fourth-year chemistry teachers had degree majors in chemistry.

Table 6.25

QUALIFICATIONS OF TEACHERS OF SCIENCE CLASSES BELOW FOURTH-YEAR LEVEL

SOUTH AUSTRALIAN GOVERNMENT SCHOOLS 1969

Type and No. of Schools	No. of Teachers	Proportion with Science Degree per cent	Average Tertiary Science Units for Non-Graduate Teachers No.	Proportion of Teachers with no Tertiary Science Units per cent
High (57)	445	39	2.9	12
Tech. High (24)	160	24	2.6	17
Area (34)	86	7	1.8	33
Total	691	32	2.6	16

Source: *South Australian Teachers Journal*, 10th December 1970.

Field of Qualifications

6.36 In the staffing of the secondary schools, the field in which degrees have been taken is of considerable importance. Table 6.26 gives the field of degree qualifications of graduates in government secondary schools. Nearly two-thirds of graduate teachers in secondary schools were arts graduates, and one-third of high school graduate teachers as against one-quarter of such teachers in technical high schools were science graduates. Unfortunately, no information was available which would indicate the extent to which teachers were engaged in teaching in areas other than those of their subject competence.

Table 6.26

FIELD OF DEGREES HELD BY SECONDARY GENERAL TEACHERS IN GOVERNMENT SCHOOLS

SOUTH AUSTRALIA 1969

	High Schools No.	Technical High Schools No.	Area Schools No.	All Secondary Schools No.	per cent
Arts	592	197	52	841	65.4
Science	312	72	15	399	30.9
Agriculture	7	1	—	8	0.6
Economics	11	—	1	12	0.9
Other	18	10	—	28	2.2
Total	940	280	68	1,288	100.0

Source: Education Department.

Changes in Teachers' Qualifications

6.37 For all school types the proportion of teachers holding university qualifications has fallen significantly since 1954. However, if to university qualifications is added the alternative qualification

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of a teachers college diploma, a higher proportion of teachers held a completed qualification in 1969 than in 1954. Nevertheless, even on the most generous interpretation of the figures (see Table 6.16) fewer than one-quarter of primary and infant teachers in 1969 held a completed qualification of any sort. A majority of teachers of infant classes and nearly half of those teaching primary grades III to VII were poorly qualified in the sense that they lacked the qualifications necessary to become certificated teachers (see Table 6.18). This reflects the short period of training available to most such teachers in the past. The introduction of a three-year course for all primary and infant teachers (see Chapter 16) will result in higher qualifications among those entering service in the future. Among secondary teachers, the proportion holding university qualifications has shown some improvement in high schools since 1960, and, if to those holding such qualifications are added those holding teachers college diplomas, 70 per cent of teachers in high and technical high schools held a completed qualification in 1969. Thirty per cent of these teachers, however, did not hold a completed qualification, and among those holding university qualifications an unknown proportion had no teacher training. Twenty-eight per cent of graduate teachers in high and technical high schools in 1969 were in this position. Teachers at fifth-year secondary level were well qualified in 1969, but, at least among science teachers, many teaching at junior levels had had no tertiary study in the area in which they were teaching (see Table 6.25). Although the maintenance of standards of preparation among secondary teachers over a period of such rapid expansion is a considerable achievement, the qualifications of teachers in government schools are still lower than they should be. In many school systems people holding incomplete qualifications are not given appointments. The position is particularly disturbing at primary level, even in terms of the proportion of teachers qualified at certificate level.

SUBJECT SPECIALISTS

6.38 The nature and role of subject consultants is discussed in Chapter 18 in the context of curriculum change. Within primary schools there is some informally arranged specialisation, usually in music. However, the class teacher normally teaches all subjects, although primary teachers are not obliged to hold tertiary units spanning the range of disciplines they will be required to teach. It is maintained that such an arrangement is desirable because pupils feel security in a firm relationship with a single adult, and because it provides a greater possibility of integration between subjects. However, the Primary Division is at present considering the possibility of limited teacher specialisation in the upper primary classes as a preparation for secondary school, and the Division argued, in its submission to the Committee, for "areas of specialist knowledge" among primary teachers to provide subject leaders within schools.

6.39 All secondary teachers are subject specialists, qualified to teach in a limited number of fields depending on their academic preparation. Problems naturally arise in the staffing of the schools because teachers are not interchangeable. An abundance of teachers qualified to teach history may coexist with an acute shortage of science teachers. The extent to which teachers will be able to teach subjects for which they are qualified depends on the "fit" between the needs of the schools and the subject areas in which teachers have chosen to qualify. There are two sources of difficulty. The first relates to the disposition of teachers between the general areas of arts and science; the second to the subject field within the general areas. Students who enter secondary training are free to choose the subject fields in which they will major and are not obliged to carry to third-year level more than one subject relevant to teaching at school level. The selection of students entering university courses to train as teachers has in the past been based on academic record without regard to subject field. In 1970, for the first time, because of the shortage of teachers of science and mathematics, some preference was given to students who were accepted into university quotas and desired to enter a science course. The number entering Bachelor of Science courses increased as a result, though the number of those taking first-year science in internal college courses was much lower than was expected.

6.40 In 1970 the 176 students admitted to Bachelor of Science courses constituted 42 per cent of all teachers college students entering degree courses in preparation for secondary teaching in academic fields. In 1969 the percentage had been 33, the lowest point reached in a period of decline since 1964, when 51 per cent of secondary trainees entering degree courses took science. Eighteen of the 24 students who entered internal college courses to train as science teachers in 1970 were admitted to Salisbury Teachers College. In its submission to the Committee, the South Australian Science Teachers Association stressed the urgency of the problem of obtaining enough science teachers, and suggested that increased numbers coming through college courses could make an important contribution to overcoming the shortage at junior secondary level. However, there seems some doubt about whether students with sufficient background to study science at tertiary level will be offering in significant numbers for internal college courses in science. In general, students who have the necessary subjects at secondary level will have come through "top" streams, and may be expected to matriculate if they are of the calibre required for tertiary science study. An exception may be in the field of biological science, which is often studied at school level in combination with humanities rather than with mathematics. Science teaching is apparently not attractive to many students qualified to pursue it who enter internal teachers college courses. In one college in 1970 only four of 21 entering students who had matriculated in relevant subjects chose to study physical sciences. The standard of junior science teaching affects both the ability and the desire

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of students to specialise in science and mathematics. It may prove necessary to concentrate on teaching programmes such as those being developed through the Australian Science Education Project as a means of assisting competent teachers at junior secondary level whose science background is inadequate. The whole question requires more careful and expert consideration than the Committee has been able to give it.

6.41 The attraction to teaching and the retention in it of university-qualified science teachers present problems to which there is no easy solution. As yet in South Australia science graduates are not available in any numbers who are likely to be recruited to teaching at the level of the Diploma in Education, but the situation may change over the next ten years. Many explanations of the lack of attraction of teaching for science graduates and undergraduates were suggested to us. Among them were:

- (a) There is a much stronger market for science graduates than for arts graduates, giving scientists a greater occupational choice.
- (b) In comparison with alternative occupations, science graduates see less prospect of professional autonomy in teaching.
- (c) In other occupations able scientists may expect more accelerated promotion on the basis of merit than in teaching.
- (d) Relatively well-paid positions in the Education Department for the scientist require that he become an administrator. He is not obliged to make such a choice at comparable salary levels in other occupations.
- (e) Scientists have had the opportunity of observing during their own schooldays the heavy load of teaching and preparation required of teachers in the area, and seek positions where they believe the pressures will be less great. Increased provision of ancillary staff has not given much help to teachers in smaller secondary schools, who are likely to be required to teach a greater range of courses, since the establishment of ancillary staff is related to enrolments.

6.42 The prospect of any short-term improvement in the supply of science teachers appears slight. The number likely to enter the schools from teachers colleges and universities is already largely fixed until 1974 by the number of students at present in training. The Education Department is forced to rely heavily for the next few years on recruitment from sources other than students at present in training. The problem of the supply of science teachers is not limited to recruitment. A Victorian study⁵ showed that the power of the schools to hold science graduates is weak. No similar study has been undertaken in South Australia, but we have no reason to believe that the situation may be different. In our view, a detailed study is required

⁵ P. J. Fensham, *Search*, Journal of the Australian and New Zealand Association for the Advancement of Science, Vol. I, No. 1, July 1970.

to establish what forms of action might improve the position. Increased assistance to classroom teachers through an expansion of ancillary staff and the provision of opportunities which would enable practising teachers to improve their qualifications in science seem obvious steps. More important, perhaps, is the expansion of opportunities for promotion within the school through senior teaching posts with pay and status equivalent to those of a deputy headmaster. We later recommend the expansion of such opportunities. A university course specially designed for the preparation of science teachers might enable more people who are not of the calibre required for training as research scientists or whose main interest is teaching to train as science teachers. Such a course, that of Bachelor of Science (Education), already exists in some Australian universities.

6.43 Accordingly, we RECOMMEND that:

The Advisory Council of Education, whose establishment we recommend in paragraph 17.29, should commission a study on the supply and training of science teachers to determine what action would be most effective in attracting and holding well-qualified people in the field of science teaching.

SEX DISTRIBUTION OF TEACHERS

6.44 It is generally considered that a balance between the sexes is educationally desirable in teaching at all levels so that students will have the experience of whatever unique contribution each sex has to offer in range of interests, and will avoid the identification of learning with a single sex. Because the special responsibilities of women in raising their own families withdraw them from teaching for varying periods and because a smaller proportion of women are remaining unmarried, the sex composition of the teaching force on initial entry is an important factor in planning the supply of teachers. Women tend to serve for shorter periods than men after completing training, to be less energetic in seeking qualifications and promotion, and, because of the broken nature of their service, to require greater provision of refresher courses and in-service training. Despite the higher turnover among women teachers, and the permanent loss to teaching after a short period of service of many who have been trained at considerable public expense, the return to the teaching force of older married women is an important source of recruitment, and the maturity and more varied experience of these women are regarded by many as a teaching asset. There are, then, two issues involved in the consideration of the sex composition of the teaching force. The first is the desirability of a balance between the sexes, so that particular levels do not become the preserve of a single sex. The second is the desired or possible ratio between younger single or childless women and older married women who re-enter the service after a period spent in raising their own families. This has important implications for the scale and type of training planned for women teachers.

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6.45 Table 6.27 shows the number of males as a percentage of all teachers employed over a period. The percentage of male teachers has increased slightly over the period, after declining in the earlier years covered by the Table. Despite this overall movement, which has resulted from the greater relative increase of secondary teachers, males constituted a smaller proportion of both primary and secondary teachers in 1969 than in 1955.

Table 6.27

MALE TEACHERS AS A PROPORTION OF ALL TEACHERS IN GOVERNMENT SCHOOLS SOUTH AUSTRALIA 1955-1969

	Male Primary Teachers as a Proportion of all Primary Teachers per cent	Male Secondary Teachers as a Proportion of all Secondary Teachers per cent	Male Teachers as a Proportion of all Teachers per cent
1955	35.6	60.6	41.5
1960	29.4	60.3	39.0
1963	30.0	56.3	39.2
1966	32.4	58.7	42.3
1969	32.6	58.2	42.7

Source: Education Department.

6.46 Table 6.28 compares the percentages of South Australian primary and secondary male teachers with those in other Australian States for 1968. Among primary teachers the percentage of males in South Australia was lower than that of any other State except Tasmania, and below the Australian average. The percentage of male secondary teachers was slightly above the Australian average, and the variation between States less marked. Primary teachers in Tables 6.27-6.28 include those in infant classes and schools. For 1969, the exclusion of infant teachers, all of whom are women, raised the percentage of males to 46.1 per cent of teachers of primary grades III-VII in South Australia.

Table 6.28

MALE TEACHERS AS A PROPORTION OF ALL TEACHERS AUSTRALIAN STATES, AUGUST 1968

	N.S.W. (inc. A.C.T.) per cent	Vic. per cent	Qld. per cent	S.A. (inc. N.T.) per cent	W.A. per cent	Tas. per cent	Aust. per cent
Primary	38.9	41.5	46.5	32.7	43.2	18.5	38.4
Secondary	55.9	61.9	54.5	58.6	57.8	57.1	58.2

Source: Commonwealth Department of Education and Science.

6.47 Table 6.29 is based on the number of teachers actually in the schools in 1969, showing secondary schools by type and including teachers colleges and teachers college students. Among secondary

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schools high schools have the highest proportion of male staff. Less than one-third of teachers college lecturers are women, although among those entering the teaching profession as college students over 64 per cent are women.

Table 6.29

PROPORTION OF MALES AMONG TEACHERS, TEACHERS COLLEGE LECTURERS AND TRAINEE TEACHERS

SOUTH AUSTRALIA 1969

	per cent
Primary Schools	32.5
High Schools (General Teachers)	62.1
Technical High Schools (General Teachers)	55.3
Area Schools (General Teachers)	55.0
Art and Craft Teachers (all Secondary Schools)	51.2
Teachers College Lecturers	70.1
Teachers College Students	
<i>Primary</i>	19.0
<i>Secondary General</i>	53.3
<i>Art and Craft</i>	41.2
All Teachers College Students	36.3

Source: Education Department.

6.48 Table 6.30 analyses secondary teachers employed in May 1969 according to sex and subject field. The low percentage of science teachers who are women is the most striking feature of this Table. If teachers in the academic fields of arts and science subjects only are considered, women are only 36 per cent of the total.

Table 6.30

SEX DISTRIBUTION OF SECONDARY TEACHERS BY SUBJECT AREA IN GOVERNMENT SCHOOLS

SOUTH AUSTRALIA 1969

Subject Area	Males per cent	Females per cent
Science (including Mathematics)	81.3	18.7
Arts	51.9	48.1
Commercial	9.7	90.3
Art	42.4	57.6
Craft	53.5	46.5
Physical Education	54.3	45.7
Music	40.9	59.1

Source: Education Department.

Sex and Temporary Status

6.49 Information is not directly available on the number of women teachers who are married, but an indication may be gained from the numbers employed in a temporary capacity. Permanent teachers are required to enter an undertaking to teach wherever they

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are sent. Most married women, being unable to give this undertaking, are temporary. Teachers continuing to work beyond the retiring age (65 years for men, 60 years for women) are also employed on a temporary basis, but the number of women who do so is small. Only 97 of the 4,110 male teachers employed in 1969 were temporary, so for all practical purposes it may be assumed that all women temporarily employed are married (although it may not be assumed that all permanent women teachers are unmarried) and that men teachers are nearly all permanent. There is no relationship between permanency and qualification in South Australia such as exists in some other States. Women are not obliged to transfer to the temporary staff when they marry, but, because they cannot move independently of their husbands, most do so. There are now no great disadvantages involved in being temporary, except that promotion, if desired, will be slower because of the limited range of schools in which the women concerned are able to teach, and tenure is less secure. Temporary employees may enter into superannuation arrangements if they so desire and are medically acceptable, and they are not debarred from holding any position up to and including the rank of head on a temporary basis. In 1969 34.1 per cent of all full-time teachers were temporary. Table 6.31 shows the percentage of women employed on a temporary basis in primary and secondary schools in 1969. There has been a slight rise in the proportion of temporary teachers in recent years. If we take temporary status as an indication of the proportion of women teachers who were married, these figures illustrate the importance of married women in the teaching service, since in 1969 60 per cent of women teachers were in this category. This figure exceeds that for the female labour force as a whole, 56 per cent of whom in 1969^a were married.

Table 6.31

WOMEN TEACHERS EMPLOYED ON A TEMPORARY BASIS IN GOVERNMENT SCHOOLS

SOUTH AUSTRALIA 1969

	Number	As Proportion of all Women Teachers	As Proportion of all Teachers
		per cent	per cent
Primary Schools	2,388	61.0	42.9
Secondary Schools	888	55.6	23.2
All Schools	3,276	59.5	34.1

Source: Education Department.

6.50 The high proportion of temporary teachers is a source both of difficulties and of benefits in staffing the schools. Temporary teachers are not concentrated in metropolitan schools, but, because such a high proportion of the South Australian population is in the Adelaide metropolitan area, a majority of them teach there. Teachers

^a *New Patterns in Female Employment*, address by the Minister for Labour and National Service, Sydney, October 1969.

who are willing to serve only in specified schools introduce a valuable element of stability in staffing, with the attendant disadvantage that particular schools may become isolated from the mainstream of change because there are few vacancies for young teachers to enter them. The opportunities for promotion open to teachers who are not free to move will, under present promotion arrangements, be limited, and the rapidity of promotion of those free and willing to move will be correspondingly increased. The filling of specific vacancies particularly in country schools is made more difficult by the high proportion of staff who may not be required to move.

Promotion in Relation to Sex

6.51 In all types of schools and in teachers colleges a lower proportion of women than of men reach senior positions. The only woman employed in the Department above the rank of inspector is an Assistant Superintendent of Primary Education (Infant). The chances of rising to senior positions are greater for women in single-sex institutions such as technical high and infant schools. The one woman head of a major high school is employed in the only girls' high school in the State, soon to be incorporated in a co-educational school. The only woman who heads a major co-educational establishment is the single Class II primary headmistress who is head of a special school for mentally retarded children. Three women were Class III primary heads in 1970. Among teachers employed in government schools in 1969, the proportion of women at the assistant level was higher than that of men for all school types. The proportion of women employed at assistant level was particularly high in primary schools, being over 90 per cent of women employed. Table 6.32 shows the proportion of male and female secondary teachers who were employed at stated levels in high, technical high and area schools in 1969. Almost 28 per cent of male teachers were employed at the level of senior master and above, while only 13 per cent of women were employed at these levels. Of the 20 inspectors employed in the Primary Division in 1970, four were women, but three of these were inspectors of infant schools.

Table 6.32

STATUS OF SECONDARY TEACHERS IN GOVERNMENT SCHOOLS

SOUTH AUSTRALIA 1969

	Proportion of Male Teachers	Proportion of Female Teachers	Proportion of All Teachers
	per cent	per cent	per cent
Assistants	72.1	86.8	78.3
Senior Master and Special Senior Master (or Mistress)	21.1	9.7	16.3
Deputy Head	2.7	2.6	2.7
Head Class IV and above	4.1	0.9	2.7
Total	100.0	100.0	100.0

Source: Education Department.

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Of the 12 general secondary inspectors one was a woman; a woman inspector was responsible for the supervision of girls' craft in secondary schools. More than two-thirds of the 3.6 per cent of women employed at the level of deputy head Class II and above in the primary service were infant mistresses.

6.52 The fact that a smaller proportion of women than of men reach senior positions is not peculiar to the Education Department but reflects social realities and attitudes which in their turn cause women teachers to be less well qualified than men, to have shorter continuous service and to seek responsibility less. Only a general picture of qualifications is available by sex, but it suggests that women teachers are markedly less well qualified than men teachers. Table 6.33 illustrates the point.

Table 6.33

MALE AND FEMALE TEACHERS HOLDING STATED QUALIFICATIONS IN GOVERNMENT SCHOOLS

SOUTH AUSTRALIA 1968

	Proportion holding University Degree, A.U.A., or Diploma of Roseworthy Agricultural College		Proportion holding a Diploma in Teaching from a Teachers College	
	Males	Females	Males	Females
	per cent	per cent	per cent	per cent
Primary	17.7	3.8	11.1	3.0
Secondary (General Teachers)	64.3	38.9	N.A.	N.A.

Source: Education Department.

6.53 The high proportion of women employed on a temporary basis limits promotion prospects, and more than three-quarters of women employed on a permanent basis are under the age of 25 years and have insufficient experience for any except the lowest promotion positions. All of this goes far to explain the statement made in the Education Department's submission to the Committee, in reference to secondary schools, that

Applications by men for promotional positions open to them are usually twenty times as great as those from women for positions open to them. It is rare for women with more than four years' teaching experience to apply for a position of subject mistress in a country school and rarer still for the position of country deputy headmistress.

Because of the greater unwillingness of both married and single women to move around in pursuit of promotion, the Department wishes to raise the proportion of men in the teaching service. This would certainly result in greater flexibility in staffing and provide a wider field of applicants for promotion positions. However, the promotion prospects of men, especially in the primary service, would be somewhat reduced if a higher proportion of teachers was male.

6.54 It is regrettable, in our view, that so few women rise to senior positions, including headships of large co-educational schools, in the Education Department. This is especially so since probably a high proportion of the most able women enter teaching. The experience of seeing more women in senior positions might be expected to have its influence on the aspirations of girls in the schools and make a contribution to a more equal rate of retention between the sexes. The material presented in this chapter does not suggest that any discriminatory practice in the Department debars women from promotion. However, aspects of school organisation and of the promotion system tend to restrict women desiring responsibility to single-sex and infant schools, and married women are handicapped in promotion by their relative immobility. As an increasing proportion of women look forward to returning to work after they have raised a family, they will probably be more interested in attaining higher initial qualifications, a development which will in any case be required if the registration of teachers which we later recommend is introduced. This would reduce a present barrier to their professional advancement, but changed attitudes towards the assumption of responsibility, and a promotion system with less emphasis on mobility, would also be required. Only 20 per cent of the women over 30 years of age teaching in government schools are employed on a permanent basis. A promotion system which places heavy emphasis on mobility must mean that in competition with men only this fifth of women teachers is in the running for promotion positions.

AGE DISTRIBUTION OF TEACHERS

6.55 The most striking feature of the age distribution of both men and women teachers is the high proportion who are under 25 years of age. This characteristic is even more marked among women than among men. Table 6.34 gives details. The number of women,

Table 6.34

AGES OF FULL-TIME TEACHERS IN GOVERNMENT SCHOOLS

SOUTH AUSTRALIA, JANUARY 1969

Males			Females						Total	
	No.	per cent	Permanent No.	per cent	Temporary No.	per cent	All No.	per cent	No.	per cent
18-25	1,834	38.9	1,944	75.6	1,141	37.0	3,085	54.5	4,919	47.4
26-30	862	18.2	169	6.6	264	8.5	433	7.6	1,295	12.5
31-40	734	15.6	100	3.9	344	11.1	444	7.8	1,178	11.3
41-50	503	10.7	165	6.4	716	23.2	881	15.6	1,384	13.3
51-60	601	12.7	192	7.5	561	18.2	753	13.3	1,354	13.1
61-70	183	3.9	2	—	59	1.9	61	1.1	244	2.4

Source: Education Department.

which falls away so sharply after age 25, builds up again in the 40-50 age group, at which ages women again outnumber men, though not

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so markedly as in the youngest group. This reflects the return to work of older married women and parallels changes in the female work force as a whole, where between the 1961 and 1966 census counts the greatest increase in the proportion of women in the work force was in the 40-49 age group.⁷ The age distribution does not vary greatly between primary and secondary teachers.

6.56 The rapid expansion of the school system and the consequent high proportion of younger teachers have resulted in a faster movement of men and women through different classes of primary schools and the earlier attainment of positions as senior masters and above in secondary schools than was the case even 10 years ago. This more rapid rate of promotion causes a higher rate of staff turnover in individual schools than when promotion was slower. Secondary schools in particular now lack the group of experienced assistants which characterised them 30 years ago. At that time it was rare for a man to gain promotion to the position of subject master with less than eight years' experience. The mode is now six years, and many gain this position, usually in an acting capacity, after four years' experience. The present "bulge" at young ages will move through the service, and, as the rate of increase in enrolments declines, the future tendency will be towards a more even distribution of age groups among men at least. Whether a similar change will occur among women will depend on the relative numbers of those re-employed and of those entering service from teachers colleges. The present age distribution of the teaching service is likely to limit the promotion prospects of those now entering teaching since their predecessors, having entered promotion positions at an earlier age, are likely to hold them for longer periods. This may create serious problems in a period of less rapid expansion of the school system and make teaching less attractive to prospective entrants. The Education Department will need to take careful note of the age structure of the service in relation to its rate of expansion in order to ensure that promotion arrangements are modified where necessary in ways which will ensure attractive prospects for those in younger age groups.

6.57 Table 6.35 shows the age at which people serving as inspectors and as heads of larger schools in 1970 received their appointments. Except in area schools, no Class I heads received their appointment before the age of forty. The position in the primary service is particularly serious. If primary service is to be attractive, particularly to able young men, accelerated promotion of those teachers showing outstanding ability will be necessary to enable them to reach Class I headships younger. The proposed reduction in the number of classes of headship may help to make this possible. An upper age limit on promotion to these positions is also desirable. The option of reduced responsibilities for those over the age of 60 might also be considered.

⁷ Department of Labour and National Service, *Women in the Work Force*, Booklet No. 6, December 1968.

Where there are relatively few Class I and II headships in relation to the number of teachers in the service it is likely that few people will attain them until they are relatively advanced in age. An increase in the number of headships of these higher classes may be necessary. While promotion to senior positions within the schools is so long delayed, able people are likely to seek promotion outside the schools to the detriment of the basic business of education. The slower rate of growth of the school system in the coming decade adds a note of urgency to the consideration of such problems.

Table 6.35

AGE OF APPOINTMENT OF CLASS I AND II HEADS AND INSPECTORS

SOUTH AUSTRALIA 1970

	Primary		Area		High		Tech. High		Inspectors	
	I	II	I	II	I	II	I	II	Primary	Sec.
39 and under	—	16	2	12	—	2	—	1	2	6
40-49	4	18	4	3	9	10	6	6	12	7
50-59	55	29	1	1	8	5	2	5	4	4
60-65	10	8	—	—	2	—	—	1	—	—

Source: Education Department.

6.58 There would seem to be no good reason why the retiring age for women should be lower than that for men, especially since women are likely to live longer. Although we think there would be advantages in allowing both men and women over the age of 60 to accept reduced responsibilities if they so desire, we think that the equality between the sexes which has been accepted in the form of equal pay in the teaching service also involves a common retiring age. Some slight improvement in the supply of teachers would also result from the extra five years of service which experienced women could give if their age of retirement were raised.

6.59 Accordingly, we RECOMMEND that:

There should be a common retiring age for men and women teachers.

LOSSES OF TEACHERS

6.60 Turnover of staff has two aspects — the proportion of staff who die, retire or resign requiring immediate replacement, and the movement of staff between schools for promotion or other reasons. The first of these may be referred to as losses, though it should be noted that a proportion of those who retire or resign will later return to teaching. The comparison of loss rates over a period of years is complicated by changed conditions relating to resignation. The requirement that women must resign on marriage and may be re-appointed on a temporary basis has not applied since 1966. The introduction of accouchement leave in 1968 and increasing leave of

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absence for study have also affected resignation figures. Hence, any trends appearing in the figures over time are not a reliable indication of actual losses from the service. Table 6.36 should be read with these reservations in mind.

Table 6.36

LOSSES OF TEACHERS IN GOVERNMENT SCHOOLS

SOUTH AUSTRALIA 1961-1969

	Teachers	Losses	Rate of Loss per cent
<i>Males</i>			
1961	2,400	111	4.6
1962	2,578	115	4.5
1963	2,781	157	5.6
1964	3,064	158	5.1
1965	3,286	210	6.4
1966	3,549	207	5.8
1967	3,766	266	7.1
1968	3,966	244	6.1
1969	4,110	316	7.7
<i>Females</i>			
1961	3,619	651	17.8
1962	3,950	748	18.9
1963	4,313	839	19.4
1964	4,426	977	22.0
1965	4,588	956	20.8
1966	4,851	807	16.6
1967	5,010	917	18.3
1968	5,292	888	16.8
1969	5,508	1,003	18.2
<i>Persons</i>			
1961	6,049	762	12.6
1962	6,528	863	13.2
1963	7,094	996	14.0
1964	7,490	1,135	15.5
1965	7,874	1,166	14.8
1966	8,400	1,014	12.1
1967	8,776	1,183	13.5
1968	9,258	1,132	12.2
1969	9,618	1,319	13.7

Source: Education Department.

6.61 If the numbers re-employed in each year are set beside losses through death, retirement and resignation to gain some idea of the annual net loss to teaching, a less alarming picture is presented. Net losses calculated in this way have actually fallen over the recent period when the basis of resignation statistics is reasonably constant, as shown in Table 6.37. The loss rate for women is nearly three times that for men, but women constitute a high percentage of teachers re-employed, so that the difference in net loss rates between the sexes is not as high as figures of gross loss suggest. The net loss rate for women in 1969 calculated on the above basis was 8.1 per cent and that for men 6.8 per cent. Since most men resigning from teaching will be per-

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manently lost to it, the rising rate of male loss over recent years shown in Table 6.36 is disturbing.

Table 6.37

NET LOSS OF TEACHERS IN GOVERNMENT SCHOOLS

SOUTH AUSTRALIA 1966-1969

	Number of Teachers	Losses	Numbers Re-Employed	Net Loss	Rate of Net Loss per cent
1966	8,400	1,014	248	766	9.2
1967	8,776	1,183	408	775	8.8
1968	9,258	1,132	365	767	8.3
1969	9,618	1,319	555	764	7.9

Source: Education Department.

6.62 Table 6.38 illustrates the higher loss rate among secondary general than among other types of teachers. Table 6.43 shows that in 1968 the highest resignation rate for males was among high school teachers. The reason for this loss among more highly qualified male teachers requires careful investigation. Retirement on account of age does not make an important contribution to loss rates, since less than 10 per cent of teachers leaving the service in 1968 did so because they had reached retiring age.

Table 6.38

RATES OF LOSS OF PRIMARY, SECONDARY GENERAL AND ART AND CRAFT TEACHERS IN GOVERNMENT SCHOOLS

SOUTH AUSTRALIA 1966-1969

	Primary per cent	Secondary General per cent	Art and Craft per cent
1966	11.8	14.0	13.1
1967	13.7	12.7	12.8
1968	12.0	11.6	12.0
1969	13.5	15.8	11.9

Source: Education Department.

6.63 In an attempt to encourage women who resign because of pregnancy to resume teaching later, accouchement leave was introduced at the end of 1968. Leave must begin not later than three months before the expected date of confinement, and a year's leave without pay is available from the birth of the child. It is as yet too early to assess the effectiveness of these provisions in bringing young mothers back into teaching. In 1969, 87 women were on accouchement leave, which was the most frequent reason for leave of all types.

TURNOVER OF TEACHERS

6.64 The Committee conducted a survey of all South Australian government schools to gain a picture of the extent to which staff in

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individual schools was stable from year to year (see Appendix C). The survey, conducted in 1969, related to staff movement in 1968. Usable replies were received from 635 schools, over 90 per cent of the total, covering 8,281 teachers. By the end of 1968 approximately one-third of the teachers in the State had moved out of the school in which they were employed at the beginning of that year. Table 6.39 gives figures for total staff movement by school type. The highest percentage of staff movement was in rural and special rural schools, the schools typical of sparsely populated areas. Nearly one-half of the staff employed in these schools in February had moved out of them by the end of the year. Area schools, also outside the areas of closer settlement, lost over 40 per cent of their staff.

Table 6.39

MOVEMENT OF TEACHERS OUT OF THE SCHOOL IN WHICH THEY WERE EMPLOYED
BETWEEN FEBRUARY AND DECEMBER

SOUTH AUSTRALIAN GOVERNMENT SCHOOLS 1968

School Type and No. of Replies	No. of Teachers Employed February 1968	No. of Teachers moving out of School during or at end of 1968	
		No.	Proportion of those Employed per cent
Infant (80)	785	276	35.2
Primary (333)	3,430	1,012	29.5
High (59)	2,055	615	29.9
Technical High (29)	1,223	393	32.1
Area (40)	654	270	41.3
Rural and Special Rural (94)	134	65	48.5
Total (635)	8,281	2,631	31.8

Table 6.40

REASON FOR MOVEMENT OF TEACHERS LEAVING INDIVIDUAL SCHOOLS

SOUTH AUSTRALIAN GOVERNMENT SCHOOLS 1968

School Type	Left Education Dept.		Promoted		Other	
	No.	Proportion of those Employed per cent	No.	Proportion of those Employed per cent	No.	Proportion of those Employed per cent
Infant	109	13.8	34	4.3	133	16.9
Primary	313	9.1	141	4.1	558	16.3
High	258	12.6	103	5.0	254	12.4
Technical High	115	9.4	71	5.8	207	16.9
Area	74	11.3	37	5.7	159	24.3
Rural and Special Rural	12	9.0	15	11.2	38	28.4
All Schools	881	10.6	401	4.8	1,349	16.3

6.65 Table 6.40 shows reasons for movement. The extent of loss through resignation and retirement revealed in it is lower than the 12 per cent loss from this cause which actually took place in 1968. An

interesting feature of this Table is the relatively low level of staff movement caused by promotion. However, if movement from less desired to more desired localities is seen as an aspect of promotion, this direct measure of movement for promotion will understate the extent of movement for this purpose.

Table 6.41

NUMBER OF TEACHERS MOVING OUT OF A SCHOOL AND NUMBER WHO HAD SPENT
LESS THAN THREE YEARS IN THE SCHOOL

SOUTH AUSTRALIAN GOVERNMENT SCHOOLS 1968

	No. of Teachers Moving	No. Moving with less than Three Years' Service	
		No.	Proportion per cent
Infant	276	199	72.1
Primary	1,012	695	68.7
High	615	384	62.4
Technical High	393	286	72.8
Area	270	178	65.9
Rural and Special Rural	65	54	83.1
All Schools	2,631	1,796	68.3

6.66 A certain amount of movement of teachers between schools is desirable. It lessens the rule of habit, bringing challenge and new ideas. However, for the fulfilment of educational purposes too frequent changes are generally agreed to be undesirable. A certain period of time is necessary to generate and apply innovations and

Table 6.42

MOVEMENT OF TEACHERS DURING THE YEAR AND AT THE END OF THE YEAR

SOUTH AUSTRALIAN GOVERNMENT SCHOOLS 1968

School Type	At End of Year			At Any Other Time During the Year		
	Males	Females	Total	Males	Females	Total
Infant	—	152	152	—	124	124
Primary	237	469	706	85	221	306
High	235	247	482	44	89	133
Technical High	142	141	283	39	71	110
Area	124	107	231	8	31	39
Rural and Special Rural	36	15	51	3	11	14
Total	774	1,131	1,905	179	547	726

to judge their effects. A working team of teachers which gives a distinctive quality to each school takes time to mature; constant change of staff requires of pupils a degree of adaptability which it may be unreasonable to expect. For these reasons both the administration and the teachers' organisations agree that a period of three years' service in a school should be expected of teachers before transfer is considered, except in special circumstances. If senior staff in particular are to make any serious impact on a school they will need to stay for

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a considerably longer period. However, resignations call for replacements which must result in staff changes, and special circumstances arise. Even so, the level of change in staffs of individual schools before three years' service in them is high. Table 6.41 shows that more than two-thirds of teachers moving out of schools in 1968 had been there less than three years. The short period of service among those moving was most marked in rural and special rural schools.

6.67 Staff changes during the year are particularly disruptive. According to Table 6.42, 28 per cent of teachers moving did so at times other than at the end of the school year. This means that 9 per cent of all teachers employed moved out of schools during the teaching year.

Table 6.43

TEACHERS MOVING BY REASON FOR MOVEMENT AND BY SEX
SOUTH AUSTRALIAN GOVERNMENT SCHOOLS 1968

	Males as Proportion of Males Employed per cent	Females as Proportion of Females Employed per cent
<i>Left Education Dept.</i>		
Infant	—	13.9
Primary	4.2	11.9
High	7.6	18.7
Technical High	5.9	12.8
Area	4.5	19.0
Rural and Special Rural	2.2	23.3
All Schools	5.6	14.2
<i>Promotion</i>		
Infant	—	4.3
Primary	7.7	2.1
High	6.2	3.6
Technical High	9.6	2.1
Area	8.6	2.3
Rural and Special Rural	15.4	2.3
All Schools	7.8	2.7
<i>Other</i>		
Infant	—	16.9
Primary	13.9	17.5
High	10.8	14.2
Technical High	14.3	19.4
Area	24.6	23.9
Rural and Special Rural	25.2	34.9
All Schools	14.4	17.6
<i>Total Movement</i>		
Infant	—	35.1
Primary	25.8	31.5
High	24.6	36.5
Technical High	29.8	34.3
Area	37.7	45.2
Rural and Special Rural	42.8	60.5
All Schools	27.8	34.5

6.68 The analysis of staff movement by sex, as set out in Table 6.43, has some interesting features. The loss rate for women, as already indicated, is significantly higher than that for men, and this difference is evident for all types of schools. The highest male loss rate for resignation and retirement was from high schools; for females, losses from small country schools were particularly high. For all school types women moved to positions at a higher level much less frequently than did men, and the chances of promotion for men were highest from rural and special rural schools.

6.69 Table 6.44 shows that movement of staff out of schools was higher in non-metropolitan than in metropolitan schools, except in the case of technical high schools, only four of which exist in country areas. The difference between metropolitan and non-metropolitan schools was not, perhaps, as great as might have been expected, though the high level of movement out of rural schools is again noteworthy.

Table 6.44

MOVEMENT OF TEACHERS RELATED TO TYPE AND LOCATION OF SCHOOL
SOUTH AUSTRALIAN GOVERNMENT SCHOOLS 1968

Type and Location of School	Total No. of Teachers Moving	Teachers Moving as Proportion of Staff in February 1968 per cent
Infant		
<i>Metropolitan</i>	234	34.1
<i>Non-Metropolitan</i>	42	42.9
Primary		
<i>Metropolitan</i>	627	27.7
<i>Non-Metropolitan</i>	385	33.0
High		
<i>Metropolitan</i>	360	28.1
<i>Non-Metropolitan</i>	255	33.0
Technical High		
<i>Metropolitan</i>	341	32.4
<i>Non-Metropolitan</i>	52	30.4
Area	270	41.3
Rural and Special Rural	65	48.5
All Schools		
<i>Metropolitan</i>	1,562	29.6
<i>Non-Metropolitan</i>	1,069	35.7
Total	2,631	31.8

The Committee's survey demonstrated the high rate of staff turnover, the short time spent in the schools by most people who move out of them, the higher rate of turnover in isolated schools, and the relatively small role played by promotion in staff movement, except in the case of rural and special rural schools. We draw attention to the need to seek policies, including promotion procedures, which will

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reduce staff movement, and in particular to the need to provide positive incentives for teachers to spend longer periods in smaller rural schools. Service in these schools appears at present to be seen as a means to promotion rather than as being desirable in itself. Consolidation which would reduce the number of rural and special rural schools could also help to reduce turnover.

PROMOTION SYSTEM

6.70 The system of promotion in the Education Department for positions which are under its jurisdiction up to and including that of headmaster is complex, as might be expected in so large an organisation. The promotion system serves the usual purposes of filling positions with the people judged best fitted to occupy them and of providing career prospects for employees. In the Education Department the system fulfils other important functions, those of staffing schools in country areas and of ensuring a degree of evenness in the quality of teachers in all parts of the State.

6.71 Certain important changes in promotion arrangements have been accepted in principle by the Education Department, and their implementation is at present being worked out. These changes are as follows:

(a) The number of classes of promotion positions will be reduced. Classes of secondary heads will be reduced from four to three, and those of primary heads from five to four. There will in future be only one class of deputy head in both primary and secondary schools. The position of chief assistant in primary schools will be abolished.

(b) Promotion within the assistant range will take place without formal assessment. There will be one class of secondary assistant, but Assistant A and Assistant B in the primary system. There is no limitation put on the number of positions at various levels within the assistant range, and promotion between levels within the range will be automatic for those with the required qualifications and length of service who have satisfactory reports from their headmasters. The headmaster may apply for the assessment of an assistant whose work he regards as unsatisfactory. Otherwise there will be no formal assessment for assistants except when they apply for inclusion on a promotion list for promotion positions proper, which are those whose number is limited by regulation, as are all positions above the rank of assistant. The establishment is usually related to school enrolment.

(c) The system of skill marks, based on periodical assessment by an inspector and a headmaster, which previously played an important part in promotion procedures will be discontinued. Assessment will take place only when a teacher applies to be placed on the promotion list. Teachers may be assessed as being eligible for promotion at ordinary or at advanced level. Among teachers whose qualifications

are otherwise equal those assessed for promotion at advanced level will take precedence over those assessed for promotion at ordinary level. Each year promotion lists for each level of position will be compiled anew, and among the qualifications relevant in ranking is the period of time which has elapsed since the teacher was assessed as eligible for promotion. Assessment at advanced level will be equated with two years' waiting time in this ranking. Once he has been assessed as eligible for promotion the teacher will not be assessed again until promoted unless he applies to have his assessment revised to advanced level, or to be reassessed after having been previously judged ineligible for promotion. His headmaster may call for a reassessment on the ground that his work has deteriorated since he was placed on the promotion list. For each level of promotion a teacher will be reassessed.

(d) When a teacher with the minimum academic qualifications and the prescribed period of service wishes to be considered for promotion he will apply to be assessed. Each year a committee of the Teachers Classification Board will produce a roll of eligibility on the basis of length of time since they were assessed as eligible for promotion, their length of service in the position at present held, and academic qualifications above the minimum required for the position into which the teacher is eligible to move. Teachers will be eligible for consideration only for positions ranking immediately above that which they hold. When the number of vacancies at each level is known, first preference will be given to people who have occupied a position at the level of the vacancy for three years and have applied for a transfer. A list of vacancies remaining will then be circulated to those on the promotion list for indication of preferences, and appointments made according to ranking on the list, preferences being taken into account.

6.72 The main promotion positions within primary and secondary schools when the new arrangements are introduced will be:

(a) PRIMARY. Deputy Head, Head Classes I-IV, Deputy Head (Infant), Infant Mistress Classes I and II.

(b) SECONDARY. Senior Master and Mistress, Special Senior Master and Mistress, Deputy Head, Head Classes I-III. The positions of Senior Master and Special Senior Master are those of subject leaders within schools. No similar positions exist within the primary system.

6.73 The new system should contribute to reducing the degree of transfer by reducing the number of classes of promotion positions. By reducing the amount of assessment required of inspectors it should enable them to give more time to their advisory role. Within the primary system it will lengthen the range through which assistants holding the required academic qualifications may automatically progress. It places more reliance on the professional competence and responsibility of teachers than did the system of periodical assessment. However, it leaves certain basic elements of the system unchanged.

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Since, within the promotion system operating in the schools, it is possible for people to move upwards only one step at a time, the outstandingly able may be tempted to move out of the schools into positions for which ordinary promotion procedures operating within the Education Department do not apply, e.g., into positions as inspectors, education officers or teachers college lecturers. These positions are advertised, and no list operates, appointments being made on the basis of merit. The material presented in Table 6.35 showing the lower age of appointment of inspectors as compared with Class I heads indicates that this does in fact happen. The relative youth of teachers college staff who are also appointed by open advertisement is further evidence. The new system of promotion retains the closed features of the previous system, whereby people may not enter at high levels within the schools. We recommend in Chapter 17 that headships of the larger schools as well as other senior positions should be filled by open advertisement (see paragraph 17.104).

Qualifications and Promotion

6.74 Qualifications play an important part in the promotion system for teachers and also affect their salary on initial employment and throughout the scale for assistants. Entrants with higher than minimum qualifications start above the minimum of the appropriate salary range, and an extra \$258 per annum is paid to holders of a degree. Since 1st July 1970, men and women have been paid at equal rates, this position having been reached as the result of gradual adjustments over a period of five years. For classification either as a primary or as a secondary teacher four units of tertiary study must be held. For primary teachers these must include some units of professional study. Professional qualifications are not a required qualification for appointment at any level in the secondary system, although holders of such qualifications will enter the service at a higher initial salary. Academic qualifications affect the level to which a teacher may rise. For example, certificated primary teachers must have six classification units, senior masters in secondary schools must hold 10 units, heads of the largest schools must hold a degree, and primary heads a degree or 12 classification units plus a teacher's certificate. In September 1970 the starting salary for a classified primary assistant was \$3,008, or \$3,234 if three years' study at a teachers college had been completed. A classified secondary teacher began at \$3,389, at \$3,718 if he had completed a four years' course at a teachers college and obtained a diploma, and at the same level plus \$258 if he held a degree. The highest salary in primary schools was that of masters and mistresses of method who were heads of demonstration schools, at \$8,528, Class I primary heads rising to \$8,137. Secondary heads Class I had a maximum salary of \$9,136. We have not made a study of the financial prospects of teaching compared with those of other professions offering equal security and requiring similar qualifications. Teachers' salaries are in any case matters for determination by industrial tri-

bunals. However, two aspects of the salary structure, in our view, require special attention in the coming period. The first of these is the existence of establishments for all promotion positions, which means that advancement beyond the assistant range is not automatic. As a higher proportion of the teaching service acquires full qualifications this is likely to affect the financial attractiveness of teaching in ways which are not yet evident. The maximum salary payable to heads of large schools is not likely to prove attractive to well-qualified people willing to undertake the heavy responsibilities involved. If, as we later recommend in paragraph 17.104, positions as heads of large schools are filled by open advertisement, so giving less weight to experience within the system, present salary levels are unlikely to draw people who could be employed, for example, as senior lecturers within a university.

6.75 The improved level of qualifications evident among both primary and secondary teachers over the last few years, and the further rises which may be expected to occur, will reduce promotion prospects for the well-qualified entrant. Even more serious factors limiting the promotion prospects of entrants to teaching are the present age structure of the service as shown in Table 6.34 and the slower rate of growth of the school system in the coming period. This may seriously affect the financial attractiveness of teaching, and require the provision of more senior positions for teachers who do not enter administrative positions. We understand that consideration is being given to providing within secondary schools a further teaching position of comparable status with that of deputy head. We regard such a development as desirable, both to retain in teaching able subject specialists who do not wish to enter administrative posts, and to increase the attraction and holding power of secondary teaching in the period of declining promotion prospects for entrants which seems to lie ahead. Other developments of a similar nature will, in our view, be required.

6.76 The apparent difficulty of attracting and holding well-qualified staff in the primary system may have serious consequences. Since senior positions in primary administration will normally be filled by people whose experience has been in primary schools, the quality of educational leadership as well as the work of the schools will be affected by this difficulty. The problem may become even more pronounced in the future, because those at present holding senior positions will have entered the service in depression years when the limited alternatives offering would have been likely to draw more able people into primary teaching. The fact that no science graduate is employed in the primary service at any level must be a matter of serious concern. In all relevant disciplines at least a core of people of some academic distinction is required to ensure that primary education is soundly based on an understanding of the central principles

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and concepts of the area studied. It is now generally accepted that in appropriate forms these concepts and ideas should be central to early, as to later, education, thus making considerably greater demands on the intellectual competence of primary teachers than in the past. The possibility that gifted children will be understimulated at the primary level must also be considered.

6.77 The greater depth and length of teachers college courses and the existence of the Bachelor of Education degree at Flinders University will improve the position, but other steps might also be considered. The training within the colleges of primary teachers with special competence in particular areas such as mathematics, science, languages and social studies could, as suggested by the Education Department in its submission to the Committee, provide valuable leadership within the schools. Consideration might also be given to training teachers able to move freely between primary and secondary schools through an upper-primary—lower-secondary competence. Graduates in primary schools, because of their greater rarity, may have better promotion prospects, but at their highest possible level of employment within the schools they are paid \$1,000 less than their secondary counterparts, and will have had to spend more time in remoter areas to reach this level. We are recommending that primary teachers who are qualified beyond the minimum required for the particular level of service they occupy should be paid loadings sufficient to make primary service equally attractive as secondary for well-qualified people. The creation within the primary service of a number of well-paid positions for academically able and experienced teachers whose services could be shared between a number of schools as subject leaders, as an expansion of the present consultant arrangement, may also be worth considering.

Transfer and Promotion

6.78 Transfer plays an important part in the promotion system. Promotion acts as an incentive to a teacher to seek transfer or to accept a transfer he would not otherwise desire. If promotion is to be related to "merit", however defined, a certain amount of transfer is inevitable, since it would be a remarkable coincidence if promotion positions always became vacant in the school of the "most meritorious" applicant. Transfer consequent on promotions may extend in a long chain. For example, the appointment of a Class I primary head necessarily involves at least four consequent promotions down the line, some or all of which may involve transfer. The final promotion in the chain will create a vacancy in a base position, that of assistant, which may be filled by a recruit.

6.79 The whole process of promotion is more complicated than the formal position may suggest. A hidden chain of "promotion" operates in addition. This chain relates, not to the level of positions,

but to their location, and grades each class of appointment according to an informal consensus of its geographical desirability. Even within the basic category of assistant, for the permanent in which a period of country service is usually required before effective choice of school operates, movement may be "promotion" in this sense. When a vacancy occurs in positions for which the ordinary or defined special method of selection operates, preference is given to those already occupying a position at a similar level who desire to enter it through transfer. Hence the path to a Class III primary headship in Adelaide is often through transfer from a similar position in a country area. Within Adelaide itself certain areas, for a variety of reasons, are regarded as more desirable than others, and promotion positions within them are also likely to be entered by transfer in this way. The result is that, in primary and high schools at least, the obligation of country service is built into the promotion system, making mobility as important as "merit" in the attainment of senior positions or of permanent service at any level in one's area of choice. In general, promotion is confined to the position immediately above that held, so that the lower classes of headships, usually in smaller country schools, must be passed through in order to reach the highest level. It should be emphasised that there are exceptions to all these statements, especially in periods of rapid growth of the schools system, but the basic generalisation, that willingness to move around is a condition of attaining the most senior positions, holds. The filling of positions in the hidden hierarchy of location means that transfer for "promotion" purposes is considerably greater than would be suggested by a count of those moving out of a school in order to take up a position at a higher level elsewhere. This makes clear the promotion disadvantages associated with employment in a temporary capacity, since initial entry to a higher level often involves occupying the position in an undesired locality. It would, of course, be ridiculous to suggest that country service is a hardship even to a majority of those who undertake it. Many teachers, especially those who are not concerned with the problems of home ownership, the education of their family or the gaining of qualifications, prefer country service, and others find it an enjoyable and valuable experience. We are here concerned rather with the fact that it is a requirement which all teachers may not be assumed to relish.

6.80 We accept that the provision of staff of roughly equal quality throughout the State is an important objective. The present arrangements achieve this end by combining a measure of direction of teachers, especially those under bond, with compensation through increased promotion prospects for those undertaking service in undesired areas. The method is effective, although it has important disadvantages, the chief of which are:

(a) Inexperienced teachers are placed in remote areas where less professional assistance is available to them than in larger schools. A system requiring an initial period of supervised teaching in larger

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schools before assignment to more remote schools, and greater availability of consultant services in country areas would help to overcome this disadvantage. This aspect is discussed in Chapter 8.

(b) The system encourages a rate of transfer greater than may be considered desirable, especially in the more senior positions in which people are unlikely to make significant contributions in a short period. Of 87 Class I, II and III headmasters appointed to schools of all types in 1970, 77 had spent less than five years in the school from which they came. The fact that two-thirds of teachers changing schools in 1968 had spent less than three years in the school out of which they moved, and the very high percentage of turnover of staff in remote schools reveal an educationally undesirable situation to which the promotion system contributes.

(c) The importance of mobility in promotion may both deter able people from entering the service and result in the promotion to senior positions in the schools of people who in terms of their ability as educators are not necessarily the best available.

6.81 It should, in our view, be accepted that in a State like South Australia country service must be built into the promotion system for teachers, as it is for workers in other State-wide organisations, for example, banks. Without it, equal provision of teachers in areas of varying population density would be very difficult, and perhaps impossible to attain. However, we think it important that conditions should be established which would make people more willingly undertake service in country schools and spend longer periods in them. The fact that a proportion of teachers is undertaking country service under forms of direct and indirect compulsion connected with bonding and promotion should not be regarded by the community as an excuse for making service there any more onerous than it need be. Further, we think that such novel inducements as a period of leave on half-pay after three years' service in some areas, and extra leave on a pro-rata basis for service beyond a particular period, as well as more conventional inducements such as higher monetary rewards, travel allowances and high-quality housing at a low rental, are all worthy of consideration in making country service more attractive.

6.82 Accordingly, we RECOMMEND that:

(a) The attractiveness of teaching to able and well-qualified people should be preserved in the period of reduced promotion prospects which seems to lie ahead by increased loadings for high qualifications, especially for holders of honours degrees and higher degrees.

(b) The loadings paid for qualifications within the primary service should be such as to make primary service sufficiently attractive to highly qualified people.

(c) A number of senior teaching posts with the pay and status of deputy head should be made available to well-qualified subject

specialists in the larger schools of the secondary system and to people well qualified over an area of the curriculum in primary schools.

(d) Financial and other benefits should be offered on a more generous scale than at present to make service in areas now regarded as undesirable more attractive so that teachers may more willingly undertake service in them and the rate of transfer out of them may be decreased.

CONTINUING EDUCATION OF TEACHERS

6.83 We think that the continuing education of teachers will assume increasing importance in the future, although its emphasis may change as the initial qualifications of teachers rise. Society itself and the understanding of the educational process are changing rapidly, along with the content and techniques of the process, and may be expected to change at a greater rate. Without periodical re-education teachers could "lapse into skilful practitioners of an outmoded ritual".⁸ The continuing education of teachers cannot in these circumstances remain solely an after-hours activity relying on the incentive of promotion, or a matter of one-day courses, valuable as these are. It will need to be accepted in future that all teachers will be periodically absent from their classrooms taking courses at some institution, whether at university, at a college of advanced education or in a special department of a teachers college. It could be argued that teachers whose methods, attitudes and knowledge are antiquated have an effect which frustrates rather than promotes the ends to which the schools are nominally dedicated. Most teachers would be stimulated and refreshed by a period of full-time study every few years, and we think that they should be enabled to do so. The contact with new ideas and with their peers would arrest the depressing intellectual effect which long periods of association with immature minds have on many teachers.

6.84 There is a considerable number of teachers still employed whose lower initial education and short period of pre-service preparation have left them insufficiently qualified to match the incoming young teachers, who will henceforth have a minimum of three years' training. Special efforts are required to enable these poorly qualified but experienced teachers to upgrade their qualifications.

6.85 We think also that teachers should be required to undertake some study during school vacations. The length of vacations makes it reasonable, in our view, to expect that teachers should undertake in-service and other forms of organised study during a part of the vacation period. If the school year were a week longer for staff than for pupils, in-service education could be organised in the schools, possibly with the assistance of specially prepared television programmes of the kind used in Victoria. This would provide an opportunity for staffs to consider the objectives of the school as a

⁸ A. E. Hartley, "The Further Education of Teachers", *Education News*, February 1970, p. 7.

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whole and better ways in which they might be reached, and would be an extremely valuable form of in-service education in areas more general and fundamental than are at present covered. In addition to such short courses, the successful pursuit of vacation courses relevant to the area into which teachers were moving could be a requirement of promotion. These courses could take place through a number of vacation periods with cumulative credits. We suggest that credit should be given in promotion to teachers who have successfully completed summer vacation courses. A discussion of courses suitable for those moving into administrative positions is included in Chapter 17.

6.86 Accordingly, we RECOMMEND that:

(a) Teachers should be enabled to apply for leave for full-time study, at the rate of one term for every seven years' service, in courses approved as likely to improve their professional competence.

(b) Teachers should be required to undertake up to a week's in-service study within their schools or elsewhere each year during a vacation period.

(c) Tertiary institutions should be approached to provide courses carrying cumulative credits for study over a month of the long vacation.

(d) The Education Department should, in collaboration with the teachers colleges, develop special arrangements whereby poorly qualified but experienced teachers are enabled to upgrade their qualifications.

CLASS SIZE AND TEACHER USE

6.87 The whole notion of the class as a stable unit of instruction is being questioned and alternative patterns of pupil grouping and teacher use developed. Australian schools have been slow to experiment with alternatives to the one-teacher-one-class pattern in the primary school and the single teacher per subject per class in the secondary school. Our teaching traditions have centred around the individual teacher, providing for little co-operative teaching of a given group and subject. Equally embedded in the tradition has been the idea that teacher-pupil confrontation must be continuous and teaching groups stable. Except at the most senior secondary levels, where a limited number of "spare" periods are allowed for, pupils are actively "taught" by a teacher throughout the school day and week. Patterns of teacher use assume on the whole that all teachers are equally competent in all aspects of their work, and that no person who is not a fully trained teacher, or a person who, in the circumstances of teacher scarcity, is accepted as his equivalent, should take any active part in the educational process. All these traditions have sound historical backing. Their establishment was part of the long struggle to achieve recognition of the need for the teacher to be educated, both professionally and generally, and of his right to

exercise professional responsibility within his classroom. Changed circumstances, however, suggest the need for a reappraisal. The increasing expense and length of training required to produce highly educated teachers, and the constantly expanding need of such teachers, make the most effective use of their skills a matter of serious concern. Many tasks at present performed by teachers could be equally well done by people with considerably less training who are available in larger numbers. Increased understanding of the learning process suggests that some things can be learned equally effectively, and perhaps more effectively, by methods not requiring active teacher participation or in groups larger than the traditional class. Some types of learning, on the other hand, require smaller groups than those at present taught, with the participation of a trained leader. The rapid accumulation of knowledge makes it more difficult for the teacher to be expert over a wide field and also makes the process of teaching something deeper than instruction in mere pre-determined content. Teachers, like pupils, are not identical, having their individual strengths and weaknesses which more co-operative teaching patterns can take into account. Such patterns also provide an important means of professional education, enabling common planning, allowing the novice to be accommodated as part of a team and permitting the use of less highly trained personnel for some aspects of the work.

6.88 We should not want to suggest that there was a single correct pattern of teacher use which would provide for the most effective learning experiences and the most effective use of teacher strengths in all circumstances. Patterns for individual schools and groups of teachers must be worked out by the people concerned and will express their willingness to experiment with different types of grouping and teacher use. However, willingness to examine present arrangements with a critical eye and to try out and evaluate alternatives is a fundamental aspect of professional conduct which teachers should be more actively encouraged to develop. Such encouragement could take the form of provision of extra non-teaching staff and equipment, including programmed materials, and the rearrangement of buildings for most effective use. Some changes in the direction of co-operative teaching are already taking place. The provision of a number of new flexible units in primary schools and the intention of buildings schools planned entirely on this basis will introduce new teaching patterns. This has stemmed from the initiative of the central administration of the Education Department. In other schools the amount of time being made available for individual study by pupils is being expanded and buildings modified to allow it to take place. In the upper classes of some primary schools a degree of teacher specialisation is developing, and co-operative teaching groups are being used in some secondary schools. Modification in the basic class grouping is nevertheless slow. No patterns involving the use of a hierarchy of staff, ranging from the highly trained, experienced professional through the less experienced assistant and the teacher in training to the teacher

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aide and clerical assistant, working as a team, have yet been tried.

Optimum Class Size

6.89 Whatever alternative patterns of teacher use may be developed, the notion of class size as an expression of the numerical relationship between pupils and teachers in the schools still has significance for the planning of teacher supply, which must also take into account the fact that changes in established patterns are likely to be slow. It is often assumed that there is an optimum class size in which teacher effectiveness and pupil achievement and response will be maximised. It has in fact proved extraordinarily difficult to test the educational effect of class size as an independent variable in the educational process, keeping all other factors such as the personality and level of education of the teacher, methods of teaching, ability of pupils or the many other possible sources of variation constant. Even if the effect of class size could be separated from the other factors in the situation and varied independently, it is difficult to state in measurable operational terms the educational objectives, other than those of intellectual attainment, in relation to which the effect of class size will be assessed.

6.90 The Scott Committee discussed the significance of secondary class size in terms of three criteria — pupil performance, the general development of pupils, and the morale and professional satisfaction of teachers. After reviewing the voluminous and often contradictory research evidence it concluded that, in relation to pupil performance, "uncritical worship of small classes for all subjects, grades and ability levels is unjustified".⁹ In terms of the general development of students, difficult to define as this may be, the Committee supported the proposition that the size of junior secondary classes should be about 30 pupils. It found general agreement with the statement that the professional satisfaction of teachers declines as the size of the class rises above a certain level. Marklund,¹⁰ in a comprehensive study in Sweden, set that level at 30 for secondary classes, a limit that was later embodied in Swedish law. The Scott Committee concluded:

In summary, the evidence generally supports the conclusion that class sizes of a maximum of about 30 in the junior secondary school . . . and not more than 20 to 25 (depending on the subject area) in the senior secondary school . . . are those that we should recommend.

It was emphasised that these recommendations should not be seen as a statement about optimum class size, but merely as targets in planning for the ensuing period.

6.91 The case for smaller sizes in the higher forms rests on informed professional opinion rather than on evidence, and is possibly a rationalisation of the fact that higher forms have traditionally been

* *Op. cit.*, p. 46.

¹⁰ S. Marklund, *Scholastic Attainments as related to Size and Homogeneity of Classes*, Stockholm Studies in Educational Psychology, No. 6. Quoted by Scott Committee, p. 44.

smaller because of low retention in the past. Professional associations, in discussions with the Committee, advocated smaller classes at higher levels on the grounds that correction per pupil was more time-consuming and that discussion played a more significant part in the work of senior classes. However, the opportunities for self-directed work are also greater in senior classes, and might provide a better preparation for tertiary study.

6.92 There was general agreement, expressed by both teachers and departmental officials in information placed before us, that a maximum class size of 30 should be aimed at for primary level, and departmental planning is based on the early attainment of this figure. There can be no doubt that the size of many classes in the South Australian government system is high according to standards generally accepted as desirable. For example, in 1969, 81 per cent of primary and infant classes in Class I-V primary schools had 31 or more pupils, and 65 per cent of "home" classes in secondary schools exceeded this size. As a target for planning over the coming period, we accept for the secondary system the class sizes recommended for a similar purpose in New South Wales by the Scott Committee, which are the same as those aimed at in the planning of the South Australian Education Department. We also accept the Department's target for primary schools. These targets are:

- (a) For primary classes — a maximum of 30 pupils.
- (b) For the first three years of secondary school — a maximum of 30 pupils.
- (c) For the fourth and fifth years of secondary schooling — a maximum of 20-25 pupils.

Pupil/Teacher Ratios and Class Size

6.93 In order to plan for reduced class size it is necessary to establish a pupil/teacher ratio which will achieve the targets set. The ratio required is difficult to establish. Overall pupil/teacher ratios give little indication of average class size or of the number of classes which may exceed a given size. For example, the pupil/teacher ratio for South Australian government primary schools in 1969 was 29.5:1. At the same time, the average size of primary classes was 33.9 pupils, and 46.1 per cent of classes had more than 35 pupils. For secondary schools the overall ratio was 18.6:1; but only 21 per cent of all secondary classes had fewer than 26 pupils, and 65 per cent had 31 or more.

6.94 There is no simple theoretical relationship between overall pupil/teacher ratios and class size. The geographical distribution of the population, retention rates, subject choice and the average number of periods taught by teachers are obvious factors to be taken into account. Whether teachers not actually available for classroom teaching are included in the number of teachers also influences the outcome. The ratio required to eliminate classes above a certain size without

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moving pupils from one school to another can only be arrived at for a particular point of time by a study of actual class sizes in a particular school system. From this study can be established the number of extra teachers needed to eliminate classes above an agreed size, and the required ratio derived by relating the total number of teachers needed to pupil numbers. A study of class sizes in individual primary schools undertaken by the Committee indicated that an additional 807 teachers would have been required in 1969 to eliminate primary classes of over 30 pupils. Such an increase in the number of teachers would have required a reduction in the pupil/teacher ratio in the primary system from 29.5:1 to 25.1:1, excluding special schools and classes. This ratio takes no account of teachers on leave, as will be discussed later. We have no similar information for secondary schools, but a survey conducted by the Education Department in May 1969 established that 325 extra secondary teachers would have been required to eliminate classes of over 35 pupils in the junior secondary years, classes of over 30 in fourth year and classes of over 25 in fifth year. These class sizes are larger than those we propose, but their implementation would have required a 9 per cent increase in the secondary teaching force. The May 1970 survey by the South Australian Institute of Teachers indicated that to establish the maximum class sizes which we have taken as appropriate targets would have required 737 extra primary teachers and 684 secondary teachers, plus 60 extra teachers in area schools. This would have required a pupil/teacher ratio of 14.3:1 in secondary schools.

6.95 A detailed study of the pupil/teacher ratio and its relation to class size in secondary schools was undertaken in Queensland in 1969. Queensland conditions are in many ways similar to those in South Australia, both States having five years of secondary school and a wide geographical spread of pupils. The elimination of classes above 30 in the junior secondary years and of above 25 in the last two secondary years would require a secondary pupil/teacher ratio of 15.1:1 in Queensland, on the assumption that secondary teachers taught 30 periods, excluding sport and religious instruction, in a 40-period week. A similar study in New South Wales, which has a different distribution of size of schools and an extra year of secondary education, indicated that to establish the same class sizes as those proposed for Queensland and to allow for a reduction in teaching periods would have required a ratio of 13.1:1.¹¹ A South Australian study which would establish a relationship between class size and teacher numbers on the basis of varying assumptions about periods taught is necessary as a guide to planning secondary teacher supply.

SUPPLY AND RECRUITMENT OF TEACHERS

6.96 Planning for future teacher supply is a vital aspect of forward planning in an education system, and perhaps the most diffi-

¹¹ Both these studies were undertaken in connection with the 1970 National Survey of Educational Needs.

cult. Estimates of future pupil numbers rest on estimates of population and migrant gain for primary enrolments, and on retention rates in addition to these factors in the secondary system. Such estimates, however carefully prepared, are subject to error. The pupil numbers to which teacher supply will be related must be projected, replacement of teacher losses based on past experience must be allowed for, decisions must be made about any changes in class size to be planned, and the numerical relationship of pupils to teachers which will achieve the desired changes in class size must be estimated. When the statistical difficulties involved in these operations have been surmounted, there remains the problem of supply. How great is the pool from which trainee teachers may be drawn? What are the prospects of recruiting teachers from sources other than teachers in training? What are the financial constraints? The answers to all these questions may require estimates of needs to be modified to bring them into the realm of the possible.

6.97 The Education Department made available to the Committee its estimates of teacher requirements to 1981 and details of the sources from which it plans to draw the extra teachers needed annually. These plans are "ideal" in that they depend on finance being available to fulfil them both in the scale of teacher training planned and in the employment of teachers. These figures are based on population estimates which include the Northern Territory for which South Australia has had the responsibility both of training and of supplying teachers. They involve greatly increased teacher numbers and significant reductions in pupil/teacher ratios over the period.

6.98 Recruits to teaching are drawn from three sources: students on allowances coming out of teachers colleges, including those studying at the universities, into the schools; the re-employment of people, mostly married women, who have had some experience in the service but have not been teaching for a period; and "other sources", covering all those recruits whose education has not been supported by allowances from the Education Department and who have had no previous experience in South Australian government schools. Over recent years the output from teachers colleges has not been sufficient, except in the case of art and craft teachers, to replace annual losses from the service, making the sheer maintenance of teacher numbers dependent on recruitment from other sources. The Department plans to depend increasingly on teachers college output, including the students whom it sponsors through university courses, and to decrease the proportion of total recruitment obtained from other sources. The numbers of teachers recruited from the colleges have the advantage of being both predictable and controllable, and teachers so supplied will be equipped with the most recent knowledge in their field and be acquainted with the most up-to-date teaching methods. However, heavy reliance on this source of supply is costly and may result in the under-use of talent and training already present in the community. Some indication of the scale on which the

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Department plans to expand teacher education over the period to 1981 may be gained from Table 6.45 and Chart 6.1 which give details of the planned total number of teachers college students, including those at university. The 1970 entry exceeded the numbers originally planned. In relation to the teacher numbers which we later indicate will be needed, we do not regard the planned level of teacher training as excessive. Indeed, unless it is heavily supplemented by recruitment from other sources, it may even prove inadequate to meet needs, on the basis of our estimates.

Table 6.45

PLANNED NUMBERS OF TEACHER TRAINEES SOUTH AUSTRALIA 1969-1981

	Total	Intake
1969	3,824 (a)	1,498 (a)
1970	4,480 (a)	1,759 (a)
1971	4,748	1,820
1972	5,272	1,935
1973	5,769	2,035
1974	6,110	2,130
1975	6,416	2,210
1976	6,667	2,292
1977	6,937	2,380
1978	7,217	2,482
1979	7,516	2,595
1980	7,830	2,696
1981	8,181	2,832

Source: Education Department.

(a) Actual.

Estimates of Future Teacher Requirements

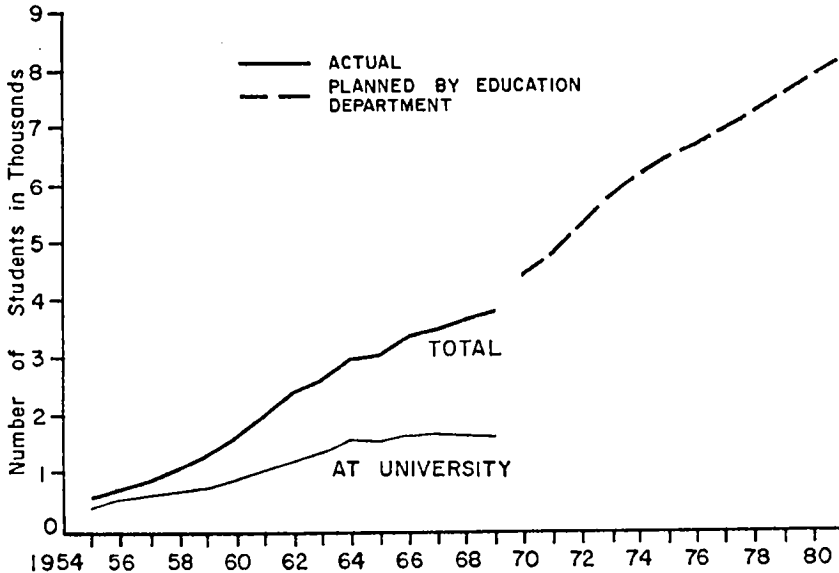
6.99 As an exercise designed to test the feasibility of certain allowances which we believe should be built into plans for teacher supply in addition to the attainment of reductions in class size, the Committee has prepared estimates of teacher requirements to 1981. These estimates are based on our projections of pupil numbers as outlined in Chapters 4 and 5, which assume migration at the rate of 10,000 a year and medium retention rates in the senior secondary grades. Our pupil estimates as used here relate only to government schools in South Australia. For 1970 they were higher by nearly 3,000 pupils than the actual August enrolment in government primary schools. They also exceeded the August secondary enrolment by about 1,000 pupils (see Appendix A, paragraph A.29). A lower rate of migration between 1968 and 1970 than that assumed in the projection is the main reason for the differences between our estimates and actual enrolments. On the basis of so short a period and on a migration change which may prove temporary, and in the light of the uncertainties of all such estimates, we do not think it necessary to revise our longer-term projections. However, in Tables 6.46 and 6.47 the Committee's projections of pupil numbers, on which our teacher

requirements are based, have been reduced proportionately according to the relationship between our projected numbers and actual enrolments in 1970.

Chart 6.1

ACTUAL AND PLANNED NUMBER OF STUDENTS IN TRAINING AS TEACHERS

SOUTH AUSTRALIA 1954-1981



6.100 We have taken as our starting point the target pupil/teacher ratios of the Education Department in its plans for the supply of teachers. These are:

(a) For *primary* teachers in ordinary schools and classes a pupil/teacher ratio of 25:1. For special schools and classes a pupil/teacher ratio of 11:1.

(b) For *secondary* general teachers a ratio of 18.6:1. For secondary art and craft teachers a ratio of 72:1. These imply an overall ratio for all secondary teachers of 14.5:1, which also is very close to that indicated as necessary in the 1970 survey by the South Australian Institute of Teachers. On the basis of our 1969 investigation of class sizes in primary schools, the primary ratio planned should eliminate classes above 30 in primary schools. The planned overall secondary ratio of 14.5 pupils per teacher is lower than that estimated in Queensland as necessary to provide classes which would achieve our junior secondary target and provide for no classes above 25 in the last two secondary years. However, the workloads of Queensland secondary teachers appear to be somewhat higher than those at present in South Australia. It should be emphasised that no firm relationship between pupil/teacher ratios and class size has yet been established for South Australia. Moreover, the pupil/teacher ratios planned by the Education Department in South Australia take no account of the

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fact that on any given day all teachers employed are not available for teaching.

6.101 For this latter reason, we find it convenient to distinguish between two types of pupil/teacher ratios. The first of these, which we shall call the *nominal* ratio, relates all teachers employed to all pupils enrolled. Such are the ratios used in the plans of the Education Department and in the official ratios published by it. The second type of ratio relates teachers actually available for teaching on any given day to pupil numbers. This we shall call the *effective* ratio. Teacher numbers used in this ratio exclude those on extended leave and those casually absent on account of sickness or other personal reasons and in attendance at in-service conferences. The nominal ratio will by definition always be lower than the effective one. In 1969 3.5 per cent of all teachers employed were on extended leave or secondment. As nearly as we could judge from the evidence placed before us, some 4 per cent of teachers are absent from their classes on a casual basis on any one day for the reasons referred to above. We think that teacher numbers should allow for the employment of "floating" staff to replace them. Hence, an allowance of 7.5 per cent of all teachers is included in our estimates of requirements to replace teachers absent on casual or extended leave.

6.102 In addition, we have indicated that we think it important that, in planning for future teacher numbers, allowance should be made for a proportion of teachers to be absent from the schools on a regular basis for more prolonged study taken at greater depth than that at present provided through in-service conferences. We have therefore included in our estimates an allowance of 5 per cent of all teachers to allow teachers who wish to do so, and are approved, to study full time for a term every seven years, in accordance with our recommendation in paragraph 6.86. The 5 per cent allowance made for this purpose would not be fully taken up, because a proportion of teachers would not teach long enough to qualify and a further proportion may not wish to take the opportunity, although we should hope that the latter group would be small. Within the 5 per cent there would thus be some leeway for the provision of teachers on a more generous than average basis in some schools where a high proportion of pupils might be regarded as having special learning difficulties. Such compensatory provision is recommended in Chapter 14 (see paragraph 14.46).

6.103 The method used in our projections of teacher requirements was to work to a target effective pupil/teacher ratio, establishing by trial and error the year when it seemed possible to attain it. The targets used for this purpose were those used by the Department in its plans for future teacher supply, amended by adding 12.5 per cent of all teachers to cover the allowances listed above. Having arrived at the number of teachers needed in the target year, we have spread the total increase required over the period back to 1970 in a manner

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which would keep relatively constant from year to year the recruitment required from sources other than planned teachers college output. The target effective ratios for both primary and secondary systems were determined as attainable in 1978. Before the target year some choice would have to be made between the attainment of class sizes of the order planned as target sizes and the provision of floating staff as replacement for absent teachers and the introduction of study leave. All could become operative only in 1978 and thereafter.

6.104 Table 6.46 gives our estimates of primary teacher requirements to 1981 based on our projected pupil numbers and calculated on the basis described. In our estimates of primary teachers we have allowed for the actual number of students planned by the Education Department to be in special schools and classes. We are aware that these numbers include estimates for the Northern Territory, but the evidence presented in Chapter 13 suggests the need for special education on an increased scale. The estimated teacher numbers represent a 22 per cent improvement in the nominal primary pupil/teacher ratio over the eight years 1970-1978 as compared with a 13 per cent improvement over the eight-year period 1961-1969.

Table 6.46

ESTIMATES OF PRIMARY TEACHER REQUIREMENTS IN GOVERNMENT SCHOOLS SOUTH AUSTRALIA 1970-1981

	Pupils (a)	Pupils per Effective Teacher	Pupils per Nominal Teacher	Teachers Required	Increase Required	Replacement at 13 per cent	Total Recruitment Required	Planned Teachers Coll. Output	Balance Required from Other Sources
1970	157,300	—	27.4	5,740(b)	—	—	—	—	—
1971	157,700	—	26.5	5,940	200	746	946	567	379
1972	157,400	—	25.7	6,120	180	772	952	522	430
1973	157,400	—	24.8	6,340	220	796	1,016	570	446
1974	158,300	—	23.6	6,700	360	824	1,184	766	418
1975	160,300	—	22.7	7,060	360	871	1,231	775	456
1976	163,800	—	22.1	7,420	360	918	1,278	820	458
1977	168,600	—	21.7	7,780	360	965	1,325	872	453
1978	174,700	24.7(c)	21.4(c)	8,156	376	1,011	1,387	931	456
1979	182,900	24.7	21.4	8,508	352	1,060	1,412	999	413
1980	190,500	24.7	21.4	8,884	376	1,106	1,482	1,055	427
1981	198,500	24.7	21.4	9,256	372	1,155	1,527	1,076	451

(a) For 1970, estimated pupil numbers, August 1970, based on February actual, including pupils in special schools and classes. After 1970, the Committee's medium projections, reduced by the relationship of estimated August numbers 1970 to Committee's projections for 1970.

(b) Actual numbers of teachers employed in South Australian primary schools (excluding Northern Territory), February 1970.

(c) These ratios give an effective pupil/teacher ratio of 25.0:1 for ordinary classes, and 11.0:1 in special classes.

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6.105 Table 6.47 gives our estimates of secondary teacher requirements. The estimated teacher numbers represent an improvement of 25 per cent in the nominal secondary pupil/teacher ratio over the eight years 1970-1978 as compared with a 12 per cent improvement over the eight-year period 1961-1969. Although we have kept pupil/teacher ratios constant in the years after 1978 when the targets which we set out to achieve have been reached, we appreciate that by that time changed approaches to teaching may have rendered these targets inappropriate.

Table 6.47

ESTIMATES OF SECONDARY TEACHER REQUIREMENTS IN GOVERNMENT SCHOOLS SOUTH AUSTRALIA 1970-1981

	Pupils (a)	Pupils per Effective Teacher	Pupils per Nominal Teacher	Teachers Required	Increase Required	Replacement at 13 per cent	Total Recruitment Required	Planned Teachers Coll. Output	Balance Required from Other Sources
1970	71,800	—	17.1	4,193(b)	—	—	—	—	—
1971	75,000	—	16.5	4,543	350	545	895	469	426
1972	78,500	—	16.0	4,903	360	591	951	534	417
1973	82,000	—	15.6	5,263	360	637	997	569	428
1974	85,500	—	15.2	5,623	360	684	1,044	616	428
1975	88,600	—	14.7	5,993	370	731	1,101	675	426
1976	90,400	—	14.2	6,383	390	779	1,169	742	427
1977	92,000	—	13.6	6,773	390	830	1,220	776	444
1978	92,400	14.5(c)	12.9(c)	7,166	393	880	1,273	786	487
1979	92,300	14.5	12.9	7,160	—6	931	925	775	150
1980	92,100	14.5	12.9	7,144	—16	931	915	766	149
1981	93,200	14.5	12.9	7,228	84	929	1,013	831	182

(a) For 1970, estimated pupil numbers, August 1970, based on February actual. After 1970, the Committee's medium projections reduced by the relationship of estimated August numbers 1970 to Committee's projections for 1970.

(b) Actual number of teachers employed in South Australian secondary schools (excluding Northern Territory), February 1970.

(c) These ratios give an effective pupil/teacher ratio of 18.16:1 for secondary general teachers, and 72.0:1 for art and craft teachers.

Table 6.48

TEACHERS EMPLOYED IN GOVERNMENT SCHOOLS SOUTH AUSTRALIA 1955-1969

	Primary	Secondary	Total
December 1955	3,203	993	4,196
December 1960	3,897	1,739	5,636
December 1965	5,012	3,007	8,019
December 1969	5,830	4,047	9,837
Annual Growth Rate (per cent)	4.3	10.4	6.1

Source: Education Department.

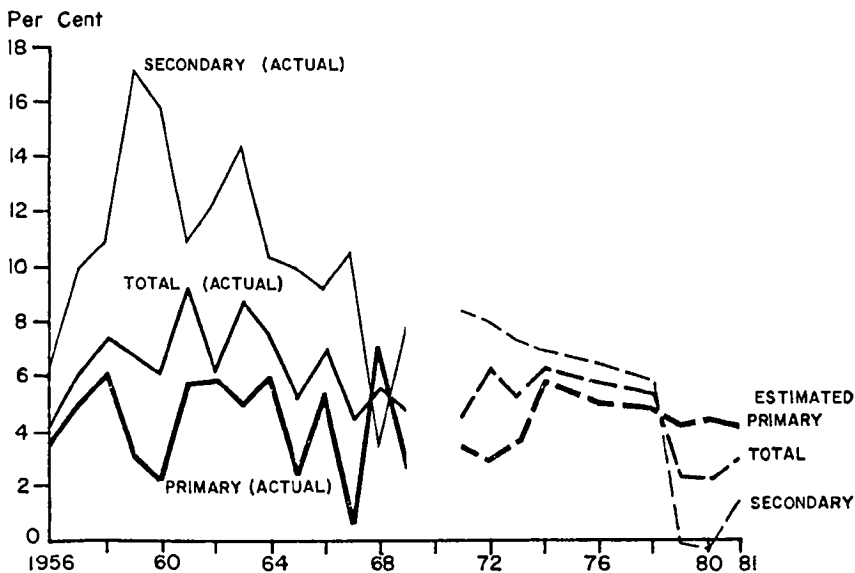
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6.106 To test whether our estimates required an excessively high rate of growth of the teaching force, we have compared them with the increases which have taken place in the recent past. Table 6.48 shows changes in teacher numbers between 1955 and 1969. The Committee's estimates would require an annual growth of 4.4 per cent in primary teacher numbers and 5.1 per cent in those of secondary teachers. The growth rate for numbers of primary teachers is virtually the same as that which actually took place over the period 1955-1969, while our projected rate of growth for numbers of secondary teachers is considerably below the 10.4 per cent annual increase which took place over the past period under much less favourable circumstances. Chart 6.2 compares past rates of growth of teacher numbers with those proposed by us to 1981.

Chart 6.2

ACTUAL AND ESTIMATED ANNUAL RATE OF GROWTH OF NUMBER OF TEACHERS
IN GOVERNMENT SCHOOLS

SOUTH AUSTRALIA 1956-1981



6.107 Our estimates envisage the employment of 9,256 primary and 7,228 secondary teachers by 1981 as against the 8,739 primary and 6,767 secondary teachers estimated by the Department as being required by that year, according to its "ideal" plans (see paragraph 6.97). The Education Department's estimates include teachers required for Northern Territory schools. In our estimates we have assumed that the students coming out of the colleges will be available for employment in South Australia. Teachers college output is already determined for the greater part of the five-year period during which South Australia's responsibility for staffing Northern Territory schools

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will be gradually phased out. This means that recruitment from other sources would need to be higher in the first three or four years than our estimates show, and the intake into teachers colleges temporarily raised above planned levels if the needs of the Northern Territory are to be met by teachers recruited in South Australia. In our opinion, the longer-term plans for teachers college numbers should remain unaltered, although after 1975 the output from the colleges will be used in South Australia only. We also think that recruitment from other sources should continue at a steady or increasing rate over the whole period, and not be diminished as proposed in the Department's plans. According to the level of recruitment from sources other than teachers colleges actually achieved over the early part of the period, and in view of the need of the Northern Territory, it may be necessary to increase teachers college intakes over the next couple of years.

6.108 To form some judgment about whether the levels of teacher supply required in our estimates are realistic, figures for past recruitment from sources other than teachers college output have been obtained from the Education Department. Table 6.49 shows the number of teachers entering primary and secondary schools for the years 1963-1969 who were not exit students from teachers colleges.

Table 6.49

TEACHERS RECRUITED FROM RE-EMPLOYMENT AND OTHER SOURCES

SOUTH AUSTRALIAN GOVERNMENT SCHOOLS 1963-1969

	Primary			Secondary		
	Re- Employment	Other Sources	Total	Re- Employment	Other Sources	Total
1963	248	64	312	191	207	398
1964	323	117	440	196	247	443
1965	297	94	391	184	181	365
1966	117	118	235	131	214	345
1967	273	88	361	135	163	298
1968	209	137	346	156	204	360
1969	367	150	517	188	257	445
Average	262	110	372	169	210	379

Source: Education Department.

6.109 Our estimates of the recruitment required from sources other than the teachers colleges do not seem impossible to achieve on the basis of these figures. It is true that a number of teachers greater than the average obtained by direct entry over the period would be required in some years, but those needed in the initial years do not exceed the level actually reached in 1969, and in the case of primary teachers do not reach that figure. We see good reasons to expect that the number of people available for re-employment will enable the level of recruitment from this source to rise rather than fall. However,

while we think that recruitment at the level required would be possible, certain provisos should be noted:

(a) The Department's planned numbers of teachers and teachers college students are related to pupil estimates which include the Northern Territory. Ours relate to South Australia only. It has now been agreed that South Australia's responsibility for staffing Northern Territory schools should be phased out over a period of five years. The entire planned output from the teachers colleges will not be available for service in South Australian schools until the end of that period. Our estimates assume that all students coming out of college will be immediately available to South Australian schools. It is probable that a number of South Australian teachers will still choose Territory service, but it seems likely that the Commonwealth will undertake direct responsibility for training teachers for the Northern Territory, so increasing the total pool of teachers.

(b) Our estimates would require an increased employment of teachers beyond that planned by the Department. They should involve no great increase in planned expenditure on pre-service training, since they rely more heavily on recruitment from sources other than teachers colleges and envisage greater recruitment at the graduate level. However, they do depend on the availability of money to employ the extra teachers and involve greater expenditure on the further education of teachers.

(c) The fulfilment of our estimates assumes a heavier recruitment of teachers from re-employment and other sources than that planned by the Education Department. We do not think such a dependence on these sources is unreasonable in the light of past levels of employment since the pool of qualified people from which teachers may be drawn may be expected to increase as the number of trained teachers increases. The tendency of married women to return to work after their children are established in school is becoming more marked, and may be expected to increase still further if past trends are any guide. The number of graduates available for recruitment to teaching at that level is also likely to expand considerably with the very substantial growth in tertiary enrolments projected for the 1970's. However, it is important that the achievement of numbers should not take place at the expense of standards, and care would have to be taken that the standards of those recruited were acceptable. The information reported in Table 6.50 indicates that such care may be necessary.

6.110 Teacher training has been required for some years of all recruits to primary teaching. The South Australian Institute of Teachers, in discussions with the Education Department on the qualifications of recruits to the secondary service, put forward a minimum level which recruits should be obliged to meet either before entry or within a specified period after entry. The Institute has indicated by resolutions passed at its 1970 annual conference that it will consider industrial action to enforce this standard in 1971. The standard sug-

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gested is relatively low, requiring four tertiary units and the equivalent of one year's teacher training. The qualifications of the 201 teachers directly recruited into secondary schools in January and February 1970 in terms of these requirements are set out in Table 6.50. Of these recruits, only 106 met the required minimum qualifications, although the gaining of professional training by the 81 whose general academic qualifications were acceptable would be possible under suitable release arrangements for study.

Table 6.50

QUALIFICATIONS OF SECONDARY TEACHERS RECRUITED INTO GOVERNMENT SCHOOLS OTHERWISE THAN FROM TEACHERS COLLEGES

SOUTH AUSTRALIA, JANUARY AND FEBRUARY 1970

	Graduates	Teachers with Professional Training		Graduates	Teachers without Professional Training	
		4 or more Tertiary Units	Fewer than 4 Tertiary Units		4 or more Tertiary Units	Fewer than 4 Tertiary Units
Re-employed	28	39	10	—	—	—
Other	20	19	2	38	43	2
Total	48	58	12	38	43	2

Source: Education Department.

6.111 An important question is whether teaching will be drawing too great a proportion of the pool available for tertiary education. However, at least over the period to 1981, the increased teacher numbers suggested by us will require a teachers college intake which will be a falling proportion of those that we estimate will be in grade XII in the previous year. This argument is pursued in Chapter 16 (see paragraph 16.127). In 1969 the number entering teachers colleges was 33 per cent of the number of pupils in grade XII in 1968. By 1981 planned intake will represent 22 per cent of those that we estimate will be in grade XII in 1980. We do not think the proportion is excessive. We think the main question at issue is rather whether a sufficient number of people of the calibre required can be attracted into teaching in competition with other occupations open to them. It may well be that the whole structure of the teaching force will need to be gradually changed in order to provide the career prospects that will attract a sufficient proportion of able people into teaching. This would involve the employment of a core of highly trained and relatively highly paid professionals who would be responsible for providing professional leadership to a greater number of less highly trained people. The large number of teachers required may make it impossible to provide the level of education and pay over the whole force which will be needed to attract the able core.

6.112 There should be no insuperable problem in finding increased numbers of young people willing to enter the colleges for

training if recruitment from other sources should fall below the levels we think possible. However, we believe that it should be possible to recruit the required number of well-qualified teachers without an increase in the teachers college numbers planned by the Department; and we suggest that the following action should be taken:

(a) In order to decrease the annual level of replacement necessary there should be a full investigation in depth into teacher losses to establish whether there is any possible action which can be taken to reduce resignations. Such an inquiry would need to be conducted by an authority separate from the Education Department, so that teachers would feel quite free to state their reasons for resigning.

(b) More intensive efforts should be made to recruit graduates, since the numbers likely to be available for recruitment at this level should rise considerably over the coming period. Postgraduate training should be made available for graduates wishing to become primary teachers, and, where the Diploma in Education course includes some study taken concurrently with a first degree, special arrangements should be made to provide intensive vacation courses which would enable graduates to enter the Diploma course after graduation. The payment of higher allowances during professional training for graduates, as recommended in Chapter 16, should assist recruitment at this level, without an increase in teachers college entry above the levels planned.

(c) Alternatives to full-time study at the Diploma in Education level should be available to mature-age graduates or others whose general academic qualifications are reasonably high. Such entrants might be given an intensive short course of a few weeks before they enter a school, and be released for part of the working week to complete their professional training over a specified period. This could give well-educated people who are daunted by the present arrangement whereby they are immediately placed in front of a class the confidence to take up teaching. Their teaching experience should be undertaken only under the supervision of a professionally qualified teacher until they are themselves professionally qualified.¹²

(d) Opportunities for part-time training at teachers colleges should be extended to people other than those employed in government schools. Such opportunities for training might prove attractive to people wanting to return to teaching, to married women not yet in a position to accept employment and to people in other occupations desiring to transfer to teaching.

(e) Part-time employment of qualified teachers should be extended. Changed patterns of teacher use, especially those which organise teaching in groups of varying sizes for different purposes, should increase the possibility of employing qualified part-time teachers and

¹² An arrangement along these lines has recently been announced and will begin in 1971.

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postgraduate students as tutors to small groups, and of accommodating less well-qualified people who would perform specific tasks under the direction of a fully qualified teacher.

(f) The efforts already being made to recruit qualified teachers from other countries should be continued, and interstate recruitment into both Diploma in Education courses and into the schools undertaken.

(g) Refresher courses of greater length and depth than those at present available should be arranged for experienced teachers re-entering the service after a period of absence from teaching.

6.113 In the long run, nothing will prove to be a substitute for better working conditions for teachers, including appropriate salaries, as a means of attracting recruits. It is necessary to break the circle whereby people are discouraged from entering the profession because the shortage of teachers has resulted in large classes, heavy workloads, few free periods for preparation and a considerable amount of time-consuming labour which could be undertaken by less well-qualified people. For this reason, every effort to achieve the fastest possible increase in the numbers of well-qualified teachers and to improve their conditions of work should be made in order to increase the attractiveness of teaching. Other changes which our inquiries have indicated may be necessary to attract into teaching larger numbers, particularly of people combining scholarship with a capacity for personal initiative, are:

(a) Greater opportunity for the exercise of professional independence by qualified people. This would include a minimum of specific direction and a reduction of workloads to enable planning for the particular needs of the pupils taught. The latter is related to an improvement in the number of teachers.

(b) Increased opportunities for advancement in specialist subject fields for well-qualified people who do not desire to enter administration.

(c) Physical working conditions, including staff rooms and staff study areas, of adequate standard.

(d) Adequate supporting non-professional staff and facilities.

(e) Adequate provision of study leave.

6.114 Accordingly, we RECOMMEND that:

(a) *The following maximum class sizes should be implemented at the earliest possible date:*

Primary — 30 pupils.

Secondary — 30 pupils for classes in the first three years, 20–25 pupils in the fourth and fifth years.

(b) *Provision should be made in planning teacher supply for teacher numbers which would cover the following:*

(i) *An allowance of 7.5 per cent of all teachers to replace those on extended leave or secondment and absent on casual leave through attendance at in-service conferences or for other reasons.*

(ii) *An allowance of 5 per cent of all teachers to replace those granted leave for approved courses of study, and to provide extra teachers in some schools to compensate for special learning disabilities among a high proportion of their pupils.*

(c) *Every effort should be made to enable these allowances to become fully operative by 1978, phasing them in gradually as classes of the desired maximum size are attained.*

(d) *In order to meet the requirements set out in the preceding recommendations, the level of recruitment from re-employment and other sources should be raised by offering greater opportunities for part-time training and part-time employment and by the promotion of recruitment at graduate level. If necessary, the number of places in training institutions should be increased.*

6.115 Although we have made recommendations regarding maximum class size, we suggest that the development of more flexible patterns of pupil grouping and teacher use should be encouraged by providing extra facilities and sub-professional personnel to those schools which indicate that they could effectively use them. In this way we hope that in the course of time the whole concept of class size as it is presently understood will cease to have significance.

REGISTRATION OF TEACHERS

6.116 New South Wales and Queensland have recently introduced legislation to provide for the registration of teachers, and similar legislation is being drafted in Victoria. In England and Wales all primary teachers have been required since the end of 1969 to hold a degree or a diploma from a teachers college, and after the end of 1973 only holders of degrees who have had teacher training may be employed in maintained secondary schools.¹³ Admission to the register amounts to a public declaration that the people concerned meet certain specified standards of qualification to teach. In Tasmania and Victoria registration is required of teachers in non-government schools, and only those who reach certain academic levels and have had professional training may be employed on a permanent basis in government schools. The South Australian Institute of Teachers in its submission to the Committee urged the registration of teachers under an arrangement similar to that operating in Scotland through the General Teaching Council, and the Australian College of Education has actively promoted its introduction for a number of years. This latter body, confined to fully qualified educators, reiterated its policy on the matter in 1970 and called for action in the following terms:

¹³ Great Britain: Department of Education and Science. *Education and Science in 1969*, H.M.S.O., 1970.

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The Australian College of Education affirms its belief that teaching, to be recognised as a fully professional vocation, must require of its members a body of knowledge on which its professional skills depend, a body of techniques that distinguish it from other professions, and a body of ethical principles to guide the activities of those members.

In order to ensure the development of such a fully professional calling, it is necessary that basic qualifications for practice should be laid down.

The College is aware of the variety of qualifications possessed by teachers, and that there is a significant proportion of teachers who cannot claim what the College regards as the minimum appropriate professional qualification. It appreciates that this situation is in part the result of periods of stress when it was not possible to attract sufficient qualified teachers, and of others when it has not been possible to provide adequate facilities for the preparation of teachers. It is clear to the College therefore that the provision of facilities for the professional preparation of teachers, adequate in extent and quality, will be essential to the achievement of the goal which the College has in mind: viz., that only qualified teachers should be registered to teach in schools.

The College considers, however, that action towards the establishment and recognition of basic qualifications for the professional practice of teaching cannot further be delayed.

Accordingly it submits that:

1. In those States and Territories in which no such provision has yet been made a statutory body be set up to establish and maintain a register of qualified teachers;
2. Registration be based on minimum qualifications comparable across and acceptable by States and Territories, with a view to developing nation-wide recognition of appropriate professional qualifications;
3. Registration be based on a minimum period of three years' approved preparation, following the completion of a full course of secondary education or a course recognised as its equivalent, and provide different provisions according to the level at which teaching is to be practised;
4. Membership of the statutory board to be representative of those teaching at the levels with which registration is concerned, and of bodies responsible for the preparation of teachers;
5. The registration scheme give power, after a period of time, to the registering body or to some other agency to prevent the use of unregistered teachers.

6.117 There is no registration of teachers in South Australia. Any one whom the employer, either public or private, is willing to accept may be employed. When qualified teachers are in short supply, as they have been over a period of more than 20 years, the level of qualifications required to obtain a position falls until the demand is met. The possibilities of promotion for poorly qualified teachers are, of course, limited, and this provides an incentive for those who wish to make a career of teaching to reach certain levels of qualification. Both teachers organisations and employers are naturally anxious to insist on some minimum level of qualification, but the material presented both in this chapter and in Chapter 16 indicates that the obligation of the government system to provide teachers for all pupils who present themselves has resulted in the employment of many teachers who are under-qualified by any professional standards. While it would not be immediately practicable to insist that only teachers who meet professionally acceptable standards of qualification be employed, we think it important that steps should be taken to move to-

wards this position. The registration of teachers would assist in its attainment, for the following reasons:

- (a) Registration draws public attention to unqualified teachers. It gives parents some objective guide to the quality of the school to which they are entrusting their children, and is likely to lead to public insistence on raised qualifications and the provision of training facilities and opportunities to make them possible.
- (b) It acts as a form of pressure on unqualified people already employed to raise their qualifications.
- (c) Registration is a form of public protection expected in other professions. No other profession in which there is a "member-client" relationship such as exists in education admits the unqualified to its ranks. Professional status, while not an end in itself, affects the quality of people attracted to the occupation and the standard of teaching to which children are exposed.
- (d) Registration accompanied by preference in employment for registered teachers would, in conditions of improved supply of teachers, effectively exclude the unqualified.

6.118 We endorse the principle of registration of teachers, for the protection both of children and of the standards of the profession. The body responsible for registration should, we think, have strong representation from the profession, but some of its members, while being active members of the profession, should represent employing authorities, both public and private. Whatever the qualifications for registration, its basis would be some certification of standards reached in a training institution, and for this reason such institutions should be represented. Some special arrangements would need to be made about the large numbers of teachers at present employed whose academic and professional qualifications would not meet registration requirements. We suggest that allowance should be made for their experience and that the main emphasis should be on the qualifications of those newly recruited. We do not suggest that employment should be immediately confined to registered teachers, but we think legislation setting up a teachers registration board should require that preference be given to registered teachers and that the employment of a certain proportion of registered teachers should be a condition of the registration of non-government schools which we recommend in Chapter 7. The registering body would need to have some power to remove teachers from the register for misconduct of various sorts, but we think that, as in the provisions for the registration of medical practitioners, its powers should be confined to a period of suspension, deregistration being in the hands of the Supreme Court.

6.119 Accordingly, we RECOMMEND that:

- (a) *A Teachers Registration Board should be established under Act of Parliament. It should consist of an independent chairman and eight*

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members selected from a panel of names submitted by the groups to be represented. These eight members should be people qualified for registration.

(b) The composition of the Registration Board should be along the following lines:

Two members from the Education Department, one of whom should be a headmaster.

Two members from non-government schools, one of whom should be drawn from a Catholic school.

Two members from the South Australian Institute of Teachers.

Two members from tertiary institutions engaged in the training of teachers.

(c) The functions of the Registration Board should be:

(i) To compile and keep a register of teachers qualified to teach at pre-school, primary, secondary and trade levels.

(ii) To determine the qualifications and experience, if any, required for admission to the register.

(iii) To arrange where possible for comparability in requirements for registration between the Australian States and for the reciprocal recognition of qualifications both within Australia and between Australia and other countries.

(iv) To hear and determine complaints against teachers relating to their professional conduct, to suspend from the register for a limited period those found guilty of conduct regarded as unprofessional and to apply to the Supreme Court for the deregistration of people whom, for stated reasons, it deems unworthy of continued registration.

6.120 The basis of registration should be academic and professional qualifications gained in South Australian tertiary institutions for the training of teachers and those acquired elsewhere which the Board accepts as equivalent. The period of experience of teachers already employed should be taken into consideration, and a period of provisional registration allowed. Exit students from teachers colleges should be required to meet standards acceptable to the Board, their registration being only provisional for a limited period otherwise.

6.121 Two other steps are vital to the effectiveness of registration as a means of raising the qualifications of teachers. Although employing authorities would retain the right to choose between qualified applicants, legislation establishing registration would be of limited value unless it obliged the employer to give preference to registered teachers and to give leave for study through some day-release to people whom he employed without the required qualifications. The provision of adequate training facilities to cope with such people would also be necessary.

CHAPTER 7

Non-Government Schools

HISTORICAL BACKGROUND

7.1 Most non-government schools in South Australia are associated with churches, once the sole providers of education. South Australia, as mentioned in Chapter 2, was the first Australian State to withdraw State financial support from schools educating children in the tenets of a particular religion. This step, taken in 1852, was ultimately accepted as inevitable by the fragmented Protestant groups which, although they constituted the great majority of the population, were each too small to support a school system in a State whose population was widely dispersed. The 1852 arrangement permitting only the teaching of undenominational Christianity in subsidised schools became increasingly unacceptable to the Catholic Church, which, even before State aid to non-government schools was entirely withdrawn in 1875, took steps to enable it to maintain a separate school system without external help. One of these steps was the training of nuns to teach in Church schools which began at Penola in 1867, and was the first venture of its kind in Australia. After 1875 the Protestant churches concentrated their educational efforts largely at the secondary level and confined them to the children of parents able and willing to pay fees high enough to cover the whole cost of running the schools. The Catholic Church, on the other hand, continued its attempts to provide education for all Catholic children, keeping fees within the range of the wide social spectrum of Catholic parents by Church subsidy to schools and by keeping costs down through the employment of members of religious orders as teachers.

7.2 For these historical reasons there are significant differences between Catholic and other non-government schools. Except in a few schools which charge higher fees, the basis of Catholic schools is religious allegiance rather than parental income. Their lower fees enable them to cater for a broader social group than other non-government schools. Hence, in many of their characteristics Catholic schools are more similar to government schools than to other non-government schools. The combined pressures of population increase, rising educational expectations and rising costs have, since the Second World War, affected all types of school in the non-government sector, resulting in a smaller proportion of the school-going population being educated outside government schools. However, because of the differences between them, Catholic and other non-government schools have faced somewhat different problems as a result of these pressures.

PRESENT POSITION OF NON-GOVERNMENT SCHOOLS

Number of Pupils

7.3 Table 7.1 gives total enrolments in non-government schools and the proportion of all pupils receiving education in them from 1956 to 1970. Chart 7.1 shows numbers of pupils in government and

NON-GOVERNMENT SCHOOLS

non-government schools for the same period. A gradually declining proportion of pupils has been enrolled in the latter schools over the period, except for an upward movement in 1970. Absolute enrolments increased from 1956 to 1964, declined from that year to 1968, and rose in 1969.

Table 7.1

ENROLMENTS IN NON-GOVERNMENT SCHOOLS

SOUTH AUSTRALIA 1956-1970

	Enrolments	Proportion of all Pupils per cent
1956	29,234	17.7
1957	30,535	17.6
1958	32,267	17.6
1959	33,817	17.5
1960	35,370	17.5
1961	35,982	17.2
1962	36,402	16.8
1963	37,196	16.6
1964	37,903	16.3
1965	37,866	15.7
1966	37,436	15.1
1967	37,259	14.6
1968	36,625	14.2
1969	36,669	13.9
1970	37,387	14.1

Source: Commonwealth Bureau of Census and Statistics.

7.4 In Table 7.2 primary and secondary enrolments are shown separately for both Catholic and non-Catholic schools for the period 1963-1969. Increased secondary enrolments were more than offset by declining primary enrolments over these years, causing total enrolments to fall.

Table 7.2

NUMBER OF PUPILS IN NON-GOVERNMENT PRIMARY AND SECONDARY SCHOOLS

SOUTH AUSTRALIA 1963-1969

	Primary			Secondary			All Pupils
	Catholic	Non-Catholic	Total	Catholic	Non-Catholic	Total	
1963	20,167	4,510	24,677	5,988	6,366	12,354	37,031
1967	19,299	4,491	23,790	6,712	6,757	13,469	37,259
1968	18,671	4,355	23,026	6,791	6,808	13,599	36,625
1969	18,110	4,356	22,466	7,208	6,995	14,203	36,669
Change 1963- 1969	-2,057	-154	-2,211	+1,220	+629	+1,849	-362

Source: Commonwealth Bureau of Census and Statistics.

7.5 Non-government schools catered for a smaller proportion of

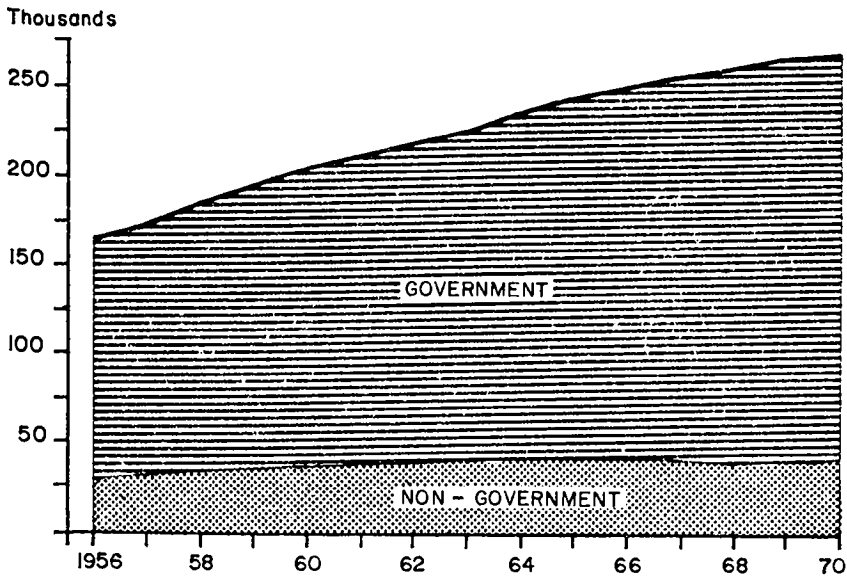
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pupils in South Australia than in any other Australian State in 1969, as shown in Table 7.3. Of the total number of pupils in non-government schools, 69 per cent were in Catholic schools, compared with 81 per cent for the whole of Australia. Non-denominational schools accounted for 10 per cent, and the remaining 21 per cent were in schools associated with particular Protestant denominations. Nearly 81 per cent of primary pupils in non-government schools and 51 per cent of secondary pupils were in Catholic schools.

Chart 7.1

NUMBER OF PUPILS IN GOVERNMENT AND NON-GOVERNMENT SCHOOLS

SOUTH AUSTRALIA 1956-1970



7.6 Of all South Australian school-going children 9.6 per cent were in Catholic schools and 4.3 per cent were in other non-government schools in 1969. The proportion in other non-government schools

Table 7.3

ENROLMENTS IN NON-GOVERNMENT SCHOOLS AS A
PROPORTION OF ALL ENROLMENTS

AUSTRALIA 1969

	per cent
New South Wales	22.9
Victoria	24.9
Queensland	23.4
South Australia	13.9
Western Australia	19.6
Tasmania	15.8
Northern Territory	17.9
Australian Capital Territory	27.5
Australia	22.2

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was similar to that for Australia as a whole. The lower proportion of all school-going children in non-government schools in South Australia compared with other States is therefore due to the lower proportion in Catholic schools. This lower proportion is explained by the smaller proportion of Catholics in the total population of South Australia compared with the other States, and by the higher proportion of Catholic children who are educated in government schools in this State. Table 7.4 illustrates both these points.

Table 7.4
CATHOLIC CHILDREN ATTENDING GOVERNMENT SCHOOLS

AUSTRALIA 1968		
	Proportion of Population recorded as Roman Catholic in 1966 Census per cent	Estimated Proportion of Catholic Children attending Government Schools per cent
New South Wales	27.7	35.9
Victoria	27.6	35.3
Queensland	25.8	32.9
South Australia	20.2	56.3
Western Australia	25.6	42.3
Tasmania	19.1	46.6
Australian Capital Territory	32.6	32.3
Australia	26.3	37.3

Source: Commonwealth Bureau of Census and Statistics and Australian Council for Educational Research.¹

Number of Schools

7.7 The number of non-government schools increased over the period 1950-1968, and fell slightly in 1969. Table 7.5 gives details. It shows, for selected years over the period, the number of schools associated with each type of church, and the number of non-denominational schools. The main increase was in Catholic schools, which,

Table 7.5
NUMBER OF NON-GOVERNMENT SCHOOLS

SOUTH AUSTRALIA 1950-1969						
	1950	1955	1960	1965	1968	1969
Catholic	96	111	124	130	130	127
Church of England	16	14	13	12	12	10
Lutheran	15	15	13	13	14	14
Methodist	3	3	3	4	4	4
Presbyterian	2	2	2	2	2	2
Baptist and Congregational	2	2	2	2	2	2
Seventh Day Adventist	2	2	3	4	5	5
Non-Denominational	6	3	5	5	4	7
Total	142	152	165	172	173	171

Source: Commonwealth Bureau of Census and Statistics.

¹ J. E. Bourke, "Australian Catholic Schools into the Seventies", *Quarterly Review of Australian Education*, December 1969, Australian Council for Educational Research.

although they declined in number in 1969, still accounted for nearly three-quarters of all non-government schools.

7.8 With the help of the Association of Independent Schools considerable information was made available to the Committee through a questionnaire to 15 non-Catholic schools in the metropolitan area who were members of the Association.² These 15 schools included 9,374 of the 11,351 pupils enrolled in non-Catholic schools outside the government system in 1969. The Catholic Education Office provided information on class size and teachers' qualifications in the schools associated with it. The analysis which follows is based in the main on this material, supplemented, where stated, by information gained from other sources.

Class Size

7.9 Table 7.6 gives an analysis of class size in non-government schools at primary level, and compares class size in non-government with that in government schools in 1969. The median primary class size in government schools with Class I-V heads was between 34 and 35, that for Catholic schools between 25 and 26, and for other non-government schools between 23 and 24. The most common size of class for both types of non-government schools at primary level was that containing fewer than 21 pupils. However, Catholic schools, although nearly 41 per cent of all their primary classes were in this group, had a considerably higher proportion of classes containing more than 40 pupils than either of the other two school types. Nearly 8 per cent of classes in Catholic schools had more than 50 pupils. No classes in government schools were as large as this, and no class in non-government non-Catholic schools was larger than 45. The high proportion of small classes in Catholic primary schools is apparently in the upper grades and is caused by the transfer of pupils

Table 7.6
CLASS SIZE IN GOVERNMENT AND NON-GOVERNMENT PRIMARY SCHOOLS
SOUTH AUSTRALIA 1969

	Government Schools with Class I-V Heads	Catholic	Non-Government Non-Catholic
	per cent	per cent	per cent
Under 21	2.6	40.7	36.4
21-25	4.8	8.6	19.6
26-30	11.5	9.9	19.6
31-35	38.1	9.7	19.6
36-40	38.1	8.6	3.7
41-45	4.7	6.9	0.9
46-50	0.2	7.7	—
Over 50	—	7.7	—
Total	100.0	100.0	100.0
No. of Classes	3,859	648	107

* For questionnaire see Appendix B.

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from parochial schools during their primary years to larger colleges containing both primary and secondary pupils.

7.10 Secondary class sizes are compared between school types in Table 7.7. English classes were used as a basis for the Table, which shows that the most common secondary class size in high and technical high schools was that containing 36-40 pupils in 1969, and over 46 per cent of classes had more than 35 members. In non-government non-Catholic schools the most common class size was that having 26-30 pupils, and less than 6 per cent of classes held more than 35 pupils. In Catholic secondary schools, a higher proportion of classes than in government schools contained fewer than 26 pupils, and at the other end of the scale there was a higher proportion of very large classes. Almost 40 per cent of English classes in Catholic schools contained more than 35 pupils, a proportion not very different from that in government schools, but very large classes of 46 and over represented 6 per cent of all classes in Catholic schools as against less than 2 per cent in government schools. The median class was between 34 and 35 in government schools, 33 in Catholic and between 27 and 28 in non-government non-Catholic schools.

7.11 Table 7.8 gives details of class size at fifth-year secondary level in subjects in which the greatest number of classes existed in all school types. At this level classes in Catholic schools were smaller on the whole than in government schools, except that isolated classes of over 50, one of them in English, existed. For every subject non-government non-Catholic schools had more favourable class sizes than either of the other school types.

Table 7.7
CLASS SIZE IN GOVERNMENT AND NON-GOVERNMENT SECONDARY SCHOOLS
SOUTH AUSTRALIA 1969

	High and Technical High Schools per cent	Catholic per cent	Non-Government Non-Catholic per cent
Under 26	14.6	24.2	31.3
26-30	13.7	16.1	40.2
31-35	25.3	20.6	22.7
36-40	31.2	24.1	5.3
41-45	13.4	9.0	—
46 and over	1.8	6.0	0.4
Total	100.0	100.0	100.0
No. of Classes	2,028	199	246

7.12 At both primary and secondary level non-government non-Catholic schools had smaller classes than government or Catholic schools. Catholic schools, while they had a higher proportion of small classes and a smaller median class size than government schools at both levels, also had a higher proportion of very large classes. At least 4,500 primary pupils and 570 secondary pupils in Catholic

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schools were being educated in classes containing 46 or more pupils in 1969.

Table 7.8

FIFTH-YEAR SECONDARY CLASSES IN GOVERNMENT AND NON-GOVERNMENT SCHOOLS

SOUTH AUSTRALIA 1969

	Proportion of Classes having more than 20 Pupils			Proportion of Classes having more than 30 Pupils		
	Government per cent	Catholic per cent	Non-Government Non-Catholic per cent	Government per cent	Catholic per cent	Non-Government Non-Catholic per cent
English	83.6	68.4	56.1	41.3	31.6	14.6
Maths. I	85.5	55.5	66.6	54.8	16.6	10.0
Maths. II	80.9	26.6	50.0	47.2	13.3	8.3
Physics	79.7	36.4	50.0	49.3	9.1	4.2
Chemistry	71.0	15.4	53.8	41.7	—	11.5

Qualifications of Teachers

7.13 There are no non-government teachers colleges in South Australia other than the Kindergarten Teachers College. Members of religious orders preparing to teach in Catholic schools may train at a college in another State run by a religious order, or in a government teachers college in South Australia, where they are exempt from fees. There were 121 private students in government teachers colleges in 1970. These students do not receive allowances, they pay a nominal fee if they are not exempt from fees as members of a religious order or as students sponsored by a particular non-government school, and they are not under bond to serve in government schools. Such students are eligible for Tertiary Teaching Scholarships, which are worth \$200 a year, but it is pointed out in paragraph 16.48 that few private students in fact gain them. Preparation for teaching at secondary level is open to private students through university courses followed by a Diploma in Education, and the Bachelor of Education course at Flinders University is available to intending primary teachers. However, the great majority of primary teachers in non-government schools will have trained at a teachers college if they have trained in South Australia. Moreover it is likely that, except for members of religious orders, they will have received their training with the support of allowances from the Education Department before transferring to non-government schools.

7.14 Table 7.9 shows the proportion of teachers in non-government schools who have received teacher training. A slightly higher proportion of teachers at primary level in non-Catholic than in Catholic schools were trained teachers. Among untrained teachers in Catholic primary schools, about half were lay teachers. At the secondary level a higher proportion of teachers in Catholic than in non-Catholic schools had received some professional training, although more than

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half of those with training had prepared to be primary teachers. Over 40 per cent of teachers in non-Catholic secondary schools were untrained, as were nearly 27 per cent of teachers taking secondary classes in Catholic schools.

Table 7.9

PROFESSIONALLY TRAINED TEACHERS IN NON-GOVERNMENT SCHOOLS

SOUTH AUSTRALIA 1969

	Primary Teachers		Secondary Teachers	
	Catholic Schools	Non-Catholic Schools	Catholic Schools	Non-Catholic Schools
No. of Teachers who had one or more years of formal Teacher Training	429	100	244	277
Percentage of all Teachers	78	81	73 (a)	59

(a) Of the 73 per cent, 35 per cent had had secondary training and 38 per cent primary training.

7.15 The academic qualifications of secondary teachers in Catholic and in non-Catholic non-government schools are set out in Table 7.10. Art and craft teachers are excluded, and qualifications do not include teachers college diplomas. Under "other tertiary" the qualifications include diplomas in home science, technology and agriculture and other such non-university professional qualifications. The survey covered only 90 per cent of secondary teachers in Catholic schools. In terms of university qualifications secondary teachers in Catholic schools were much more poorly qualified than those in non-government non-Catholic schools, as might be expected from the material presented in Table 7.9 which shows the relatively high proportion of teachers in Catholic secondary schools who were primary trained.

Table 7.10

ACADEMIC QUALIFICATIONS OF SECONDARY TEACHERS IN NON-GOVERNMENT SCHOOLS

SOUTH AUSTRALIA 1969

	Catholic Schools		Non-Catholic Schools	
	No.	Proportion per cent	No.	Proportion per cent
Degree	105	33.4	279	59.5
Associate of University of Adelaide	8	2.5	62	13.2
Other Tertiary Qualifications	10	3.2	63	13.4
No Tertiary Qualifications (excluding Teacher Training)	191	60.8	65	13.9
Total	314	100.0	469	100.0

Teachers in government secondary schools were more highly qualified in the proportion who held university qualifications than those in Catholic schools and less highly qualified than those in non-government non-Catholic schools (see Tables 6.20-6.21).

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7.16 A survey of junior science teachers in secondary schools undertaken by the South Australian Science Teachers Association in 1969 covered teachers at first-year, second-year and third-year levels in 9 non-government non-Catholic schools, 14 Catholic schools and 115 government schools. Table 7.11 compares the qualifications of science teachers between the school types. Non-government non-Catholic schools had a substantially higher proportion of teachers who were science graduates than either Catholic or government schools. Catholic

Table 7.11

QUALIFICATIONS OF SCIENCE TEACHERS OF GRADES VIII TO X

SOUTH AUSTRALIA 1969

Type and No. of Schools	Proportion of Teachers holding Degrees in Science	Proportion of Teachers who had studied no Science at Tertiary Level
	per cent	per cent
Non-Government Non-Catholic (9)	70	11
Catholic (19)	36	28
Government (115)	32	16

Source: *South Australian Teachers Journal*, 10th December 1969.

schools had the highest proportion of teachers who had studied no science at tertiary level. The same survey also covered teachers of chemistry at fourth-year level. The non-government non-Catholic schools again had a higher proportion of teachers with a science degree (92 per cent), but at this level the difference between school types was less marked, Catholic schools having 88 per cent of teachers who were science graduates, and government schools 78 per cent.

Table 7.12

DISTRIBUTION OF SECONDARY ENROLMENTS BETWEEN GOVERNMENT AND NON-GOVERNMENT SCHOOLS

SOUTH AUSTRALIA 1969

	Proportion of all Secondary Enrolments	Proportion of Grade XII Enrolments
	per cent	per cent
Government	83.0	68.2
Catholic	8.6	10.8
Non-Government Non-Catholic	8.4	21.0

Source: Commonwealth Bureau of Census and Statistics.

Retention Rates

7.17 The material presented in Table 5.7 compares retention rates between government and non-government schools. Some idea of patterns of retention may also be gained by comparing the total pupil numbers in the three school types with the distribution of grade XII pupils between them. Table 7.12 shows these differences, and high-

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lights the significantly higher retention rates of non-government non-Catholic schools.

Staff Turnover

7.18 The staff of non-government non-Catholic schools is considerably more stable than that of government schools. In a smaller system organised in separate units what promotion is possible is more likely to occur within the same school. Between 12 and 13 per cent of staff in non-government non-Catholic schools left the school in which they were employed in 1967 and in 1968. This figure is close to that for resignations from the government system in 1968, but considerably lower than the one-third of all staff who moved out of the government school in which they were employed in 1968 (see paragraphs 6.64–6.69). Fifty-eight per cent of staff employed as primary teachers in non-government non-Catholic schools had been employed in the school for six or more years, and 44 per cent of secondary teachers. This high level of stability in staffing has the advantage of enabling educational policy to be continuous. It has attendant disadvantages in the complacency which may develop among people whose experience of different schools is limited. Material covering the length of teachers' service in the school in which they were employed in 1969 was available for Catholic secondary schools. It indicated shorter periods of service, suggesting higher turnover. More than one-third of all secondary teachers in Catholic schools in 1969 were in their first year of service in them, and only 22 per cent had been in the school for more than five years.

Teachers' Salaries

7.19 Detailed information was available only for the non-Catholic schools. Within the Catholic system we were informed that, for secondary teachers who were members of religious orders teaching in colleges charging higher fees, a sum of about \$2,000 was paid annually to the order to which they belonged. In these schools lay staff were paid rates comparable with those in the government system. At primary level the payment to the order ranged from \$750 to \$1,154 per teaching member in the case of members of religious orders. The salaries paid to lay teachers at this level in parochial schools were considerably below those paid in government schools, the actual salary being negotiated between individual teachers and the school board employing them. Table 7.13 sets out the salaries paid by non-Catholic non-government schools to their teaching staffs in the second term of 1969. Table 7.13 indicates substantial differences between the salaries paid in boys' and girls' schools. Only 11 per cent of teachers in girls' secondary schools, for example, were paid \$5,000 or more, while 73 per cent of such teachers in boys' schools were in this group. At the time this material was collected, senior masters in government secondary schools were paid \$5,320–\$5,580, and senior mistresses \$5,092–\$5,352. The average enrolment of the 15 non-Catholic schools

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surveyed was 625. Such a school in the government system would have eight promotion positions of the level of senior master and above in a staff of at least 32. The 25 per cent of positions which are paid at a level of \$5,092 and more is considerably above that existing in

Table 7.13

SALARIES OF FULL-TIME TEACHERS IN NON-GOVERNMENT NON-CATHOLIC SCHOOLS (a)

SOUTH AUSTRALIA 1969

	Boys' Schools		Girls' Schools		Co-Educational Secondary
	Primary	Secondary	Primary	Secondary	
Less than \$3,000	1	3	8	12	11
\$3,000-\$3,499	9	11	11	19	12
\$3,500-\$3,999	14	7	33	43	5
\$4,000-\$4,999	8	21	6	52	—
\$5,000-\$5,499	6	58	1	9	2
\$5,500-\$5,999	3	36	—	2	4
\$6,000-\$6,999	2	12	—	1	1
\$7,000-\$7,999	—	2	—	4	—
\$8,000 and above	—	5	—	—	—
All Teachers	43	155	59	142	35

(a) Excluding heads.

non-government non-Catholic girls' secondary schools, but below the proportion of teachers employed even at \$5,500 and more in boys' secondary schools in the non-government non-Catholic group of schools. Salary differences between boys' and girls' secondary schools are reflected in lower fees in the latter.

Tuition Fees

7.20 In 1969 the annual tuition fees at primary level in the 15 major metropolitan non-Catholic schools surveyed ranged between \$320 and \$360 at girls' schools, and between \$350 and \$500 at boys' schools. Fees vary according to the level at which the pupil is studying, and in all cases the fees stated here are maximum fees and apply to a full year's tuition as a day pupil. In Catholic primary schools fees ranged between \$42 and \$51 per annum, most schools charging \$45, and reduced fees applied where more than one child of the same family attended the school, bringing the amount paid for some children to as low as 30c a week or \$12 a year. Fees charged at non-government secondary schools in 1970 are summarised in Table 7.14. The highest fees charged were at non-Catholic boys' schools, and fees in Catholic schools were, even at their highest level, below any fees charged in non-Catholic schools.

7.21 For the financial year 1969-70, the recurrent cost per primary pupil in the government system was \$193, and that per secondary pupil \$346.^a These costs include all recurrent costs of the Education Department, except the cost of teacher training and amounts paid

^a These figures are derived from those in Table 15.1.

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for primary textbooks supplied by the government and for secondary book-allowances. These allowances are available to both government and non-government schools. All fees charged in non-Catholic schools exceeded these costs, except for those in the two secondary co-educational schools whose fees were almost identical with the cost per

Table 7.14

ANNUAL TUITION FEES IN NON-GOVERNMENT SECONDARY SCHOOLS

SOUTH AUSTRALIA 1970

	Non-Catholic Schools			Catholic Schools	
	Boys	Girls	Co-ed.	Boys	Girls
Below \$100	—	—	—	4	3
\$100-\$149	—	—	—	—	6
\$150-\$199	—	—	—	6	4
\$200-\$249	—	—	—	1	1
\$250-\$299	—	—	—	—	—
\$300-\$349	—	—	2	—	—
\$350-\$399	—	3	—	—	—
\$400-\$449	—	4	—	—	—
\$450-\$499	2	—	—	—	—
\$500-\$549	1	—	—	—	—
\$550-\$599	2	—	—	—	—
Average	\$536	\$403	\$345	\$147	\$125

Source: *Fees at Non-Government Schools*, Department of Education and Science, Canberra, 1970.

pupil in the government system. If direct State aid is added to fees, all schools in this group had incomes per pupil, excluding any income from other sources, greater than the recurrent cost per pupil in the government system. The income per pupil from fees and State aid in the two boys' schools charging the highest fees was \$655, exclusive of income from other sources. In comparing this income with the recurrent cost per pupil in government secondary schools, allowance must be made for the financing of charges on borrowed funds, which in non-government schools must be met from fees.

7.22 Fees charged for secondary pupils in Catholic schools were all below \$250, indicating that the subsidy received both directly from the Church and from the lower costs through employing religious teachers is considerable, or that standards are lower than in government schools. In the case of Catholic primary schools the difference is more remarkable. Average fees plus State aid amount to only \$90 per pupil, while recurrent cost in government schools, exclusive of the cost of teacher training, was \$193 per pupil in 1969-70.

GOVERNMENT ASSISTANCE TO NON-GOVERNMENT SCHOOLS

Indirect Assistance

7.23 Many benefits have long been available to pupils and parents in non-government schools and to the schools themselves. These

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benefits are in general available equally to schools of all types and may be distinguished from more direct financial assistance to non-government schools which will be discussed separately. The most important benefits available equally to pupils in government and non-government schools are:

(a) STATE:

Free textbooks for primary school children. Secondary book-allowances ranging from \$16 in grade VIII to \$26 in grade XII.

Boarding allowances ranging from \$50 per annum for primary students living more than 25 miles from a government primary school to \$230 per annum for grade XII students for whom no suitable secondary course is available in a government school within daily travelling distance.

Assistance with transport in some circumstances.

The services of the Psychology Branch of the Education Department, on application by a parent.

(b) COMMONWEALTH:

Free milk.

Commonwealth scholarships at secondary, post-secondary and tertiary levels.

Deductions from taxable income of up to \$300 per child for educational expenses.

7.24 Additional assistance is given to non-government schools in the following forms:

(a) STATE:

Use of facilities of the Audio-Visual Education Centre of the Education Department.

Attendance at in-service conferences organised by the Education Department.

Places available in government teachers colleges for private students who, if they are sponsored by a non-government school, pay no fees. Nominal fees are charged for other private students.

Private students are eligible for Tertiary Teaching Scholarships.

Teachers trained in State teachers colleges are employed in non-government schools.

Purchase of standard items from Public Stores at the same price as that charged to government schools.

Advances from the State Bank for capital expenditure on boarding facilities.

Exemption from Land Tax and reduced local council rates.

(b) COMMONWEALTH:

The educational services of the Australian Broadcasting Commission.

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Sales Tax exemption.

Pay-roll Tax exemption.

Direct State Aid

7.25 The benefits listed above have generally been accepted as compatible with a policy of denying direct financial assistance to non-government schools. This policy, adopted in South Australia in 1875, continued without serious challenge until the 1960's when total enrolments in non-government schools began to fall. The resumption of direct assistance to non-government schools began with the Commonwealth Secondary Schools Science Facilities Programme in 1964, followed by the Commonwealth Secondary Schools Libraries Programme in 1969. These grants represented the first direct Commonwealth assistance to schools, and applied to schools of all types. However, they made no contribution to the running costs of non-government schools, and assistance in this direction began in 1969. In 1969 the South Australian State Government made per capita grants to non-government schools, and in 1970 allocated an additional \$250,000 to be divided between non-government primary schools on the basis of established need. From the beginning of 1970 the Commonwealth Government has made per capita payments to non-government schools on a more substantial scale than the State payments.

Table 7.15

DIRECT ASSISTANCE BY COMMONWEALTH AND STATE GOVERNMENTS TO NON-GOVERNMENT SCHOOLS PER PUPIL ENROLLED

SOUTH AUSTRALIA 1970

	Catholic		Non-Catholic	
	Primary	Secondary	Primary	Secondary
	\$	\$	\$	\$
<i>Capital Grants (a)</i>				
Commonwealth Science Grant	—	34.00	—	36.50
Commonwealth Library Grant	—	15.00	—	15.50
Total	—	49.00	—	52.00
<i>Recurrent Grants (b)</i>				
State	10.00	20.00	10.00	20.00
Commonwealth	35.00	50.00	35.00	50.00
Total	45.00	70.00	45.00	70.00
Total Assistance	45.00	119.00	45.00	122.00

(a) These are not distributed on a fixed basis per pupil. The figures per pupil have been calculated on the basis of the actual grants given or recommended.

(b) These are fixed grants per pupil.

7.26 The Commonwealth science and library grants are divided between government and non-government schools in each State by the Commonwealth, and committees in each of the main non-

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government sectors decide the allocation between schools in the sector, allotting priorities on the basis of need. The science grants have been made to non-government schools for the period 1967-68 to 1970-71 at double the rate operating for the earlier years of the scheme. In Table 7.15 these grants are expressed as annual grants per pupil over the period 1968-1971. If we assume that the \$250,000 granted by the State Government in 1970-71 for assistance to low-standard primary schools goes in the main to Catholic schools this would raise the assistance per pupil in such schools by up to \$13.50 a year. Per capita payments from State funds are lower both at primary and at secondary level than those in any other Australian State. This is shown in Table 7.16.

7.27 In addition to these per capita grants, all States except South Australia subsidise interest charges on money borrowed by non-government schools for approved capital purposes. In the Australian Capital Territory government capital assistance extends beyond interest subsidies to the repayment over 20 years of loans made to non-government schools. The Queensland Government meets 40 per cent of approved construction projects at the eight grammar schools which, although outside the government system, have a special historical relationship with it. Some States also pay subsidies on expenditure for equipment in non-government schools. Assistance with capital expenditure in South Australia is limited to enabling the State Bank to advance money to schools for capital expenditure on student residential facilities.

Table 7.16
STATE GOVERNMENT GRANTS TO NON-GOVERNMENT SCHOOLS
AUSTRALIA, DECEMBER 1970

	Per Primary Pupil	Per Secondary Pupil
New South Wales	\$36.00	\$42.00 (a)
Victoria	\$20.00	\$40.00
Queensland	\$25.00	\$67.00-\$71.00
South Australia	\$10.00	\$20.00
Western Australia	\$20.00	\$30.00-\$36.00
Tasmania	\$20.00	\$30.00-\$50.00
Australian Capital Territory and Northern Territory	\$35.00	\$50.00

Source: Commonwealth Department of Education and Science.

(a) At secondary level grants are subject to a means test based on parental income.

PLANNING FOR FUTURE PROVISION IN NON-GOVERNMENT SCHOOLS

7.28 Increased capital and running costs have been reflected in the falling proportion of all pupils in non-government schools shown in Table 7.1. Non-government non-Catholic schools have steadily raised fees to cover increased running costs. In 1969 nearly all of the 15 major schools of this type in our survey reported that the demand for day places in their schools was almost completely satisfied at the

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existing level of fees. For day pupils there were virtually no waiting lists, although the demand for boarding facilities was greater than could be satisfied. About one-fifth of all students in non-government non-Catholic schools are boarders. State aid was used in 11 of the 15 schools as a means of averting further increases in fees. Four schools paid the per capita grants to the parents, indirectly achieving the same object. The schools planned a 16 per cent increase in primary-school places over the next five years and a 3 per cent increase at secondary level. The actual number of places represented by these increases was small, being only 393 at primary level and 213 at secondary level over five years.

7.29 Catholic schools also have raised fees and, although fees in relation to those of non-Catholic schools are low, it is feared by the Church that even at their present level they place Catholic secondary education beyond the reach of many parents who wish their children to have it. Catholic parochial schools have traditionally been mainly primary schools. Before the Second World War it was possible, because of the number of religious teachers available, to build primary schools in most parishes. Apart from these parochial schools, the main Catholic schools are colleges which combine both primary and secondary classes, and are usually run by a religious order.

7.30 After the Second World War the increased birth-rate and the arrival of many Catholic immigrants raised the demand for places in Catholic schools until the intake had to be limited to prevent overcrowding. Changing geographical distribution of the population has clearly resulted in unused capacity in many Catholic parochial schools at the same time as rising capital costs have made it impossible to erect new schools in expanding areas at a rate commensurate with their increased population. Rising demands for education have led to an expansion of Catholic provision at the secondary level, where education involves both higher capital and higher recurrent costs. Religious orders have not expanded at the same rate as pupil numbers, so that a greatly increased employment of more expensive lay teachers is necessary. In 1969 nearly 36 per cent of full-time teachers in Catholic primary schools and 28 per cent of those in secondary schools were lay teachers. In a submission prepared by the Catholic Education Office for the National Survey of Educational Needs in 1969 it was stated that \$39m. was required over a period of five years to raise the standards of buildings, equipment and staff in existing schools, to train teachers and to meet the administrative needs of the system. A further \$6m. was requested to build, staff and equip new schools. Over a period of five years it was planned to increase primary enrolments in existing schools by 12 per cent if the required financial assistance were forthcoming and to increase secondary enrolment in existing schools by 51 per cent. In addition to these increases, new schools planned to 1974 would cater for an additional 3,800 primary and 1,750 secondary pupils. The

total increase in enrolments suggested in the plan would represent a 45 per cent increase in the enrolment in Catholic schools over five years, bringing it to 36,700.

7.31 The existing non-government non-Catholic schools show little inclination to increase their size greatly. Any significant expansion in this sector would depend on capital assistance which was substantial enough to tempt new groups to form for the purpose of organising new schools. It would also depend on assistance with running costs which was high enough to enable fees to be reduced. Significant increases in the number of places in Catholic schools would likewise depend on these two factors, but expansion would be easier to organise because many existing schools desire to expand, and Catholic schools are part of a system so that the initiation of new schools is a relatively straightforward matter. Considerable sums of money are already required to improve a number of existing Catholic schools. Among the schools visited by the Committee were several new Catholic schools having excellent facilities, but several Catholic primary schools visited had buildings and facilities whose standard was below any seen in the State system. The \$250,000 allocated by the State Government in 1970-71 will be available to non-government primary schools where the quality of education is suffering from lack of resources. Grants may not be used to reduce fees or to increase the number of places provided; but, if a school has gained a grant as a school in special need, the money may be used for capital or recurrent expenses as it desires. Grants of this nature, if continued for a number of years, could make a significant contribution to the upgrading of conditions in the worst-housed of the Catholic primary schools, without extending provision.

FUTURE OF DIRECT STATE AID

7.32 In our opinion it is necessary to be clear about the purposes which financial assistance to non-government schools seeks to promote before it is possible to have a view about the extent and type of aid appropriate. We discuss below some possible purposes evident in the Australian context, given that non-government schools exist and that they are already receiving a measure of government assistance.

(a) A purpose of aid could be to keep down public expenditure on education. If pupils at present in non-government schools were all to transfer to government schools, the full cost of their education would have to be met from public funds. From the point of view of governments and taxpayers it is cheaper to give aid so long as it falls short of the full cost of educating the child in a government school. Various complications exist in applying this criterion. Aid is given by both Commonwealth and State Governments, and takes indirect as well as direct forms. So long as a substantial portion of the aid comes from Commonwealth funds, which also bear an important part of

the costs of indirect aid in the form of income-tax concessions, the State Government stands to gain from even quite high levels of total aid, particularly as it would have to meet the full costs of educating pupils who transferred to government schools. Hence, when considering the level of aid which would be cheaper in terms of funds expended than would the provision of places in government schools, somewhat different conclusions will be arrived at according to whether the calculation is made from the point of view of State finances, or of Commonwealth finances or of total public expenditure. The total of present direct public assistance per pupil (\$45 per primary pupil and \$70 per secondary pupil in South Australia) falls considerably short of the cost of educating a pupil in a government school. However, when all forms of assistance are costed, aid would be considerably higher; and more careful costing than has yet been attempted is necessary to establish the point at which aid ceases to be an economic proposition in that it draws more per pupil from public funds than the cost per pupil in government schools.⁴ There are other economic aspects which should be taken into account. Fee-charging schools have incomes apart from assistance directly received from public funds. Unless aid results in fee reductions of an equal order, it improves the bargaining power of non-government schools to attract staff and may allow those schools whose standards are already high to improve further their relative position. So long as able and well-qualified teachers are in short supply the increased ability of some schools to attract staff of high quality may lower staff standards in government schools and in less affluent non-government ones.

(b) Aid could be given in an attempt to afford some relief to parents who are paying fees to maintain their children in non-government schools at the same time as they are contributing through taxes to the education of children in government schools. Any level of relief up to the cost of educating a child in a government school could be supported by this argument. Moreover, if it is claimed that relief should be available to this full extent, it would be reasonable to argue that it should not be confined to parents who at a particular point in time have children in non-government schools, but that it should be available to all parents who desired alternative education for their children. The logical extension of this argument would be to issue all parents with a voucher to a value equivalent to the cost of educating a pupil in a government school, and to allow them to use it in any school, including a government one, of their choice. Such a situation might have advantages, but it would have widespread implications.⁵

⁴ An analysis by Professor P. J. Fensham suggests that assistance from public funds to high-income parents sending children to more expensive non-government schools in Victoria already approaches the cost per pupil in government schools. See P. J. Fensham, "State Aid — How Much, How Many, How Long?", *School Bell*, Journal of the Victorian Council of School Organisations, Vol. 25, No. 7, August 1970, pp. 8-10.

⁵ Such a scheme is discussed by Gerald Burke in an article in *Rights and Inequality in Australian Education*, P. J. Fensham (ed.), Cheshire, 1970.

(c) Aid could be given to ensure the maintenance of alternative systems of education and to give parents some choice in the type of education their children received. The avoidance of a single source of authority and control is accepted as an important element both of liberal thought and of the plural society. The standards and approaches of non-government schools have influenced changes in government schools, and vice versa. For many parents the distinctive values possible in non-government schools and the greater variety of extra-curricular activities in many of them make them attractive alternatives to State education. The Catholic community has shown a willingness to make sacrifices to maintain a separate school system. This is evidence of its conviction that parental choice of school is an important principle. In our survey of non-government schools several instances of educational experimentation were quoted. However, there was no evidence that experimentation was taking place on a scale comparable with that in the government system, except perhaps in the area of school government and in the degree of freedom to organise their own time accorded in some schools to senior pupils. If the number of pupils in non-government schools were to decline, both variety and choice in education would be more limited than they now are. However, to make choice available to all parents who in different circumstances might choose to exercise it would require assistance to extend non-government provision, together with sufficient aid to permit significant reductions in fees. Moreover, if the purpose of aid were to promote variety, the expansion or maintenance of numbers in non-government schools is only one of the forms that it might take. In the United States of America, for example, Federal grants are paid to schools which undertake experimental programmes within the public system, and particularly to those schools undertaking programmes designed to overcome specific learning difficulties.

(d) Aid could have the purpose of ensuring that the conditions in which any child is educated do not fall below a certain minimum standard. The ensuring of minimum levels is accepted as a basis of policy in many areas of life in the Welfare State. In the case of schools the argument may be stated from the point of view of the community, which is poorer to the extent that the talents of its members are under-developed, or from the point of view of the human rights of the individual. If the purpose of aid is to ensure minimum standards, most forms of assistance per pupil in Australia are an expensive way of achieving it, since they apply aid equally to all schools, whether their standards are high or low. Aid applied to non-government schools to achieve minimum standards should be limited to schools whose standards fall below those in government schools, and would need to be given on conditions which ensured that it was used for the purpose of raising standards to certain levels. The \$250,000 grant to primary schools in need made by the South Australian Government in 1970 is an example of this type of aid. It is con-

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fined to schools identified as being in special need, and may not be used to increase the number of places. It may be used to improve the standards of building and equipment or to subsidise recurrent costs as the school decides.

7.33 The purposes which aid may serve, and the implications of accepting alternative purposes, are matters of great complexity; and we agree with the view expressed in the Currie Report:⁶

The ultimate resolution of this problem, which brings up basic questions of the relationship between the State and the churches and between the individual and society is to be found rather within the realms of politics and of community attitude and belief than of pure logic or educational theory.

SUPERVISION OF STANDARDS IN NON-GOVERNMENT SCHOOLS

7.34 Although we make no recommendations about the level or purposes of State aid, which we regard as matters for community decision, nevertheless we feel strongly that certain minimum standards in government and non-government schools alike should be both promoted and enforced. There is at present in South Australia surprisingly little public supervision of standards in non-government primary and secondary schools. The Education Act requires only that a declaration be made that a specified proportion of instruction is given in the English language (a provision introduced during the First World War, which has little current relevance) and that attendance records be forwarded at regular intervals to ensure compliance with the law relating to compulsory attendance. The Act does not give inspectors the right of entry, but states that they may be requested to visit by the head of the school. When a certificate existed which marked the successful completion of primary schooling and a readiness to undertake secondary studies, inspectors from the Education Department moderated its standards in non-government schools, and the practice of regular visits grew up. Now that such a certificate no longer exists inspectors have continued their regular visits to primary schools, though at less frequent intervals. The purpose of these visits seems uncertain, since the State has no power in relation to the conduct of non-government schools. However, the professional contact and exchange of views may be seen as valuable in themselves. At secondary level, the existence of external examinations has been regarded as a sufficient check on standards. Problems of external moderation of standards are now arising for non-government schools in view of the increased reliance on internal accreditation. These problems are discussed in paragraphs 18.65–18.68. In general, it can be said that the policy in South Australia appears to have been that the conditions in non-government schools are not matters of public concern, presumably since parents have the option of removing their children from them if they are dissatisfied.

⁶ *Report of the Commission on Education in New Zealand*, Government Printer, Wellington, 1962, p. 698.

7.35 The Commonwealth Minister for Education and Science,⁷ in introducing the proposal for grants per pupil to non-government schools, while asserting that the non-government schools were entitled to assistance from government funds, added the proviso that such schools should meet standards acceptable to the State. We regard such a proviso as reasonable, and think that conditions with respect to standards should accompany aid. In Great Britain, for example, church schools may have their full running costs and most of their capital costs met from public funds on conditions which require that a proportion of their boards of management be nominated by the local education authority and that they charge no fees. No conditions of this kind have been suggested in Australia, but we think there are good grounds for requiring that certain minimum standards be met. We have recommended in paragraph 6.119 that teachers should be registered. This would provide a standard means of measuring qualifications, and we think that both government and non-government schools should in due course be required to employ only registered teachers. A prohibition on classes above a certain size would also be practicable, and we believe that State assistance to schools should require that at least this minimum condition be met. It would be desirable that schools themselves should be registered, as they are in most Australian States. Registration would provide a guarantee that certain minimum standards existed. In Victoria and Tasmania at least, only teachers holding a certain level of qualifications may be employed in non-government schools. The immediate restriction of employment to registered teachers would be impracticable in South Australia because of the shortage of teachers who would be qualified for registration, but policy should aim at achieving this within a reasonable period.

7.36 Accordingly, we RECOMMEND that:

- (a) *Non-government schools should be registered.*
- (b) *Conditions of registration should require that certain standards be observed in relation to buildings and class sizes, and that, in due course, only registered teachers be employed.*
- (c) *Except for purposes of raising schools to levels necessary for registration, government financial assistance should be confined to registered schools.*

⁷ *Commonwealth Parliamentary Debates*, 18th August 1969.

CHAPTER 8

The Structure of the School System

8.1 Schooling is compulsory in South Australia between the age of six and the end of the term following the pupil's fifteenth birthday. For most pupils the span of schooling is longer than the compulsory period, beginning earlier and ending later. Except in more sparsely populated areas there is a break between primary and secondary stages involving transfer to another school, which may also involve a choice between school types. In the larger schools an earlier break occurs at the end of grade II in a change from infant school to primary school proper. There is nothing sacrosanct about these divisions. In some school systems, as in some country areas in South Australia, the whole span of schooling is covered in a single institution. Separate infant schools do not occur in all Australian States or in all advanced countries. The age of transfer between primary and secondary systems varies within and beyond Australia. The existence of the two main secondary school types, high and technical high schools, has its origins in the period before secondary education became universal, and the break between primary and secondary systems also reflects historical influences. It may not be taken for granted, then, that the division of schooling between levels and between institutions rests on any consciously accepted rationale appropriate to the present situation. However, given that changes are likely to be costly and that some breaks and divisions may be necessary, the case for changing the existing school structure would need to be a strong one.

AGE OF ENTRY

8.2 Children may enter South Australian schools at two dates during the year — at the beginning of first term if they will be five years old before the end of February, and at the beginning of July if their fifth birthday occurs before 2nd July. There is only one point of entry into grade III, at the start of first term. As a result, most children enter primary grades after having spent two or two and one-half years in infant classes, depending on the time of the year at which they were admitted to school. The group entering grade III will vary in their speed of, and capacity for, learning as well as in age and period of school experience. As children are not all born on the same day, there is no simple way to provide a common period in infant classes.

8.3 A variety of suggestions was made to the Committee regarding the age of entry into school and the number of times during the year when entry should be permitted. It was suggested that children should be admitted earlier to compensate for the absence of universal pre-school education and to increase the possibility of all children being adequately prepared to enter grade III. Other proposals amounted

to raising the age of entry. Entry once a year, entry at the beginning of each term and continuous entry, allowing each child to begin school whenever he reached a certain age, were all advocated. The Minister of Education has recently called for wide discussion of possible alternative entry arrangements among parents and teachers; and some schools may be experimenting with variations to the present pattern in 1971. Arguments may be advanced in favour of all these suggestions. However, none completely overcomes the central difficulty of expecting a group of children who vary in many ways, of which length of schooling is only one, to reach a certain minimum standard at a single point of time.

8.4 In our view, only an approach which ceases to classify children according to grade levels and allows continuous progress for each child, preferably in a continuing group, according to the best attainment of which each is capable can cope with the multitude of variables between children. A few infant and primary schools already organise their programmes according to this view. Some infant schools practise, in addition, "family grouping" whereby groups under a single teacher range from newly entering children to those working at a standard above that expected for entry to grade III. In some primary schools having no separate infant school the family group extends to cover what would normally be regarded as grade III. Class organisation which advances each child in basic skills at his individual rate rather than attempting to teach the whole group at what is regarded as a grade norm is better able to cope with differences, including slight or considerable differences in chronological age. Within broad limits it makes age irrelevant.

8.5 While we think that an excellent arrangement would be to have pre-school centres attached to every school, allowing each child to pass on to more formal work when he was judged to be ready, in the present circumstances of shortage of pre-school teachers we do not regard this as practicable. In addition, it would require expenditure on a scale which, considering the needs of education at all levels, we think unlikely to be undertaken in the immediate future. We recommend in Chapter 10 that priority should be given to the development of pre-school facilities at public expense in certain areas, and that consideration should be given to locating these within school grounds (see paragraph 10.70). Until such time as more extensive pre-school provision is developed, we think there are considerable advantages in allowing continuous entry into school, each child on his fifth birthday, as in New Zealand. Such an arrangement has the advantage of allowing the assimilation of single pupils, or small groups, to whom more individual attention can be given than if large groups are admitted at two dates in the year as at present. Continuous entry would encourage the acceptance throughout the school of variations within teaching groups which must be treated on an individual basis. It would allow a gradual expansion of the group of children in their

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first year of school which would enable teachers to become acquainted with the individual child, his level of functioning and his capacities.

8.6 Problems of staffing and of admission into grade III would follow from continuous entry. Staff for the early years of schooling would need to be provided at the beginning of the school year to permit the gradual build-up of groups, and new teachers made available when the group reached a determined size. We do not think this would create any greater staffing difficulties than the present arrangement whereby the influx of children at mid-year is seldom matched by appropriate increases in staff. By spreading the need for staff increases over the year, the change proposed might even make their recruitment easier. Continuous entry could aggravate the problems of transition to grade III unless primary classes were similarly organised to take account of the different levels at which pupils come to them. However, it could have the effect of obliging teachers to accommodate to variations in their group which already exist and are often insufficiently acknowledged. Greater integration between primary and infant levels could be achieved by the record of levels of achievement in basic skills which would need to go with the child to grade III. We suggest later that the organisation-break should in any case be gradually eliminated. At the end of each year the teaching group would move forward together, the teacher moving with them if this were regarded as desirable.

8.7 Accordingly, we **RECOMMEND** that:

- (a) Entry into school should be continuous on the basis of each child being admitted on the next school Monday following his fifth birthday, or of groups being admitted at monthly intervals according to arrangements worked out by schools.*
- (b) The gradual introduction of the changed system of entry should be accompanied by appropriate in-service and pre-service preparation of teachers and the provision of materials to enable teaching methods to adapt to the individualised teaching which such an arrangement will require at all primary levels.*

SEPARATE INFANT SCHOOLS

8.8 Of the 530 government schools, excluding special schools, providing primary education in February 1970, 85 had associated with them a separate infant school under an infant mistress. Separate infant schools usually exist where the enrolment in the preparatory grade and grades I and II exceeds 250. In August 1969, 26,026 pupils of the total enrolment of 51,850 in these grades were in separate infant schools accommodated in a building separate from that of the large primary school with which they were associated, and sometimes located on a separate site. The infant mistress is in complete control of the staff and educational programme within the infant school, and

is responsible to the Assistant Superintendent of Primary Education (Infant). Three inspectors who are specialists in early education assess and advise in infant schools, organise in-service conferences and may occasionally give advice to teachers of infant classes in primary schools in remote areas. Teachers of infant classes within primary schools are assessed and advised by members of the normal primary inspectorate. Separate promotion lists operate in the primary and infant systems, making those trained in a particular field ineligible for promotion in the other. In recent years the training programmes of infant and primary teachers have drawn closer together. A single qualification, the Diploma in Teaching (Primary), now covers both areas. Child development over the whole age span to secondary level is studied by both groups, supplemented by specialist study of the particular age group to be taught by each. During training each group has some experience in the classrooms of the other.

8.9 The arguments for retaining separate infant schools rest largely on the specialist competence developed by people concentrating on a limited age span. Child-centred activity methods, group work and a less formal approach to education in general have characterised the best infant schools for many years, bringing into the classroom methods first developed at pre-school level. Infant schools have, as a group, innovated in more exciting ways than most primary schools, where instruction tends to remain teacher-centred and more formal. There is the danger of a reversion to methods and testing unsuitable for young children if the whole school were to become the responsibility of a primary headmaster lacking knowledge of infant methods. Such a headmaster may have received no serious professional education since his pre-service education many years before, which would not in any case have covered early education. Infant staffs are composed typically of young women whose education is likely to have been more recent. To place such young staff directly under the supervision of a head less knowledgeable in the area would, it is argued, give the weight of authority to what is regarded as out-moded, increasing its chances of survival.

8.10 Another argument favouring separate infant schools is that they require the entering child to accommodate to a smaller institution than the full primary school. Separate play areas or the same play area used at different times are less upsetting in noise and numbers for the young child and reduce the possibility of bullying by older children. Separate infant schools also provide a promotion position, that of infant mistress, which is in practice open only to women, at a salary comparable with that of a Class III primary head. Since few women ever become primary heads, the position of infant mistress increases the promotion prospects of women in the primary service. The employment of an infant mistress is also important because, as the only person without a class responsibility, she is free

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to interview parents, to conduct the administrative work connected with the infant grades and to provide educational leadership.

8.11 Of these arguments, that relating to specialist competence, in our view, carries most weight. It would be equally possible to retain separate play areas and buildings under a single head for both establishments. We are opposed to promotion positions reserved for women. The position of infant mistress is in any case open only to women who have specialist infant training, and the existence of separate promotion lists for primary and infant teachers may in fact reduce the likelihood of women becoming primary heads.

8.12 Continuous educational experience is more easily provided in an institution under single direction. The arrangements for liaison between infant and primary teachers do not appear, as they were outlined to us, to be very effective. The existence of separate staff rooms reduces the opportunities for informal liaison. Separate infant schools encourage the expectation that children entering primary classes proper will all have attained a minimum standard, so discouraging adaptation to individual difference, and possibly resulting in pressure on some children too early in their school lives. Infant schools directed by their own specialist head exist only in schools large enough to have a separate infant department. Almost half the children in infant classes are taught by teachers who are under the direction of a primary headmaster and are advised by an inspector who is not a specialist in infant education. It may be preferable, on grounds which will be discussed later, to plan for the elimination of very large primary schools. If the size of primary schools were limited to 600, say, the numbers in infant classes would not be large enough to justify the full-time employment of an infant specialist who was not responsible for a teaching group.

8.13 Many of the approaches to education which have been pioneered in kindergarten and infant schools are spreading to primary classes. Teacher-dominated learning and its passive reception by silent children in serried rows have been abandoned at all levels as ineffective by teachers whose professional competence and energy have enabled them to apply newer learning theories. The abolition of separate infant schools might encourage the view that learning is a continuous process which cannot be compartmentalised into infant methods and primary methods. These arguments also apply to the transition from primary to secondary school where a greater overlap of content and methods and a continuing view of the individual child are equally important. However, short of developing larger schools, which we should regard as undesirable, the difficulties are less easily overcome by organisational changes at this level.

8.14 The phasing-out of separate infant schools would also facilitate the introduction of male teachers for young children, a change

which would be welcomed by teachers and would probably be of benefit to children. Both the name and notion of infant departments could give way to specialisation at junior primary level as in Western Australia, where this level is seen as including the third, and in some cases the fourth, grade.

8.15 We think it important that specialist leadership and advice should be available to teachers of young children, including those in schools not large enough to be considered eligible for it under present arrangements. This purpose could well be served by the employment of specialist consultants or education officers working between a group of schools. A smaller number of them would be needed than the number of those at present employed as infant mistresses. There would therefore be available for teaching posts and promotion positions in the primary system a group of women with high qualifications and specialist competence. The training in administration which we recommend in Chapter 17 for headmasters should prepare primary headmasters for leadership over the whole primary span.

8.16 Accordingly, we **RECOMMEND** that:

(a) Infant schools should be gradually integrated into the primary schools with which they are associated, and primary headmasters should be assisted in their overall supervision of the schools by consultants who are specialists at the junior primary level.

(b) The present infant and primary promotion lists should be amalgamated, and teachers of older and younger primary children encouraged to see themselves as a single staff.

(c) The preparatory grade and grades I and II should cease to be referred to as "infant classes".

(d) Any necessary changes in the preparation of teachers should be made to enable teachers, while developing competence over the whole primary field, to specialise at either junior or upper primary level.

LENGTH OF PRIMARY SCHOOLING AND THE AGE OF TRANSFER

8.17 There are variations between the Australian States in the arrangement of levels of schooling. Different ages of entry to school operate in different States, the break between primary and secondary schooling occurs at different stages and the period of secondary schooling varies in length. In some cases the differences are ones of nomenclature rather than of levels, but there is sufficient variation to cause difficulties for families transferring interstate, especially at the end of primary schooling. Table 8.1 shows the number of years of primary schooling in the different States, and the average age of pupils in their first year of secondary schooling in 1969. School attendance among five-year-olds has risen steadily in South Australia in recent years, and retardation during the primary years has become relatively infrequent, as shown in Tables 4.1 and 4.2. A policy of automatic pro-

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motion into secondary school has combined with these two factors to produce a falling average age among seventh-grade pupils from 12 years 8 months on 1st August in 1963 to 12 years 4 months in 1969. Although the average age of first-year secondary pupils in South Australia has fallen since 1964, when it was 13 years 7 months in August, it remains higher than elsewhere in Australia except the Northern Territory. The period of primary schooling is nominally longer in South Australia than in any other State, but, as a result of differing policies governing entry to school, Queensland and Western Australia have an average age among first-year secondary pupils which differs little from that of South Australia.

Table 8.1
PRIMARY GRADES AND LENGTH OF PRIMARY SCHOOLING
AUSTRALIAN STATES 1970

	No. of Primary Grades	Years spent in Primary School	Average Age of First-Year Secondary Pupils 1st August 1969 (years and months)
N.S.W. and A.C.T.	Kindergarten Classes I to VI	7	13-0
Victoria	Grades I to VI (Two years in Grade I for majority of children)	6 or 7	12-9
Queensland	Grades I to VII	7	13-4
South Australia and N.T.	Preparatory, Grades I to VII	7 to 8	13-5 (S.A.) 13-9 (N.T.)
Western Australia	Grades I to VII	7	13-3
Tasmania	Kindergarten Grades I to VI	6 to 7	12-9

Source: Commonwealth Department of Education and Science.

8.18 Some submissions made to the Committee urged an earlier transfer to secondary school in South Australia to provide a six-year secondary system, as in New South Wales and Victoria. The main argument used to support such a change was that it would facilitate interstate movement among people with school-going children. Interstate transfer affects fewer than one per cent of Australian school-going children,¹ but for each of them it may cause educational complications. It was also argued that many children learn little in grade VII at primary school, which still tends to be a year of consolidation, despite the fact that transfer to secondary school is now automatic, the Progress Certificate having been abolished. Earlier transfer was supported to allow children to be initiated earlier into

¹ See *Variation in Australian Education*, Australian Council for Educational Research (for the Australian College of Education), 1966.

the range of subjects and pattern of teaching and work at secondary level, all of which differ considerably from those at primary level.

8.19 There would be advantages in a uniform Australian system, but, as no general pattern exists to which South Australian changes could be made to conform, unilateral action on the part of one State could not achieve it. The advantages of a lower age of transfer to secondary school would need to be great to offset the expense and difficulties it would involve. Most submissions made to us opposed such a change on both educational and practical grounds. The main points made were:

(a) To lower the age of transfer would raise problems in secondary schools where an even wider age span than that at present being provided for would have to be accommodated. Younger children would be out of place in what was essentially an adolescent community, and rules appropriate to them would not be appropriate to the pupils of 17 and 18 years of age at the top of the school.

(b) Evidence based on Piaget's theories of stages of development suggests that the change from the stage of concrete operations to abstract thought occurs at roughly the present age of transfer, making the programme of the primary school, which is geared to the concrete stage, more suitable for most 12-year-olds.

(c) Countries with a younger age of transfer, for example the United Kingdom where the age is 11+, are re-appraising the situation. The Plowden Committee recommended that the age of transfer be raised.

(d) The difficulties associated with transfer from primary to secondary schooling could be overcome more successfully by attention to individual differences at all levels than by an earlier age of transfer. Some difficulties are associated with the change from a single teacher to specialist teachers, with a wider range of subjects and with more exacting standards. Primary schools are experimenting with programmes designed to aid transfer by developing some subject specialisation among teachers and by introducing pupils to foreign languages and self-directed study in the upper grades.

(e) There is already a serious shortage of accommodation and of qualified teachers in secondary schools. Earlier transfer would leave some rooms empty in primary schools and require others to be built in secondary schools. It would also remove from primary schools many of their best qualified and most experienced staff. The proportion of males among primary teachers would fall (there were 620 men and 218 women teaching grade VII classes in 1969).

8.20 The weight of these arguments rests heavily on the vigour with which changes assisting transfer are in fact being made in primary schools. A number of submissions to the Committee, especially from subject associations of teachers, urged closer relations between primary and secondary teachers and courses. The Primary

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Schools Advisory Curriculum Board has no representatives from the Secondary Division, although secondary teachers serve on subject committees associated with it. The Director of Primary Education is represented on the Secondary Schools Advisory Curriculum Board, but primary teachers are not included in the subject committees operating at secondary level. We make recommendations about the composition of these boards and committees in paragraphs 18.47 and 18.49. It is significant that subject associations of teachers are in practice confined to secondary teachers and are concerned with secondary courses, that academic consultants are attached to one or the other system and that in-service courses are based on either Primary or Secondary Division. It is true that there have been a number of conferences on problems of transition, but there would seem to be good arguments for administrative changes enabling consultancies, in-service education, curriculum research, etc., to span the whole age group of school attendance. The exchange of senior primary and junior secondary teachers might also be valuable. In short, steps that would end the present *de facto* separation of the primary and secondary systems seem desirable. The organisational changes which we recommend in Chapter 17 would place both Primary and Secondary Divisions and special services under a proposed Deputy Director-General (Schools), so assisting a more integrated approach to education at each level.

8.21 On balance, we do not favour a change in the age of transfer from primary to secondary school. The arguments against it are in our view stronger, especially in a situation where change could not, in any case, bring about interstate uniformity. However, problems of transition clearly exist, irrespective of the age of transfer, and are intensified by the fact that primary and secondary schools are administered by separate Divisions.

8.22 Accordingly, we RECOMMEND that:

Further steps should be taken immediately to ease the transfer of pupils from primary to secondary schools by better integration of the two levels. This will involve changes in the content and methods of teaching in the upper primary and lower secondary grades, and the organisation of consultancies, teachers, curriculum and pupil records on a basis which will permit effective overlap between upper primary and lower secondary levels.

TYPES OF SECONDARY SCHOOL

8.23 In the Adelaide metropolitan area and in three larger country towns parents may choose between a high and a technical high school for their child's secondary schooling. The Education Department stipulates the geographical area from within which a school may draw its pupils, and therefore the place of residence determines within Adelaide which particular school of either type the child may attend.

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In towns where the population will support a single separate secondary school, that school is invariably a high school. In smaller centres, secondary classes to third-year or fourth-year level are available in the same school as primary education. The larger and more numerous of these schools are area schools; the smaller are the special rural schools, which do not go beyond third-year secondary level. A correspondence school serves both primary and secondary pupils in areas remote from any school. Table 8.2 gives some indication of the relative importance, in terms of pupil numbers, of the types of government school offering secondary education.

Table 8.2
TYPES OF GOVERNMENT SECONDARY SCHOOLS AND PUPIL NUMBERS
SOUTH AUSTRALIA, FEBRUARY 1970

School Type	No. of Schools	Pupil Numbers	Proportion of all Secondary Pupils per cent
High	63	48,211	65.2
Technical High	33	20,465	27.6
Area	42	4,927	6.7
Special Rural	9	136	0.2
Correspondence	1	252	0.3
Total	148	73,991	100.0

Source: Education Department.

8.24 Between them, high and technical high schools account for nearly 93 per cent of enrolments in secondary classes in government schools. Thirty-four of the 63 high schools are in country areas; only four technical high schools, two of them in Whyalla and one each in Port Pirie and Mount Gambier, are outside Adelaide and its environs. Area and special rural schools will be discussed in the context of the provision of secondary schooling in less closely settled areas.

8.25 High schools are the oldest and numerically still the most important type of secondary school. Their programmes were originally designed to prepare for public examinations and university entry, and were thus geared to the requirements of a select group. An alternative type of secondary education for the less academically inclined and for those expecting to leave school earlier was provided in "tops" of primary schools from the 1920's. In 1941-42 these became junior technical schools as separate organisations, and in 1955 technical high schools. In them alternative courses to those of the Public Examinations Board were first developed and internal certificates issued. Their courses placed greater emphasis on practical activities, particularly in art and craft, including pre-vocational trade training, especially for boys. Although high and technical high schools were originally intended to provide different types of education for different types of students, social and educational changes have drawn the

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programmes of the two school types closer together. As secondary schooling has been extended to the whole school-age group, and retention rates have risen, each school type has been called upon to cater for a wide range of academic ability, since parents are free to choose between them. The increasing importance of providing students with an acceptable certificate and the increasing proportion of each generation requiring post-secondary education obliged the technical high schools to provide courses leading to Public Examinations Board examinations. High schools have been obliged to move in the other direction, by providing courses alternative to those of the Public Examinations Board. In 1968 the Technical High School and the High School Branches of the Education Department were combined in a single Secondary Schools Division.

Courses and Certificates

8.26 The Matriculation examination is taken at the end of five years of secondary schooling. The only other external examination since the external Intermediate examination, taken at the end of third year, was abolished at the end of 1968 is the Public Examinations Board Leaving examination at the end of fourth year. Internal certificates are issued at the end of fourth and fifth year on the basis of an internally constructed and examined curriculum. The structure of secondary courses and certificates is set out in Table 8.3.

Table 8.3

SECONDARY SCHOOL GRADES AND CERTIFICATES WITH AVERAGE AGE OF PUPILS
SOUTH AUSTRALIA, AUGUST 1969

	Average Age (years and months)	Certificates Available
1st year	13-5	Statement of school record setting out academic achievement at any time from first to fifth year.
2nd year	14-5	
3rd year	15-5	
4th year	16-5	Public Examinations Board Leaving Certificate or Secondary School Certificate: Fourth Year
5th year	17-5	Matriculation (P.E.B.) or Secondary School Certificate: Fifth Year

8.27 Since 1969 secondary courses have been organised in tracks. A description of the tracks, together with the approach which underlies them, is contained in the following extracts from a pamphlet issued by the Department to intending secondary students and their parents.²

The aims of the Junior Secondary Curriculum may be summarised briefly as follows:

(1) To use a broad-based student-centred curriculum which encourages more student interest and participation than has been possible with the more formal, traditional and prescribed syllabuses of the past.

² *Our Secondary Schools*, South Australian Education Department, 1970.

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(2) To cater for individual interests, abilities and needs as widely as possible; so that all students irrespective of ability may be challenged by appropriate course offerings.

(3) To regard the first three years as exploratory during which students study certain basic subjects in common. They also choose from as wide a range of electives as possible before committing themselves to more specialised courses of study at the senior level (fourth and fifth year).

(4) To use continuing assessment, a process by which the results of homework, class exercises, traditional tests and project work, etc., determine a student's achievement and readiness for promotion, rather than to rely heavily upon terminal and final examinations.

Five tracks designated by numbers 0, 1, 2, 3 and 4 are used, but the majority of students will be concerned with tracks 0, 1 and 2. Certificates are granted in the fourth year for courses in tracks 0, 1 and 2; and in fifth year for tracks 0 and 1. Subjects and courses with tracks 3 and 4 status do not qualify for certificates.

Track numbers indicate the purpose of the syllabus and do not necessarily represent levels of ability.

(1) In first year, and to almost the same extent in second year, most syllabuses can be regarded as track 0. They aim to keep open the preliminary path to tertiary studies at university, a diploma course at the South Australian Institute of Technology, or a teachers college. Eventually track 0 syllabuses lead to studies that make considerable demands on the ability to abstract and theorise and generally study in depth. By fourth and fifth year they are designed to prepare students for matriculation and are at present examined externally by the Public Examinations Board.

(2) *Track 1* keeps open the way to tertiary studies other than those requiring matriculation subjects for entry, e.g., certificate courses at the South Australian Institute of Technology and some teachers college courses. Track 1 syllabuses in general subjects, which may be offered from second to fifth year, have a practical bias in addition to promoting abilities to theorise and think. They therefore have a content and purpose that can attract students of high ability. Able girls who have decided upon a commercial career and require vocational subjects, Shorthand, Typewriting, Commerce, etc., usually take track 1 syllabuses (which may be examined either externally by the Public Examinations Board, or internally by the Education Department). Track 1 syllabuses, which are particularly well represented in technical high schools, develop skills and demand high standards that prepare students for the most exacting apprenticeships. Track 1 courses that are examined externally by the Public Examinations Board are terminated at the fourth year.

(3) *Track 2* provides a suitable preparation for various kinds of post-secondary and trade study. The content and treatment of track 2 syllabuses are meant to promote through interesting subject matter all the essential skills and abilities. Reading, writing, speaking, computation, thinking, understanding of the world around and decision making are all emphasised, but not by way of theory and abstract terms. Track 2 syllabuses aim to prepare students to cope successfully with practical situations of everyday life and general employment. Track 2 students do not have the same academic ambitions as those of track 0 or track 1.

(4) *Tracks 3 and 4* are not offered at fourth year because the syllabuses lack the depth associated with certificates. Students in track 3 have left primary school with poor ability in communication, reading, expression and computation. Track 3 syllabuses emphasise remedial work and the consolidation of the essential skills of communication and computation. The aim is to prepare students for intelligent participation in the community and for occupations that require perseverance and

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repetitive routine procedures. Track 4 students have special physical and/or emotional disabilities which preclude them from most occupations other than those of a simple routine nature.

8.28 Internal certificates issued state the track in which subjects were taken, together with a grading for each. Externally examined courses in track 0 prepare students for entry to university and for diploma-level courses at the Institute of Technology. In 1970 approximately 60 per cent of all secondary students were studying track 0 courses, the proportion being greater in high schools than in technical high schools. Certain track 1 courses may lead to Public Examinations Board examinations at the end of fourth year, but, because they do not usually include a sufficient number of subjects examinable at matriculation level, they do not lead to matriculation. Most track 1 courses are examined internally, as are all other tracks except track 0. It is easier to move from track 0 to tracks 1 and 2 than in the reverse direction; consequently, in first year most subjects are taught initially at track 0 level except for those students specially placed in tracks 3 and 4.

8.29 External examinations still exert a considerable influence on the secondary school curriculum, since it is considered that the ground must be laid in the junior school to enable as many as possible to go forward to the Public Examinations Board Leaving and Matriculation examinations. In subjects where later study builds on earlier, it is argued that specific foundations must be laid in lower-level courses, and steps taken to ensure that a wide enough range of subjects examinable at Public Examinations Board levels are taken in the first three years. The central dilemma of secondary education — a degree of conflict between the desire on the one hand to keep the gateway to higher education open to as many as possible for as long as possible, and on the other hand to provide for each pupil the type of course best suited to his individual interests and aptitudes — has been tackled in the track system by an attempt to exclude as few as possible from tracks leading to higher study at least until the end of third year, whilst organising teaching groups within tracks on the basis of general ability and achievement. The system is intended to promote flexibility of courses and organisation in schools, allowing them to take advantage of the abolition of early external examinations to arrange for each child a course of study based on his interests and abilities. Syllabuses may be varied and individual subjects taken in different tracks. The schools themselves decide the degree of flexibility in organisational arrangements and in variety of courses each will provide, on the basis of availability of staff and facilities, and according to the convictions of their heads and teaching staffs. A relatively small but growing number of schools is experimenting with teaching groups based on performance in individual subjects or on mixed ability grouping, and providing a variety of syllabuses and levels, pupils not being allocated to a common grouping and level in all subjects. However, such arrangements are by no means general,

and the degree of flexibility theoretically possible under the track system has as yet not been realised in practice.

High and Technical High Schools

8.30 Although the two main types of secondary school have been drawn closer together over the past period and are now administered and staffed as a single Division, important differences between them still exist. Each school type has retained its identity by offering predominantly the type of course for which it was originally intended, but each now offers courses once considered the prerogative of the other. For example, high schools offer tracks 1 and 2 as well as the more traditional track 0, and matriculation classes are available in some technical high schools. These arrangements indicate that each school type covers approximately the same range of ability, but the distribution is different. In high schools those in the upper range of measured ability far outnumber their counterparts in technical high schools, resulting in a higher proportion of high school students following track 0 courses. Conversely, those with measured abilities in the lower ranges are more numerous in technical high schools, and courses considered more appropriate to their abilities are offered. Track 3 is at present available in technical high schools only, and the number of track 2 students is significantly larger than in high schools.

8.31 Where choice of school operates, as in the Adelaide metropolitan area, a degree of self-selection is evident. Table 8.4 shows that each school type enrolls pupils over the whole range of ability found in normal schools, as measured by I.Q. tests. In the 100 to 109 range of average ability and slightly above there is little difference between entrants to high and technical high schools. Both school

Table 8.4

DISTRIBUTION OF I.Q. SCORES AMONG PUPILS ENTERING SECONDARY SCHOOLS

ADELAIDE METROPOLITAN AREA 1970

I.Q. Scores	High Schools per cent	Boys' Tech. High per cent	Girls' Tech. High per cent	Co-ed. Tech. High per cent
Under 69	0.1	1.4	0.8	0.6
70—79	0.5	6.5	3.5	5.0
80—89	3.3	20.2	15.5	15.9
90—99	14.6	32.8	30.9	28.5
100—109	33.6	27.6	32.1	32.8
110—119	29.9	9.3	13.7	12.3
120—129	11.7	2.0	3.0	3.8
130 and over	6.2	0.3	0.6	1.2
Total	100.0	100.0	100.0	100.0

types include pupils of relatively high and relatively low ability, but in high schools those of higher ability are more strongly represented. There are some interesting differences between girls' and boys' technical high schools, able boys being more inclined than girls to choose

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high school. The three co-educational technical high schools are closer to girls' than to boys' technical high schools in their distribution of ability.

8.32 Table 8.5 illustrates the weaker holding power of the technical high schools. Retention rates vary according to the socio-economic area from which the school draws its pupils, as well as according to school type. The one high school and the one girls' technical high school which retained over 90 per cent of their first-year intake into fourth year are situated within a few blocks of each other in the same suburb. Among metropolitan secondary schools technical high schools have lower retention rates than high schools; those of girls' technical high schools are the lowest.

Table 8.5

NUMBER OF METROPOLITAN SECONDARY SCHOOLS WITH STATED PROPORTIONS OF 1965 ENTRY IN FOURTH YEAR IN 1968

	20-29 per cent	30-39 per cent	40-49 per cent	50-59 per cent	60-69 per cent	70-79 per cent	80-89 per cent	90+ per cent	Total
High Schools	-	-	3	6	5	3	4	1	22
Boys' Tech. High	3	1	6	-	1	-	-	-	11
Girls' Tech. High	4	6	3	-	-	-	-	1	14
Co-educational Tech. High	-	-	-	-	1	-	-	-	1

8.33 Other characteristic differences between high and technical high schools are:

(a) All technical high schools except three in the metropolitan area and four in the country in February 1970 were single-sex schools, whereas all high schools except two were co-educational.

(b) In general, high schools provide fifth-year matriculation courses, which were available in 1970 in 90 per cent of metropolitan high schools and in 63 per cent of country ones. Only six of the thirty-three technical high schools, one of them in a country area, have matriculation classes. Nine technical high schools and two high schools offer internally examinable fifth-year courses. Most technical high schools do not at present go beyond fourth year, although it is expected that the number offering fifth-year courses will gradually increase if suitably qualified staff are available. The concentration of matriculation classes in high schools is explained by the higher proportion of more academically able students who attend them and by their higher retention rates. It is more economic in terms of staff-use to concentrate matriculation classes in high schools, allowing adequately prepared students from technical high schools to transfer there for their fifth year. The greater frequency of matriculation classes and track 0 courses in high schools may explain in part the higher level of academic qualifications of high school teachers of general subjects in comparison with their counterparts in technical high schools, a difference which is illustrated in Table 6.20.

(c) A greater range of art and craft courses is available in technical

high schools, and a somewhat narrower range of academic subjects. Art, home management and woodwork are the main art and craft courses offered at high schools. In addition to these, metalwork, photography, plastics, applied electricity and technical drawing may all be available in a boys' technical high school or a co-educational one, and dressmaking in a girls' technical high school. Foreign languages are not provided in all technical high schools, and some girls' technical high schools do not offer any courses in science or mathematics that are an adequate basis for post-secondary study in these fields.

(d) Pupil/teacher ratios are generally more favourable in technical high schools, and the expenditure per pupil is greater than in high schools, \$365 per pupil in technical high schools in 1968 and \$295 per pupil in high schools. This is explained by the greater emphasis on art and craft subjects, which are taught in smaller groups, and by the fact that tracks 3 and 4, providing courses for slow-learning pupils, exist only in technical high schools, and are also taught in smaller classes.

(e) The technical high schools pioneered the non-Public Examinations Board secondary courses, and were encouraged to extend the range of such courses to fifth year.

Comprehensive Secondary Schools

8.34 Whether secondary schooling for pupils of differing abilities and interests should be organised in separate schools having different emphases has been hotly debated in many countries as secondary education has been extended to all children. The question has been posed more sharply in systems which, unlike that of South Australia, have limited entry to academically biased schools by selective examination. The organisation of secondary education in a single school type has long been the pattern of American and Soviet schools. Scandinavian countries have reorganised in a single school type to the end of compulsory schooling as the result of an extensive research study, and the British Government in 1965 directed local education authorities to plan for a similar change, now slowly and unevenly taking place. Australian changes over the last decade brought the organisational structure of the Australian secondary school systems closer to a comprehensive pattern through the organisation of secondary schooling in a single school type in all States except Victoria and South Australia, which both retain parallel systems. In South Australia, unlike Victoria, a single directorate covers all types of secondary schooling.

8.35 In industrialised societies the education system is subjected to contrary pressures which become particularly evident at the secondary stage. These pressures stem from possible conflict between aspects of its social function. On the one hand it has the function of initiating all children as members of the society. This function suggests the common pursuit of shared objectives, a degree of shared

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understanding and appreciation of the cultural heritage, and shared practice of the values of the society. In political democracies these values ideally involve the appreciation of individual differences and the fostering within individuals of socially acceptable talents, not confined to intellectual ones. They also include acceptance of different views, the obligation to participate in decision-making on the basis of rational discussion and consideration of evidence, and the expectation of peaceful change. They may be summed up as the acceptance of individuality within community.

8.36 Schools have a second social function, that of differentiating out a stratified labour force and preparing children to fulfil certain functions within it. Since the society highly rewards occupations requiring a high level of intellectual competence, tests of this competence have opened the gates to higher education for some and closed them to others. This process once began at the end of primary schooling. As the society becomes richer and requires a greater proportion of highly educated people the process of selection begins higher up the educational ladder. Achievement replaces birth, to the extent that it is not dependent upon it, in the selection process. The society undertakes the provision of free education to higher levels and supports talented individuals through scholarships beyond these levels. Selection based on achievement emphasises individual competition in schools and may lead to a narrow view of the talents worthy of cultivation. In these ways it may run contrary to the values suggested by the first social function of the education system and may deter many from further schooling at the same time as it motivates others to continue at school.

8.37 The sociological analysis behind the general movement towards a single type of secondary school suggests that in highly developed industrialised societies the distinction between the two social functions of the schools becomes less sharp. Such societies, as they move towards highly developed technology with increasing elements of automation, need to develop talents in such variety and to such levels that selection becomes a less important function of schools, tending to be deferred to post-secondary levels. The demand for minimally educated labour falls off, hours of work are reduced and the complexity of social issues requires high levels of general education in the community. Rather than specific skills, those entering industrial occupations need the highest level of literacy and mathematical proficiency that they are able to attain as a basis for continuous re-education as industrial processes change. Hence, for practical as well as idealistic reasons it is argued that schools need to encourage each individual to his highest level of proficiency rather than discourage him through the imposition of successive hurdles and constant interpersonal comparison. The presence of all courses within the same school widens the options open to the individual child, and, depending on the type of internal organisation adopted, can enable

each to work at the highest level of which he is capable in individual subjects. Flexible internal organisation which avoids the casting of individuals into moulds or fixing them at particular levels thus becomes as important as the single school type, but the single school type is essential, because wherever there is more than one type a degree of selection operates very early.

8.38 Beyond the universally accepted criterion that a comprehensive secondary school is one which admits all children of appropriate age in an area and provides within it a range of courses for children of all levels of ability and aptitude, there is division of opinion about the characteristics of such schools. Within the general framework of a single secondary school type the following patterns of organisation may exist:

(a) Pupils may be placed early in their secondary schooling in moderately inflexible groups pursuing courses which qualify them for university and higher technological study, trade or commercial occupations not requiring tertiary qualifications, and so on. This type of organisation, usually based on measured verbal and mathematical ability and performance, is called multilateral and, because of its relative inflexibility and early specialisation, is not accepted as comprehensive by many, since it preserves within a single school most of the rigidities of a system based on separate school types. Dissatisfaction with this multilateral type of organisation within a single secondary school type caused the Western Australian Education Department in 1964 to introduce a work-unit scheme which enabled students to proceed at a different pace in each subject.³

(b) The second pattern avoids grouping by general ability and offers a more flexible arrangement in which all subjects, or "core" ones such as English, mathematics and science, are offered at several levels in each year, pupils being assigned to levels appropriate to their achievement in each subject after an exploratory period. This arrangement, called "setting", enables pupils to work at different levels in different subjects according to their achievement in each. The school is time-tabled and courses designed to allow movement between levels. Such organisation is, of course, more complex than that required under (a), and presents difficulties both in time-tabling and in staffing. To allow for transfer between levels, all classes in a particular subject in a particular year must take place at the same time. Such an arrangement increases the amount of preparation required of staff, since each can teach only one class at any given level. It also requires a high level of academic competence in staff because the same teacher will be required to teach at junior and senior levels. It does, however, increase the possibility of more flexible teaching arrangements, as it makes it easier to organise team teaching whereby some teaching

* For a discussion of organisational changes in Australian secondary education in the 1960's, see R. T. Fitzgerald, *The Secondary School at Sixes and Sevens*, Melbourne, Australian Council for Educational Research, 1970.

takes place with all classes as a single group, followed by smaller tutorial groups and individual study. Problems of organisation may be lessened in large schools by "setting" the whole range of achievement over two groups of classes, so that each group may be time-tabled at a different time, allowing the same teacher to take two groups in a given year. This is the pattern of secondary education in New South Wales since its reorganisation in 1962 on the basis of the Wyndham Report.⁴ Individual student programmes replace subject and level choice fixed by assignment to a group on the basis of measured general ability. Its object is to create a school environment which caters more fully for individual differences, as does the work-unit scheme used in Western Australia.

(c) The two previous alternatives both aim at creating homogeneous teaching groups, the first by streaming on the basis of general ability, the second by grouping pupils by achievement in individual subjects. The second produces more homogeneous groups, since within groups of the same measured general ability there is considerable variation in ability between subjects. However, no group, however finely chosen, is homogeneous, and some educators have objected to the whole principle of homogeneous grouping because of its imperfections in allowing for individual difference, and on more general grounds. These grounds relate to the undesirable social effects of creating a hierarchy of classes and subjects, and to its undesirable educational effects. There is evidence that children's performance is influenced by the view they form of their own abilities as the result of the expectations of others expressed in such ways as the assignment to classes of varying levels. It is also maintained that heterogeneous grouping has positive virtues in its encouragement of mutual appreciation between children whose abilities lie in different directions, and in the stimulus gained by the whole group by the presence within it of pupils of high ability in various areas, which are not limited to intellectual ones. Within the heterogeneous class, core subjects may be studied at varying levels by different children, thus allowing for individual differences in ability and interest in each subject field. Subjects such as music, drama and art may be followed by the class as a single group. This, the most extreme form of comprehensive schooling, amounts to a continuation in the secondary school of the methods used in non-graded primary schools where within a single group each pupil works at his own level, which may be above or below the nominal "class" level, in each subject. Some Victorian secondary schools are moving into this pattern. Some have moved beyond it into a form of junior school organisation which groups all pupils in a single year together and provides a curriculum centred on general studies worked out by the teachers and pupils in individual schools. There is little in the way of formal teaching to large groups; teachers, other pupils and resources are available to each child for consultation.

⁴ Report of the Committee appointed to Survey Secondary Education in New South Wales, 1957.

Such an organisation eliminates the need to assign pupils to teaching groups and dismisses the whole concept of classes and of teachers allotted to particular groups for specified periods of the day or in closely designated subject areas. The increasing attention being given in all educational circles to individual study, self-directed learning and methods which allow for consultation with peers suggests that heterogeneous grouping, whether in class or outside, will probably be the direction of future developments, especially in the junior secondary years.

8.39 Evidence on the relative merits of homogeneous and heterogeneous grouping in regard to their effect on academic performance is inconclusive.⁵ The large middle group of pupils appear to perform better in heterogeneous groups; for those at each extreme of the continuum, the effect is not so clear. Results are influenced by the extent to which content and methods are modified to suit the type of grouping used. The expectations of the teacher in regard to individual pupils and groups influence performance, although the mechanism by which this effect is produced is not yet understood.⁶ Any organisational changes aimed at extending each child are likely to be ineffective unless teachers move beyond interpersonal competition and examination results as motivations for learning. Fundamental changes require new patterns of pupil-teacher relationships based on a conviction that each child is capable of development and change. These relationships can start only from the level of development that each child has reached. Schools which are genuinely comprehensive in that they value a variety of talents and seek to promote each pupil to his highest level of performance in each area without invidious distinctions or comparisons can only be built by teachers who believe in them. *Ultimately it is teacher attitudes which are crucial and no organisational changes can alone transform secondary schooling.*

8.40 The concept of the comprehensive secondary school has, then, two aspects. The first is the organisation of all pupils of relevant age in a single school type providing a full range of courses and options. The second relates to the internal organisation of the school, which should be flexible enough to allow each pupil to work at his best level in each area of learning without early specialisation or fixing at particular levels and without harmful interpersonal or intergroup comparisons. The extent to which this latter purpose can be achieved is closely related to teacher attitude, whether its organisational form is setting by individual subjects or ungraded groups working by individual progression in subject areas or in an interdisciplinary

⁵ See *Streaming*, a paper prepared by G. M. Dow for the Steering Committee of the Curriculum Advisory Board, Victoria, 1969.

⁶ See, for example, R. Rosenthal and L. Jacobson, *Pygmalion in the Classroom*, New York, 1968, and, by the same authors, *Self-Fulfilling Prophecies in the Classroom*, in Deutsch, Katz and Jensen (eds.), *Social Class, Race and Psychological Development*, New York, 1968. See also Janet Bouri and Jean B. Lunn, *Too Small to Stream*, National Foundation for Educational Research, 1969.

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programme. In our view the track system as it is at present practised in those South Australian schools which organise, for all subjects, in fixed teaching groups based on general ability and performance is closer to a multilateral than to a comprehensive pattern. We agree with the implications of the advice given to all schools in August 1970 by the Director-General⁷ that the form of internal organisation of secondary schools, as well as their curriculum, should be the subject of a variety of experiments, embodying the considered opinions and attitudes of teachers in individual schools. Experimentation with heterogeneous grouping and interdisciplinary studies might be expected to follow such an approach in at least a number of schools. The track system was devised to encourage diversity, but we think that it should be re-examined to determine whether any allocation to tracks is necessary within the first three years. The existence of external examinations does impose some rigidity, but it is doubtful whether it requires tight sequential organisation of syllabuses at junior secondary level and formal teaching to the extent now followed in many track 0 classes. It may be that pupils who have developed a zest for learning and the ability to pursue it in more independent ways in the junior secondary years can cope in the final years of schooling with the requirements for entry to tertiary study. It may also be the case that more radical experimentation in junior school programmes could increase the numbers capable of highly disciplined study at senior levels.

8.41 Although we consider that the provision of secondary schooling within a single school type would not bring about radical changes in learning opportunities unless it were accompanied by certain internal changes within schools about which teachers themselves must decide, the general organisation of schooling is nevertheless an important issue. A number of submissions were placed before us urging that the present distinction between high and technical high schools should be discontinued in favour of a single secondary school type. The following arguments were advanced in favour of such a change:

(a) The purposes for which separate types of secondary schools were established — the one to prepare students for entry into non-manual labour in general and higher studies in particular, the other to prepare for entry into manual jobs — are no longer relevant. There is considerable overlap in the occupations entered by students from both types of school. Both are called upon to educate the whole range of ability found in normal schools.

(b) Where choice between school type exists it has long-range consequences for some children which may be imperfectly understood. The opportunities available to students who will not matriculate are more limited in high schools than in technical high schools. Little in the way of pre-vocational experience which might incline a boy or girl towards industry is offered. Experience which might draw the

⁷ See paragraph 17.41.

academically inclined into industry through education in technological fields is also absent. In technical high schools, on the other hand, students with academic interests and abilities are a minority group. While they may take courses which will lead to university study, they must, as a general rule, change schools in order to matriculate. In many girls' technical high schools the studies in mathematics and science which would lead to matriculation are not offered. Hence in marginal cases the choice of school type influences occupational choice at an early age in ways that are not always appreciated by parents.

(c) Although the generally freer atmosphere and the provision of a wider range of creative activities in the manual arts make the best technical high schools attractive to children of all levels of ability, and there can be no suggestion that technical high schools have been physically less well provided for than high schools (indeed, the reverse, if anything, is true), the two school types do not enjoy equal prestige. This is shown by a study of parental choice in 1964,⁸ which indicated that better educated parents were more likely to choose high schools even if this required their child to travel further. A 1970 study⁹ showed that the parents of technical high school students had, as a group, significantly lower incomes than parents of high school students. Differing prestige between the two school types is inevitable because high schools as a group give entry to high-status employment through matriculation, and most technical high schools do not. Hence parental choice between them is not necessarily based on educational considerations about the suitability for their particular child of courses offered; and choice at this level is in any case undesirable.

(d) The existence of an alternative type of secondary school may encourage the retention in high schools of a narrow view of the process of education which equates it with success in examinations.

(e) It is true that no further single-sex schools are to be established, but unless secondary schooling is reorganised the present single-sex schools are likely to remain. This suggests occupational stereotypes for boys and girls which are out of keeping with the opportunities at present available. In fact, the pre-vocational experience in girls' technical high schools is limited to commercial occupations, where it takes so precise a form as to be termed directly vocational. While there may be no objection to schools offering courses which combine vocational with general education, there are objections to allowing pupils to enter them too early in their schooling, and to such a restricted range of possibilities. Apart from the occupational limitations imposed by present arrangements, there are strong social arguments favouring co-education which are equally relevant for all pupils and not confined to those attending high schools.

⁸ D. M. Toomey, *Some Social Influences upon Selections for Secondary Education in Adelaide*, a paper read at Section J of the 1965 A.N.Z.A.A.S. Congress.

⁹ K. J. Hancock and R. J. Blandy, *1970 Survey of Upper Secondary School Children in South Australia*, Flinders University of South Australia. (Mimeographed Report.)

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(f) Retention rates are lower in technical high schools than in high schools. It may be argued that this reflects the different distribution of measured ability and the degree of social selection evident between the school types. However, there is a good deal of evidence to suggest that retention among the less academically able and among children of less well-educated parents is increased when they are not grouped in separate schools. This is especially so if the schools in which they are associated with pupils of higher aspiration are organised in ways which provide for subject choice and the study of each subject at a level appropriate to the individual student. In highly industrialised societies the early school-leaver is strongly represented among those unable to find continuous employment, and, if his level of literacy is also low, later industrial training is almost impossible. The retention in school of the less academically able pupil becomes important in these circumstances, and a single school type is more likely to promote it.

(g) Secondary schools outside the metropolitan area are usually high schools. The recognition of all schools as comprehensive would enable courses to be offered there which would suit a wider range of abilities and interests than at present. Greater consolidation, and the provision of hostels, may be needed to achieve schools of the requisite size in some areas.

(h) Although it is usually argued that schools need to have 800-1,000 pupils to provide a full range of courses, especially at fifth-year level, some New South Wales schools are operating successfully as comprehensive schools on the basis of 600 pupils.¹⁰ It should be pointed out that the size of the school needed to provide a given range of optional courses is reduced by higher retention and smaller classes. Moreover, teachers can provide flexible programmes in quite small schools if they so desire.

8.42 The case against a single type of secondary school rests on practical rather than educational arguments. As the case was presented to us, the main considerations are as follows:

(a) The classic arguments in favour of the comprehensive school do not apply in South Australia since each type of school caters for the whole range of ability and there is open choice between them where both types exist. In these circumstances, insistence on a single type of secondary school is purely doctrinaire. The Education Department is pursuing a policy of "comprehensiveness without the comprehensive school". This is shown in the inclusion of internally examinable courses in high schools and of Public Examinations Board courses in technical high schools. There has also been some broadening of subjects available to academic streams in the early years of high school, enabling all students to do some art and a social science. Schools are grouped to facilitate movement between school types and

¹⁰ See R. Wiseman, *The Comprehensive High School for South Australia*, a report to the South Australian Institute of Teachers, 1969.

to allow for some groups of high school students to take advantage of the wider craft offerings in a technical high school within their group, and vice versa. In some areas this possibility has been actively exploited.

(b) A single school type may be desirable, and, if secondary schooling were being provided *de novo* in present circumstances, it might well be organised in a single school type. However, in the situation which exists, the conversion of all schools to enable them to provide the same range of courses, to convert single-sex schools into co-educational schools and to provide the full range of craft courses in high schools would involve the expenditure of millions of dollars. It would also involve finding larger numbers of general academic teachers, already in short supply. Unless post-fourth-year schooling were organised in separate schools, the provision of matriculation classes in all schools would be uneconomical in its use of highly trained staff, even if sufficient numbers could be recruited.

(c) The size of many secondary schools, particularly in country areas, is such as to make a full range of courses within them impractical.

(d) The building programme is already committed three years in advance on the basis of separate school types. The next round of schools planned will all offer a full range of facilities.

8.43 There is, in effect, no difference of opinion concerning the desirability of a single secondary school type between advocates and opponents of reorganisation. The question at issue is not future developments but the practicability of the reorganisation of existing schools. No top-level organisational changes would be required, as all secondary schools are now under a single directorate. Replacement of a high proportion of the buildings of secondary schools, at present housed in "temporary" buildings as additions to a permanent core, will in any case be required in the near future, as will the replacement of a number of old buildings housing the older of the single-sex technical high schools. We accept the desirability of a single type of secondary school providing a full range of courses and facilities, at least in the metropolitan area and larger country centres. The question of secondary education in area and special rural schools we defer for later discussion. The two separate school types and the existence of sex-segregated secondary schools we regard as reflections of past social conditions without relevance to present needs. The means by which the changeover can be made will vary from area to area and will need to be worked out in conjunction with plans for rebuilding. Where single-sex secondary schools are situated close to each other and their combined size would not be excessive, general subjects could be simply arranged in mixed classes by placing junior classes in one school and senior classes in another. Extra craft facilities may not always be needed, pupils transferring for half days to the school which has the facilities they require. Extra craft facilities will be required in high schools, but, if expenditure on them is seen not as

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an extra grafted on to academic courses but as an integral part of the offering of the school, important for those who will enter non-manual as well as for those entering manual occupations, their provision will be regarded as being in the same category as the provision of libraries and science facilities. Such extra expenditure we regard as necessary. There may be a case for some secondary schools providing special facilities for those showing special talents or interests in particular directions — for example, in music or art or home management. Such variety would be desirable, provided that such schools were open to all children to whom they were geographically accessible, and not zoned in their intake.

8.44 Support for co-educational schooling at secondary level has been implied in our previous discussion. The drawing together of the social roles of the sexes in modern society has been the main basis on which we have advocated that boys and girls should be educated together. If it is to be undertaken at all at school level, preparation for housekeeping and parenthood should in modern conditions be regarded as equally relevant to boys and girls. On the other hand we think that schools should not suggest that technical courses in the fields of electronics, woodworking, engineering and so on are unsuitable for girls, or that humanities are more suitable to the one sex and science and mathematics to the other. All that the school has to offer should, in our view, be equally open to both sexes. It may be the case in the earlier stages of a wider choice that few boys will choose home management in preference to woodwork, for example; but in countries where all options are equally open to both sexes gradual changes have occurred, the possibility of which we regard as desirable.

8.45 Another argument favouring mixed schools and classes is the opportunity they present of learning to regard members of the other sex as individuals and workmates rather than simply as sex stereotypes. We have found it a common practice in secondary schools which are nominally co-educational for classes in the junior secondary years to be sex-segregated and social relations between the sexes at all levels to be curtailed. Such arrangements contribute to setting the schools apart from life as it is lived beyond them, and, in our view, do not assist the development of social maturity in either sex. In this area, as in the internal organisation of schools in general, we regard decisions as being appropriately made by staff in consultation with students; we wish only to declare our support for certain lines of action without seeking to impose them.

8.46 Accordingly, we **RECOMMEND** that:

(a) *The present system of high and technical high schools should be replaced as soon as practicable by schools of a single type, each providing a full range of courses and allowing a pupil to progress in different subjects at different rates where appropriate. Where it is*

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considered desirable, particular schools should be permitted to specialise in particular subject areas. In the latter case the intake into the school should not be zoned on the basis of residence.

(b) The present track system should be re-examined in the light of the preceding recommendation.

(c) All secondary schools should be co-educational.

Length of Secondary Schooling

8.47 We have already rejected the proposition that the age of entry to secondary school should be lowered. We have also considered whether a further year should be added at the end of secondary schooling to enable those going on to tertiary-level study to be better prepared for it. Present variations between the Australian States in length of secondary schooling and average age of students in their final year are set out in Table 8.6. The average age of final-year students in South Australia was somewhat below the Australian average in 1969, but the addition of a further year would place it considerably above that of other States.

Table 8.6

LENGTH OF SECONDARY SCHOOLING AND AVERAGE AGE OF FINAL-YEAR PUPILS

AUSTRALIAN STATES, AUGUST 1969

	Years of Secondary Schooling to Matriculation	Average Age in August of Final Year (years and months)
New South Wales (and A.C.T.)	6	17-10
Victoria	6	17-8
Queensland	5	17-4
South Australia (and N.T.)	5	17-5
Western Australia	5	17-3
Tasmania	5 and 6	16-9 and 17-8

Source: Commonwealth Department of Education and Science.

8.48 We appreciate that an extra year of schooling might enable students entering the universities to be better prepared for their studies there. This would be especially so if the final year allowed for an initiation into self-directed learning of the type required for university success. However, the final year would not allow for the more leisurely study of a limited number of subjects in depth unless it were a post-matriculation year. To provide a year of post-matriculation study would be to revert to the arrangement operating before the new matriculation was introduced, so providing two points of entry into university courses. Experience has shown such a situation to be undesirable from the point of view of university programmes. We think that changed methods of examining for university entry which encouraged the development of higher-level intellectual skills rather than mastery of specific content would make a more important contribution to the development of learning patterns which would help

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to ensure success in university courses than would an additional year at school. If the Matriculation examination were deferred to a later year, this would probably result in an unnecessary retention in school of those not intending to take university courses. As retention rates rise the proportion of students retained into a final year of schooling who are taking courses other than those leading to university matriculation will also rise. The end result of delaying entry into university could well be to raise the requirements for entry into teachers colleges and other non-university tertiary institutions, as has happened since the Matriculation examination has been moved from fourth-year to fifth-year secondary level. The proposition that an extra year be added found little support among those giving evidence to us. We concur with the main grounds advanced for rejecting it, which were the unsuitability of the school atmosphere and patterns of discipline for older students and the difficulties already being encountered in providing well-qualified staff for fifth-year students.

Upper Age of Compulsory Attendance

- 8.49 School attendance is compulsory in South Australia until the end of the term after the pupil's fifteenth birthday. We have considered whether the upper limit of compulsion should be raised. On the one hand, it was argued before us that increasing retention rates made such a move unnecessary. On the other hand, some few of those with whom we spoke supported longer compulsory schooling on the grounds that it would oblige parents who did not regard schooling as sufficiently important to keep their children at school beyond the compulsory age to give them increased opportunities for schooling. On balance, we think that rising retention, as outlined in Chapter 5, makes any legal changes redundant, and that no useful purpose would be served by obliging pupils to stay unwillingly at school. We think that the accessibility of further education at any later stage in life when people may desire to take advantage of it is a matter of greater importance than a raised school-leaving age. For these reasons we are not recommending that any immediate change be made in existing arrangements.

Senior High Schools

- 8.50 In some other countries and States separate senior high schools are organised for those in the one or two final years of schooling. Such an arrangement has advantages. It facilitates the development of patterns of study and discipline more appropriate for the older students for whom it caters. Such patterns would prepare students for tertiary study. It might enable the more effective use of highly qualified staff and of specialised facilities such as libraries and science equipment. It could make possible more active social life and a more stimulating intellectual environment by assembling together larger numbers of senior students and senior teachers. The possi-

bility of exchange of staff between senior secondary and tertiary institutions might be promoted, and teaching could thus become more attractive to academically able people. Sandwich courses which combined school with periods of employment could be more easily arranged in separate senior high schools. The idea of matriculation courses as a continuous two-year period of study might be encouraged, and the more adult arrangements possible in such a school might make continued schooling more attractive to those not desiring to matriculate. The separation of some senior classes could make the rearrangement of secondary schooling at junior levels on comprehensive lines easier by adding an element of flexibility to the situation. The argument that there would be economies in the use of highly qualified staff if senior classes were concentrated in separate establishments ceases to have validity as pupil retention rises. Most individual schools have senior groups more than large enough to occupy fully the qualified staff available, as illustrated in the detailed study of class sizes at fifth-year secondary level given in Chapter 6. However, there are also objections to moving the academically well-qualified and experienced staff into separate institutions where they would not be available to teach or advise at junior levels. The fragmentation of staff into junior and senior levels would limit the breadth of experience gained by individual teachers and might promote a hierarchy regarded as undesirable. A further break in schooling would be introduced with its attendant problems of articulation, and the leadership and example of senior students would be removed from junior students.

8.51 We are of the opinion that the Education Department should give consideration to the establishment of one or two senior high schools, within the context of change to a single type of secondary school, and that the problem of providing senior secondary education in country areas could be eased by the organisation of some schools of this type if suitable residential accommodation were also provided, but we make no specific recommendation on this matter.

SCHOOL SIZE

8.52 Table 8.7 gives details of the size of government schools in South Australia in 1969. Both primary and secondary schools in South Australia exhibit a wide range of enrolments, from the small and isolated country school of six or so children, to schools of more than 1,000 in the metropolitan area, Mount Gambier, Port Lincoln and Whyalla. At August 1969, 16 secondary and 22 primary schools each had a student population in excess of 1,000. In 1968, the latest year for which interstate comparison is at present possible, the number of very large government primary schools containing more than 1,000 pupils constituted 6.2 per cent of all government primary schools, which percentage was three times greater than in New South Wales, the next highest. Although this number fell in 1969 to 4.6 per cent in South Australia, it is true that many primary children receive their

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education in very large schools. In the government secondary sector, however, where all States appear to accept larger sizes, South Australia is not exceptional among the States in its percentage of schools with more than 600 students; in schools of more than 1,000 students it is exceeded by New South Wales, Queensland and Western Australia. In the non-government sector no essentially primary school exceeded 600 students, the two largest secondary schools had between 601 and 800 students each, and no school containing both primary and secondary students had more than 1,000 students.

Table 8.7

SIZE OF GOVERNMENT SCHOOLS

SOUTH AUSTRALIA, AUGUST 1969

	Essentially Primary	Essentially Secondary	All Other (a)	Total
Less than 21	59	—	8	69
21 to 35	57	—	21	65
36 to 100	117	—	12	138
101 to 200	41	7	11	60
201 to 300	28	7	12	46
301 to 400	20	10	9	42
401 to 600	49	20	4	78
601 to 800	51	22	—	77
801 to 1,000	32	11	—	43
1,001 to 1,200	12	4	—	16
1,201 to 2,000	10	12	—	22
Total	476	93	77	656

Source: Education Department.

(a) Special schools, area and special rural schools, correspondence school.

8.53 In 1969, over one-half of all students in high schools in South Australia, and almost two-fifths of those in technical high schools, received their education in schools containing more than 800 students. In the government primary sector, if we exclude area and special rural schools, three-fifths of the children were in schools with more than 600 enrolments, and over 35 per cent were in schools of between 800 and 1,700. At the other end of the scale, 20 per cent of all schools and nearly 24 per cent of schools other than secondary each had 35 or fewer pupils. Schools containing 100 or fewer pupils constituted 42 per cent of all schools. The most common size of school was that having 36 to 100 pupils. Most primary pupils, then, received their education in schools having more than 600 pupils, most secondary pupils in schools exceeding 800, but, except in "essentially secondary" schools, there were large numbers of small to very small institutions.

8.54 Little evidence was placed before the Committee which would establish a desirable upper limit for enrolments in a single school, although a number of teachers and headmasters interviewed con-

sidered that many schools, especially primary schools, were too large. Research evidence indicates that the size of an organisation affects the personal attitudes of the individual members and alters the rate of participation of these members in the activities of the organisation. A study of a number of high schools in the United States of America¹¹ showed a significantly higher level of pupil participation in the general affairs of the school and in its extra-curricular activities where pupil numbers were smaller. Headmasters were concerned that schools should not be so large as to make it impossible for each child to be personally known to them. Similar considerations apply to size of staff; the working unit is likely to be more effective where staff numbers are small enough for common policies to be hammered out effectively and individual strengths and weaknesses taken into account. None of these generalised statements helps us to establish a precise figure for the size of schools. In addition, various organisational means exist for breaking down very large schools into vertical or horizontal units within which individuals may be enabled to feel significant and be known to each other.

8.55 The arguments advanced for large schools of all types are concerned in the main with economies in providing the necessary facilities, with simplified administration procedures, and, for secondary schools, with the desirability of supplying a reasonable degree of comprehensiveness both in courses and in curricula at all levels. The arguments advanced for smaller schools are concerned with the undesirable effect of large schools upon the child or upon the group, with the reactions and the participation of the children in the school situation and with the necessity to make available to every child the pastoral care to which he is entitled. The child should feel secure in the system and not be forced to regard himself as an insignificant part of a large and impersonal machine. He should, particularly when in his early years, but nevertheless at every age, know where help and advice are readily and sympathetically available. For this to take place he should know the staff, and the staff should know not only his name and class but something of his home background, his interests and his temperament. From this point of view it would probably be desirable that a school for young children should be small; and probably the older the pupil, the larger the size of the school may satisfactorily become. Current opinion sets the maximum desirable size of a secondary school somewhere between 600 and 1,000 children, and it can be presumed that primary schools should be smaller than this.

8.56 The Crowther Report¹² considered that a satisfactory range of courses could be provided in five-year secondary schools of 600,

¹¹ R. Barker and P. Gump, *Big School, Small School*, Stanford University Press, 1964.

¹² 15 to 18, Report of the Central Advisory Council for Education, H.M.S.O., 1959, Vol. I, p. 71.

having an intake of 120. In Scotland the Advisory Council of Education regarded 800 as a desirable number for a secondary school providing a full range of courses. In New South Wales, the Wyndham Committee in 1957 was of the opinion that an intake of 200 in first year was necessary in the conditions of retention then prevailing to provide a wide enough range of options in the first year without uneconomical use of staff. This would require schools of a size exceeding 600 to 700. Retention rates influence the size of intake needed to provide a full range of courses to the end of secondary schooling, as does size of class. Comprehensive programmes are at present operating in schools of 600 in New South Wales. On the basis of retention rates in South Australia in 1970, an intake of 200 could be expected to yield 45 final-year pupils, requiring a school size of somewhat over 700. Lower retention rates in particular areas would require a larger intake there, and areas of higher retention rates a smaller one to produce this number in final year. It can be said that very large secondary schools, for example those containing more than 1,000 pupils, of which there were 16 in South Australia in 1969, are not necessary to provide a full range of courses in a five-year system. Since the impersonality of relationships within an institution increases with its size, we think that secondary schools exceeding 1,000 pupils should be eliminated, and consideration given to reducing the maximum size still further. Such a reduction should not present any serious accommodation difficulties, except in the acquisition of land, because of the very high proportion of "temporary" premises needing replacement.

8.57 In the case of primary schools, no considerations of retention and course range arise, so that greater emphasis can be given to personal factors. We think it particularly important that a young child should not be allowed to feel an anonymous member of a large impersonal organisation. Experienced primary headmasters, in discussions with us, supported the view that 600 children was the maximum with whom they could expect to have some personal acquaintance. At present 105 primary schools in the State exceed this size. The larger schools would have a separate infant school. We have already said that, in our view, such a separation is educationally undesirable, but the corollary is that the overall size of primary schools would need to be smaller. We realise that primary enrolments in particular areas fluctuate with the changing age distribution of the population in them. This creates difficulties because young children need, wherever possible, schools close enough to be easily reached on foot, and buildings will constantly be redundant or less than fully used in areas where they were once required. Most big primary schools are at present largely, sometimes wholly, accommodated in temporary buildings, and this eliminates the problems of building redundancy when primary school population falls. We should certainly not want to advocate that they continue to be housed

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in such a make-shift way, but there are arguments favouring a design for primary schools which, while comfortable, is not regarded as permanent in the sense of expecting that it will last, say, 100 years. Educational processes, as well as population, change over time.

8.58 While there is no clear evidence to suggest that any particular size of school is optimal for all conditions, we are convinced that, in present conditions, the size of many South Australian schools is excessive.

8.59 Accordingly, we **RECOMMEND** that:

(a) *Planning should proceed on the basis of eliminating primary schools of more than 600 pupils in the total span of their seven grades.*

(b) *Secondary schools should not exceed 1,000 pupils, and their maximum size should be nearer 800 wherever possible.*

SPECIAL PROBLEMS OF RURAL AREAS

8.60 Regulations permit the Minister to establish a primary school if it appears likely that there will be an average annual attendance at it of eight or more children. A primary school may be closed:

(a) if the enrolment falls below eight, and there is no satisfactory evidence to indicate that the enrolment will increase to eight or higher within three months, or

(b) if the Department is able to provide satisfactory daily transport to and from another school within reasonable distance.

Table 8.8

SIZE AND NUMBER OF ONE-TEACHER AND TWO-TEACHER SCHOOLS

SOUTH AUSTRALIA 1969

No. of Pupils	No. of One-Teacher Schools	No. of Two-Teacher Schools
6-10	6	—
11-15	25	—
16-20	27	—
21-25	15	—
26-30	13	12
31-35	2	11
36-40	2	10
41-45	—	11
46-50	—	15
51-55	—	11
56-60	—	8
61-65	—	3
66-70	—	1
All Sizes	90	82

Source: Education Department.

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8.61 In 1969 two-teacher schools numbered 82 and their enrolments varied from 26 to 69. The mean enrolment was 46, the median 44. Twelve of these schools were classified as rural, and were managed by a teacher-in-charge. There were 90 one-teacher schools with enrolments from six to thirty-six. Their mean enrolment was 15, the median 18. All but four of them were classified as rural schools. Education Department policy is to provide two teachers when the enrolment is 30 or more. The one-teacher school served its purpose in times of slow transport and isolation, but times have changed and parents are becoming more willing to accept the transport of their children, except perhaps for the very young ones in grades I and II. This is shown in the following figures: in 1967 20 one-teacher and two two-teacher schools were closed, and 11 one-teacher and five two-teacher schools in 1968. The size and number of one-teacher and two-teacher schools still operating in 1969 are shown in Table 8.8.

8.62 Some of these schools are situated in remote areas, where consolidation is impossible. Their closure would require children attending them to board away from home or to enrol with the Correspondence School aided by the School of the Air. A number of small schools, however, are within reasonable distance (some only three miles) of larger primary or area schools. The wishes of the parents and the local community are important in preventing the closure of small schools, although their children would in many cases be better served educationally in a larger school within reasonable distance of them. Their attachment to a school which is often a social centre and which their own efforts have equipped and maintained is understandable, but present arrangements regarding school closure appear to give it undue weight. In practice a school having an enrolment above eight is not closed unless the parents request the Minister of Education to close it. If the establishment of an area school would involve the closing of a number of small primary schools, the Department discusses the position fully with the various school committees, district councils and local community, and if possible obtains their agreement.¹³

8.63 Small schools have a number of advantages. In them individual progression and the development of independent work which we have advocated for larger schools are, perforce, a reality. There is a sense of belonging to a community small enough for each individual to be valued and important. Older children are required to help the younger, developing social responsibility. Teachers are able to be part of the general community, bringing about a closer relationship between home and school. In recent years, however, the problems of small schools have grown considerably, owing in part to the increasing awareness by the public generally of the need for modern amenities, and also because of the increasing complexity and rate

¹³ A considerable consolidation of smaller schools has recently been announced.

of change of the educational process itself. Many teachers in charge of small schools are in their first or second year of teaching, and have had little or no experience in larger schools where more professional help is available. They are, in addition, often poorly qualified. In 1969, 18 teachers in charge of small rural schools were unclassified, indicating a very low level of qualification. The task facing these inexperienced and often under-qualified teachers becomes increasingly demanding with the rapidity of changes in teaching methods and curricula. Changes must be assimilated which relate to seven grades rather than the one or two in which teachers in larger schools are expected to be competent. In our country visits we were impressed by the dedication and quality of individual teachers in one-teacher schools, but the more inexperienced required, in our view, greater professional assistance than is at present available to them. We shall return to this point later. Modern teaching methods require equipment which is expensive in relation to pupil numbers in very small schools. Adequate libraries, duplicating facilities, film projectors, television sets, and so on are needed. These facilities are in some ways especially important for children in isolated areas just because they are isolated and because their environment, though often rich in direct experience, may be intellectually very limited.

8.64 The educational advantages of schools larger than the present one-teacher schools and the many two-teacher schools are, in our view, considerable enough to justify the closing of such schools wherever their pupils can reasonably be accommodated in larger schools by consolidation. We should regard 15-20 miles of travelling as not unreasonable for even young pupils in the conditions of modern transport, provided that good roads exist. Even with consolidation, however, small and remote schools will remain. The disabilities relating to service in them, reflected in the high rate of turnover of their staffs (see Tables 6.39 and 6.44), should be compensated for, as recommended in Chapter 6, in order to make service in them more attractive. There remain problems apart from those of attracting and holding reasonably well-qualified staff and providing reasonable accommodation for them.

8.65 Extending the framework of discussion beyond one-teacher and two-teacher schools to the provision of education in more sparsely populated areas in general, including the provision of secondary classes in relatively small and remote special rural and area schools, we think that the main problems are:

(a) THE PROBLEM OF PROFESSIONAL ADVICE AND LEADERSHIP FOR INEXPERIENCED TEACHERS IN REMOTE SCHOOLS. This problem is not confined to one-teacher schools, but extends to teachers taking up their first appointment in schools in which they may be required to spend all

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or part of their time in secondary teaching where no other person is working in the same subject areas. Some of these teachers are, in addition, primary-trained. We think there are objections to sending inexperienced teachers to remote schools where no person experienced in the field is available for consultation, and that a period of internship in a larger school should be required before they are thrown so completely on their own resources. A system of "hub" schools operates, whereby schools within reasonable distance may call on a particular headmaster for advice and assistance. This is helpful where it operates effectively, but we believe that a headmaster having the supervision of several small schools would be a better solution. There would seem also to be a need for itinerant consultants prepared to spend at least a few days with inexperienced teachers in need of help in particular subject areas. In some parts of the State regional offices are the obvious focus for the organisation of such services. The services already exist, but they need to be provided on a larger scale if relatively or totally inexperienced teachers are to be sent to small and remote schools. Good professional libraries and resource centres whose services were available by mail would be of considerable assistance to teachers in remote schools. More assistance, whether locally or by mail, is required by the high proportion of young country teachers taking external courses.

(b) THE PROBLEM OF PHYSICAL CONDITIONS IN SCHOOLS AND RESIDENCES.

In some parts of the State climatic conditions are such that special provision is needed to offset them. Classrooms where the temperature may be 109°F and above were reported to us in areas where the school had no source of electricity. There are good arguments for combining a policy of consolidation with special grants for schools kept open in particular areas. Farms in the Eyre Peninsula area we visited had their own generators. Schools did not. The control of flies and heat costs money, but without it little effective education may be expected in certain periods of the year. The condition and size of teachers' residences are, we understand, the subject of a special Departmental inquiry. We do not wish, therefore, to comment on the matter in detail. Improvements are called for, and we hope that they will be forthcoming. There is a need for the provision of flats for single teachers in some country areas. Such flats would need to be of a mobile type which could be moved around in response to fluctuating demands. The expectation that teachers will board with local families must often be irksome to both parties, and we consider that teachers are entitled to a degree of privacy and a command over facilities for entertainment and study which are often absent from houses where board is available. In the interests of economy the provision of some facilities is limited to schools of specified sizes. The full expense of telephone installation and rental, for instance, is not met by the Department in the case of smaller schools, or in residences separate from the school. In the case of one-teacher schools, in particular, this

form of communication is essential both in home and in school in emergencies which may arise when a single adult is in charge of a group of children. We think that, while personal calls should be paid for by the teacher, all other costs should be met by the Department. There is also a need, in our view, for special assistance to remote schools in equipment for which a few parents, whose knowledge of educational matters may be limited, cannot be expected to provide. Libraries in one-teacher schools could often be described as pathetic in comparison with the range of reading available to a child in a reasonably large, adequately equipped primary school. Excursions which may extend the often restricted experience of children in remote schools may need to be subsidised, at least to the extent of an emergency fund which may be used to help children whose parents are unable or unwilling to meet costs.

(c) THE PROBLEM OF TRANSPORT. The Department provides school bus services where it is considered that the numbers travelling and the distances involved justify them. The transport provided may be by private contractor or by departmental buses. Where the numbers and the distances travelled are considered insufficient for the provision of transport at full departmental expense, consideration is given to paying a subsidy based on the number of children and on the distance of the route, the balance of cost being met by the families involved. The full costs of transport may be met where ten or more children are living three or more miles, with the majority of them living more than five miles, from a school. The tradition has grown up that the most distant family using the bus should board the teacher who drives it. Such an arrangement is often detrimental to the school tasks of the young teacher who arrives and leaves the school with his pupils. We accept the need for departmental assistance in transport, but we think that the money should be made available to parent bodies who should arrange for the provision of transport services by a private local contractor. The responsibility of providing drivers is not, in our view, the function of school staffs.

8.66 Now that basic levels of education have risen and the prospects of local employment are declining in many areas, the difficulties of providing education to an adequate level in more sparsely populated areas have increased. A four-year secondary course, culminating in an external or internal award, has become the expected minimum of education. Fifty years ago the basic level which it was assumed all would reach was the Qualifying Certificate, then awarded at the end of primary schooling. In more sparsely populated areas secondary education is available in the same school as primary, in area schools or special rural schools. The average number of secondary pupils per school in special rural schools in 1969 was 15; for area schools the average was 117. The provision of teachers with an adequate range of qualifications for teaching these secondary pupils is difficult, particularly in special rural schools where the numbers may be very

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small. The provision of specialists in every subject area is clearly impossible, even with the generous pupil/teacher ratios allowed by the Department in small schools.

8.67 We think that country people have the right to expect that education for their children to the end of fourth-year secondary level should be available without requiring that they board away from home. Every effort should be made to make this possible, where necessary with the assistance of the Correspondence School. Nevertheless, wherever it can be achieved without undue travelling, the secondary pupils in special rural schools would undoubtedly be better served educationally in an area school. There is a good case for providing special preparation for teachers in area schools with few secondary pupils, in the same way as some special preparation is available for teachers intending to teach in one-teacher schools. Primary-trained teachers whose academic preparation over a minimum three-year tertiary course had given them special strength in broad subject areas, such as the humanities or mathematics and science, would be well prepared, with some extra training specially directed towards working in small secondary schools, for teaching in such schools. Many are in fact now being used in this way, though without special preparation. The facilities of the Correspondence School are available for students in school, but are not, according to our observations, used in all cases where they would be advantageous. In those special rural schools which it is impractical to consolidate, and in area schools where the majority of pupils are in primary grades, we think it would be advantageous to staff the secondary section with primary-trained teachers, preferably graduates, who had had special training, of the kind referred to above, for teaching small secondary groups. Such teachers should be paid a special allowance as an incentive to undertake the special course, in anticipation of an appointment to small secondary schools, with the prospect of promotion later in the primary schools.

8.68 The Education Department in South Australia has, in our opinion, provided secondary education in more sparsely populated areas on a generous scale, particularly in view of the limited resources and staff at its command. In increasing numbers of country high schools matriculation classes are available, and the development of area schools has been important in bringing secondary classes to more thinly populated areas. Difficulties, however, continue to exist and are not readily overcome. While we think, as already stated, that education to fourth-year secondary level should be available without children having to leave home to get it, it will need to be accepted in some areas that if fourth-year classes are to be provided they will need to be courses taken through the Correspondence School with tutoring assistance from teachers. Such courses will generally be preferable to classes run entirely by ill-equipped teachers, and a full range of staff competent to take fourth-year secondary work is not likely to be available where there are fewer than 15 or 20 pupils in the fourth year.

8.69 For fifth-year study many pupils will still have to leave home. The Department pays a boarding allowance to pupils in any secondary year for whom no schooling is locally available. These allowances contribute towards, but do not meet fully, the expenses involved. There are often difficulties in finding board acceptable to parents who, fairly naturally, require some supervision to be exercised. There may well be a case, which our investigations have not been detailed enough to establish, for providing hostels in larger country centres, such as are available in some other States. The increased level of education now required establishes a new situation in respect to the secondary education of country students who are beyond the reach of country high schools with matriculation classes. It may even be preferable to consolidate at fourth-year level and provide hostels rather than attempt to meet demands locally. At fifth-year level the possibility is certainly worth investigating.

8.70 Accordingly, we RECOMMEND that:

- (a) Small one-teacher and two-teacher schools should be closed wherever accommodation in larger schools is available within a reasonable travelling time, and transport over good roads is possible.*
- (b) Wherever possible, secondary students at present in special rural schools should be enrolled at area schools.*
- (c) Secondary education to the end of fourth year should be locally available to all pupils, provided that it may be taken through correspondence lessons in schools where fourth-year numbers are insufficient to justify the provision of a full range of staff.*
- (d) In area schools and any remaining special rural schools where the majority of pupils are in primary grades, secondary classes should be taken by four-year-trained primary teachers (preferably with degrees) who have undertaken a special course to prepare them for such work in addition to having specialised in a broad subject area in their tertiary studies.*
- (e) Teachers appointed to small and remote country schools should in general have served for at least one year in a larger school where professional assistance is available.*
- (f) A single headmaster should be responsible for groups of small schools. Visiting consultants should be prepared to spend several days with new teachers, and resource kits should be made available.*
- (g) Schools in isolated areas and those where climatic conditions are particularly trying should be eligible for special grants to help in overcoming disadvantages due to locality.*
- (h) The organisation of transport arrangements, beyond the payment of a subsidy, should be the responsibility of parents in the area rather than of the Education Department.*
- (i) The questions of providing hostels for students and of providing mobile flats for teachers should be investigated.*

CHAPTER 9

Educational Facilities and Services

9.1 In this chapter we shall briefly survey the resources available to the school in addition to its normal complement of teachers. These resources are both physical and human, covering buildings and equipment, libraries and audio-visual facilities, specialist staff shared between schools in the fields of music and physical education and the services available through the Psychology Branch. The actual and potential uses of non-professional supporting staff employed within the school and usually grouped under the general title of ancillary staff will be discussed, and the income available to the schools surveyed.

ANCILLARY STAFF

9.2 The provision of supporting staff in the schools as a means of freeing headmasters and teachers for their tasks as educators and educational administrators is one of the most important and feasible ways of achieving a reasonably rapid improvement in the quality of education. Among the submissions made to us it was frequently mentioned. Well-qualified teachers are scarce and both their training and their employment are expensive. As they become more highly trained their use on tasks which could be performed by people without professional teacher training becomes less defensible. Any immediate and spectacular reduction in class size is unlikely, because teachers require a minimum of three years of tertiary education and training, but some relief to teachers would be available through the greater employment of supporting staff. Such people are immediately available and, given the money to employ them, the scale of their employment could be increased rapidly.

9.3 The main fields in which non-professional ancillary staff could be employed are:

- (a) In clerical work of all kinds, including record-keeping.
- (b) In activities involving the handling of money and the ordering and sale of books.
- (c) As laboratory assistants and technicians, in both science and language laboratories.
- (d) As library aides handling routine borrowing and clerical work.
- (e) In caring for, operating and repairing audio-visual aids.
- (f) As teacher aides both outside and within the classroom, typing and duplicating notes, tests, work sheets and supplementary reading material and undertaking routine marking.

- (g) In the maintenance of grounds and buildings.
- (h) In the supervision of playgrounds in primary schools.
- (i) In caring for sick pupils.

9.4 Within schools a high proportion of the teacher's time is spent in tasks of the kind listed above. Senior and relatively highly paid teaching staff are often in charge of bookrooms, which represent a sizable business undertaking in large secondary schools. According to a survey made by the Committee one school had annual book sales amounting to more than \$57,000. We were told that in large secondary schools up to ten sick girls a day may be cared for by the woman deputy head as the only member of staff sufficiently free from teaching duties to be available for this purpose. More important perhaps than the economic aspects of such uses of highly paid staff is the fact that the variety of teaching methods used in most schools is restricted by the absence of non-professional or para-professional support. Individualised learning requires a great deal of development of materials; visual aids are likely to be infrequently used by teachers too fully occupied with classes to undertake the necessary organisation of material. Teachers require more opportunities to plan and to work out the objectives of courses and curricula through consultation with other members of staff. Supporting staff would help to make time for this purpose available. In our view the development of wide-spread changes in teaching methods depends greatly on the provision of ancillary staff.

9.5 The scale of employment of ancillary staff in schools in September 1970 was as follows:

Clerical Assistants

Enrolment

50- 100	1 part-time (4 weeks a year for peak periods)
101- 200	1 part-time (10 hours per week)
201- 400	1 part-time (15 hours per week)
401- 600	1 part-time (30 hours per week)
601- 800	1 full-time
801-1,000	1 full-time plus 20 hours part-time per week
1,001-1,300	2 full-time
1,301-1,600	3 full-time
1,601-1,900	4 full-time

Laboratory Assistants

Enrolment of 350 with at least 20 science classes: 1 assistant
 Enrolment of 500 with at least 15 science classes: 1 assistant
 Enrolment of 750 with at least 30 science classes: 2 assistants
 Enrolment of 1,200 with at least 50 science classes: 3 assistants

Caretakers

Caretakers were employed in 58 schools in February 1970.

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9.6 The 1970-71 estimates provided for a limited expansion of appointments of ancillary staff, some of them in new fields. The main increases were:

Primary Schools

5 caretakers
10 teaching assistants for Aboriginal schools
20 teacher aides

Secondary Schools

20 library aides
20 teacher aides
20 caretakers
3 storemen
1 collator
1 film-booking clerk

The proposed appointments, spread over the whole system, amount to a very small increase, but the inclusion of new categories such as teacher aides is important. Inclusion in the estimates does not necessarily mean that the appointments will be made during the financial year. The Public Service Board must approve the employment of all labour other than teachers and weekly paid staff in schools, and a period of up to six months usually elapses between approval and appointment.

9.7 The teacher aides proposed will, in the first instance, be made available to schools with a high proportion of migrant children. They will act as general clerical assistants to teachers in the keeping of records, preparation of duplicated materials and so on. The use of teacher aides within the classroom raises contentious issues. Generally speaking, teachers have opposed the employment within the classroom of people without full professional qualifications. Such objections stem from past policies, the effect of which may with justice be described as dilution. For many years teachers were trained on an apprenticeship system as a preliminary to, or as a substitute for, formal education undertaken full time in specialist training institutions. Such young, poorly paid and ill-equipped teachers were frequently placed in charge of classes. Later, in the period of acute shortage of teachers in the 1950's, brief courses of training were given to recruits, some of whom had a minimal educational background. The placing of such people in charge of classes was regarded as a temporary expedient which all concerned are anxious not to repeat. It is important that, where staff who are less than fully trained are employed in ways which involve their use in the classroom, they should be seen as a means of raising educational standards and not as a substitute for improved pupil/teacher ratios. Registered teachers, as recommended

in paragraph 6.119, could be accepted as people who could delegate responsibility. The tasks to be delegated to aides can only be worked out by experience, but, provided that aides are always regarded as being under the direction of trained teachers, we do not see that any difficulties need arise. Changing patterns of teaching, involving work in small groups and with individual children, open up greater possibilities for the use of aides. In the words of the Plowden Committee:¹

As the whole school becomes more of a workshop for children, the distinction between help inside and outside the classroom loses meaning . . . The effectiveness and status of teachers will eventually be improved by their having assistants who can be used as they judge best.

Especially in primary schools, we think that the employment of aides who could help in the classroom as well as outside it would be advantageous in coping with individual differences and in allowing teachers to give more attention to the overall planning of their educational tasks. We therefore assume that assistance provided for teachers will be used in ways regarded by teachers as most effective whether within or beyond the classroom. The development of team teaching could usefully accommodate such aides.

9.8 The plans prepared by the Education Department for the National Survey of Educational Needs in 1970 did not envisage any increases in the establishment of clerical staff or laboratory assistants, but provided for the employment of additional categories of non-professional staff as follows:

Primary Schools:

A caretaker-gardener for schools with enrolments of 250 and more.

Maintenance staff for sports grounds.

Teacher aides on a basis of one for every five teachers employed.

Secondary Schools:

Bursars for schools with 1,000 or more pupils.

Caretakers for schools of 400 or more pupils.

Teacher aides on a basis ranging from one for schools with 200 pupils to four for schools with 1,400 or more pupils.

Library assistants for schools with 1,000 or more pupils.

Storemen.

Printing aides.

Groundsmen.

In addition to these categories, the proposals included the provision of extra professional supporting staff for teachers in secondary schools. This staff included counsellors-career advisers whom we shall discuss in the context of psychological services (see paragraphs 9.84–9.86) and teacher-librarians on an increased scale.

¹ *Op. cit.*, paragraph 921.

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9.9 We regard both the primary and the secondary scales of employment of ancillary staff as proposed in the National Survey as minimal, especially in the degree of clerical and general assistance which they would make directly available to teachers. The Plowden Committee (paragraph 923) recommended the employment of one aide for every two teachers in infant classes, and one for every four teachers of primary classes, with extra provision in priority areas. Such a scale we should regard as more appropriate for the tasks that they might perform. In smaller secondary schools, as suggested by the Education Department, a single non-professional worker might combine the functions of teacher aide, library assistant and laboratory assistant. While the amount of help within the classroom which aides may be able to give at secondary level may be small, the scope for their employment beyond it to assist teachers in duplicating, record-keeping, ordering and assembling equipment for audio-visual media, caring for sick pupils and so on is considerable. Routine marking of objective tests could be undertaken by aides, and useful assistance in the marking of essay-type questions in all areas could be gained by employing on a part-time basis well-educated people who were not necessarily trained teachers, allowing them where necessary to work at home. The level of assistance directly available to the teacher would, in our view, need to be greater than that suggested in the National Survey.

9.10 The employment of bursars to handle the financial affairs of larger schools, including the responsibility for the ordering and selling of books is, in our view, essential. Over \$100,000 a year may pass through the books of a large secondary school, including book sales, canteen receipts, subsidies, amenities fees and money raised by parent bodies. None of these responsibilities should be undertaken by teachers, especially in larger schools where the scale of operation of the bookroom now requires that a senior teacher be placed in charge, to the detriment of his professional work and development.

9.11 The increasing significance of the library, especially in those schools where it is developing into a multi-media centre, will require the employment of library assistants on a scale greater than that proposed. The increased use of equipment that needs servicing, such as video-tape apparatus, loop film projectors and overhead projectors, will inevitably require the employment of technicians, on a single-school basis where this is warranted, and on an area basis otherwise.

9.12 The employment of ancillary staff would be an economy. All the tasks which they might perform are at present performed by teachers, obscuring the actual cost involved in their performance. The Director-General, in a communication to the Committee, suggested a scale of employment of non-teaching staff of all types in a ratio of one to every three teachers, a higher ratio than that proposed for secondary schools in the National Survey. The National Survey

proposals would give a primary school of 600 pupils a non-professional staff of seven, including four teacher aides, i.e., for a teaching staff of say, 21, a ratio of one to every three teachers. The proposed secondary scale would give a secondary school of 800, employing about 42 teachers, a non-professional staff of nine, including two teacher auxiliaries, a total ratio of non-professional to professional staff of 1:4.6. The ratio appears low. We are particularly concerned with the scale of assistance directly available to teachers. Such aid would come from clerical provision in excess of the needs of school administration, and from teacher aides or auxiliaries, including laboratory assistants and other types of assistants directly available to teachers in the case of secondary schools. The Plowden Committee scale for primary teacher aides amounts to one to every three teachers over the range of infant and primary grades. Such a scale would require seven aides for the staff of a primary school of 600, raising the National Survey total to ten. We see no reason why a similar ratio would not be needed in secondary schools, where the scale of preparation, organisation and administration required of teachers is higher. This would require 14 aides, including laboratory and other assistants directly available to teachers, an increase of at least seven over the National Survey scale for our secondary school of 800, raising its ancillary staff to 16, or one to every 2.6 teachers employed. We strongly support the greatly increased scale of employment of non-teaching staff which the Department would implement if it had the means, and suggest that the overall scale be raised to two to every five teachers employed. We have included provision for such a scale of employment in our estimates of the future costs of education in Chapter 15. It is estimated that the average salaries of such staff would be three-fifths of average salaries of teachers. Ancillary non-teaching staff on this assumption would cost an amount equal to about one-quarter of the total expenditure on employing teachers.

9.13 If a considerable increase in the scale of employment of ancillary staff is accepted, some problems related to their employment will be:

- (a) The basis of choice between different types of assistance, and the scale on which it will be provided in individual schools.
- (b) The training required for such categories of workers as teacher aides and library assistants who will work closely with teachers in the educational process.
- (c) The training of teachers in the most effective ways of employing such assistants.

9.14 The immediate employment of ancillary staff on the scale that we have suggested would be unwise. Staff in individual schools will need to make a careful survey to establish what type of help could be most effectively used in the first instance, and then undertake

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a planned expansion. We think that, once the overall ratio of ancillary to teaching staff and its rate of expansion are established, individual schools should have, within certain limits, some freedom in the choice of types of ancillary staff most useful to them. To achieve the purposes for which ancillary staff are employed it would be necessary to lay down guidelines, stipulating, for instance, that book sales and the conduct of the bookroom should not be undertaken by teachers. Experimentation in the most effective way of using help should be undertaken, and the school budgets, which we recommend (see paragraph 17.48), should allow for some marginal employment of ancillary staff on the initiative of the school if staff and council are agreed that this would be preferable to other possible uses of part of its budget.

9.15 Teacher and library aides will in general be people, many of them probably married women, whose basic level of education would initially be of third-year or fourth-year secondary level. In Victoria there is a special training course for library aides for secondary schools. We suggest that a short induction course for teacher aides and library aides, lasting perhaps four weeks to a term, would be required. During this period they would be given an introduction to the working of a school typical of that in which they will be employed and learn such technical skills as will be required of them, including duplicating, operating tape-recorders and film projectors, the keeping of records and so on. People who may be required to work with infant and primary teachers in the classroom would require longer training of a somewhat different kind.

9.16 Both the pre-service and the in-service training of teachers will need to cover ways of using ancillary staff most effectively. This is more than a technical question. It includes a fundamental re-examination of the teacher's task, including attempts to determine what pupils can learn largely by themselves, what they can learn through explanation by others and what requires personal interaction between pupils and teachers, and between pupils themselves. The development of novel teaching patterns is possible, given a reasonable level of assistance to teachers.

9.17 Accordingly, we **RECOMMEND** that:

(a) The scale of employment of non-teaching staff in the schools should be greatly expanded. A level of two ancillary staff of all kinds to every five teachers employed seems a reasonable target.

(b) Establishments for the employment of different types of non-professional assistance should be worked out flexibly enough to leave to individual schools a margin of choice between types.

(c) Where short training courses are required for ancillary staff, they

should be conducted by the Education Department or by an appropriate college.

(d) In-service and pre-service education of teachers should include a study of the changes in teaching patterns which assistance from ancillary staff makes possible.

SCHOOL INCOME AND SUBSIDIES

9.18 Government schools in South Australia have sources of income beyond the sums allotted for education by Parliament. Control over the expenditure of these funds rests with headmasters and school committees and councils. A proportion of funds raised is subsidised on a dollar-for-dollar basis by the Education Department for purposes approved by it. The subsidy arrangement has long been under attack as a procedure by which inequalities existing between schools in different areas are compounded. In the past, almost all equipment used in schools, including library books, has been bought by parent bodies, some of it with assistance from subsidy. Hence, the more money parents raised, the greater the support given from government funds. This pattern is gradually changing, as will be discussed later.

9.19 In order to gain a picture of the income available for expenditure within schools, of the extent of its variation between schools and of its sources, the Committee undertook a survey of schools.² The survey covered the calendar year 1968. Of the replies received from 654 schools, 588 were sufficiently complete to be usable. Table 9.1 sets out total income for each school type and its distribution between various sources. Moneys raised by parent bodies and subsidies received accounted for about half the income available to schools; subsidies alone accounted for 27 per cent of the total. For each school type subsidies received were less than the amount applied for, being 73 per cent of the amount sought by all school types, and ranging from 60 per cent of the amount applied for by area schools to 84 per cent in the case of high schools. Over \$1,300,000 was raised within schools, exclusive of government subsidies. While in aggregate this may appear to be a substantial figure, it represents only about 2.5 per cent of the total recurrent costs of running the schools.

9.20 School income per pupil is more significant than total income. Table 9.2 gives average school income per pupil by school type, and some indication of the range within school types. This information relates, of course, to a single year which is not necessarily a typical one for particular schools. Secondary schools have a substantially higher income per pupil than primary or infant schools. Beyond the frequency with which country schools appear at both ends of the range no very consistent pattern emerges from this Table.

² For the questionnaire used, see Appendix C.

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Table 9.1

INCOME OF GOVERNMENT SCHOOLS (a)

SOUTH AUSTRALIA 1968

School Type	Total Income	Book Profit	Canteen Profit	Fees (b)	School Fund (c)	Parent Bodies	Subsidies Sought	Subsidies Received	Subsidy Received as Proportion of Total Income
	\$	\$	\$	\$	\$	\$	\$	\$	per cent
High	658,400	97,600	90,700	179,400	32,400	96,500	192,700	161,800	24.6
Technical High	291,900	40,800	47,500	64,700	28,600	31,900	120,100	78,500	26.9
Area	118,700	4,900	10,200	20,200	7,600	40,400	58,700	35,500	29.9
Primary	620,500	32,200	87,800	51,900	45,600	230,100	247,100	172,900	27.9
Infant	81,000	4,600	2,700	5,000	20,100	23,300	27,800	25,400	31.3
Rural	16,700	200	—	400	1,100	9,900	6,400	5,000	29.9
Special Rural	13,800	300	800	700	300	8,200	5,200	3,500	25.3
All Schools	1,801,000	180,600	239,700	322,300	135,700	440,300	658,000	482,600	26.8
Percentage of Total Income	100.0	10.1	13.3	17.9	7.5	24.4	—	26.8	—

(a) Based on returns from 588 schools.

(b) Sports, library and amenities fees only.

(c) Proceeds from voluntary subscription cards and money raised by pupils.

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9.21 The metropolitan area was divided into five socio-economic levels on the basis of the proportion of male bread-winners in State electoral districts who were employed as professional, technical and related workers or as administrative, executive and managerial workers at the time of the 1966 census.³ Among technical high schools, the two schools shown as having the lowest income per pupil in the Table were in areas with the lowest proportion of male workers in the categories listed. On the other hand, the two infant schools showing the highest income per pupil were also in these areas. Factors other than socio-economic ones influence school income. Among them are the age of the school, which affects the level of equipment built up on past income, and the enthusiasm of parent bodies. The size of the school influences the amount of money which must be

Table 9.2

SCHOOL INCOME PER PUPIL IN GOVERNMENT SCHOOLS (a)

SOUTH AUSTRALIA 1968					
School Type	Average School Income per Pupil	Lowest School Income per Pupil		Highest School Income per Pupil	
	\$		\$		\$
High	15.74	Victor Harbour	8.79	Booleroo Centre	43.79
Technical High Area	16.32	Burra	10.68	Glengowrie	45.07
		Angle Park Boys'	6.53	Gepps Cross Girls'	24.74
		Le Fevre Boys'	8.49	Brighton Boys'	30.10
		Swan Reach	4.62	Kangaroo Is.	16.04
Primary	8.74	Port Broughton	5.19	Browns Well	18.73
		Mount Pleasant	1.55	Mount Torrens	29.49
		Grange	1.69	Woods Point	29.52
Infant	5.97	Hincks Ave.,		Alberton	6.30
		Whyalla	1.07	Mansfield Park	6.98
		Elizabeth West	1.32		
Rural	3.71	Mount Wedge	1.27	Willalo	26.60
		Verdun	1.32	Koppio	32.27
		Wirrulla	5.69	Andamooka	27.35
Special Rural	16.08	Elliston	7.31	Cooper Pedy	30.77

(a) Including subsidies.

raised per pupil to provide certain equipment used by the whole school, as does the number of families from whom it can be raised. Small schools figured in both the highest and the lowest groups ranged according to income available to the school per pupil enrolled. Table 9.3 gives a fuller analysis of the income per head in metropolitan primary schools, grouped according to the proportion of the male work force who were in the census categories listed above in the area where the school is located. The metropolitan area is confined to State electoral districts regarded as metropolitan, and excludes such outlying districts as Salisbury (school income per primary pupil \$1.86) and the primary schools in Elizabeth (income per pupil ranging from \$3.00 to \$3.60). The variation between areas in average school income per pupil was perhaps smaller than might have been expected, but,

³ See Appendix D.

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among schools covered, those in the lowest socio-economic area had a higher proportion of schools among those showing low incomes per pupil and a smaller proportion in the group whose incomes per head were \$6 and above than any other area.

9.22 A wide range of responsibility in the provision of equipment, in the maintenance of ovals and grounds and in the construction of such items as swimming pools and halls rests with schools, financed from their own incomes assisted by subsidies from the Education Department. Of recent years the Department has extended its responsibilities in relation to the setting-up of new schools. The grassing and reticulation of playing fields and ovals for such schools are now covered by State funds, and foundation grants for equipment, including library grants, are made to them. New buildings will include an indoor assembly area, complete with stage and dressing-rooms, and a centre for use by fifth-year secondary students.

9.23 The maintenance of all ovals and playing fields, including the provision of tractors and mowers for this purpose, is the responsibility of the school, assisted by subsidy. In the 1970 budget, some grants were made to assist the schools in the labour costs involved in this maintenance. These grants, totalling \$85,000, range from \$50 to \$750 per school according to enrolments. A limited range of teaching aids is provided by the Education Department, but most equipment, including television sets, radios, tape-recorders, physical education apparatus, duplicating facilities, film projectors, pianos and other musical instruments and library books are provided by parents, assisted by subsidy. Certain items of secondary equipment have been made available through Commonwealth science and library grants, as mentioned elsewhere.

Table 93
SCHOOL INCOME PER PUPIL IN GOVERNMENT PRIMARY SCHOOLS (a)
BY SOCIO-ECONOMIC LEVEL
METROPOLITAN ADELAIDE 1968

	Socio-Economic Level of Area					All
	Lowest	Fourth	Third	Second	Highest	
Less than \$3.00	4	2	1	—	—	7
\$3.00-\$3.99	8	2	1	3	1	15
\$4.00-\$4.99	3	4	2	3	4	16
\$5.00-\$5.99	5	6	4	—	3	18
\$6.00-\$6.99	5	—	6	4	3	18
\$7.00-\$7.99	—	3	2	3	1	9
\$8.00-\$8.99	1	3	1	—	—	5
\$9.00-\$9.99	—	—	1	1	1	3
\$10.00 and over	—	1	—	1	1	3
Total	26	21	18	15	14	94
Average School Income per Pupil	\$4.61	\$5.81	\$6.18	\$6.17	\$6.06	\$5.65
Percentage with Income per Pupil of \$6.00 and above	23	33	55	60	43	40

(a) Including subsidies.

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9.24 Money raised by a school committee, council or other approved body may be subsidised at the rate of dollar for dollar. The approval of the Director-General for the object and the amount of subsidy must be obtained before any expense exceeding \$20 is incurred. The application for the subsidy must be made by the committee or the council, the material purchased becomes the property of the Minister, and the head teacher is responsible for its proper care and safe-keeping. There are, at present, three categories of subsidies, as follows:

Section I: Library books, physical education equipment, teaching aids, etc.

Section II: Special projects, such as oval developments, broadcast equipment, etc.

Section III: Major capital works (not including alterations).

9.25 In the budget each year the Government sets aside from revenue an amount for subsidy purposes included in Sections I and II. Table 9.4 shows the grants which have been made in recent years for these purposes.

Table 9.4

SUBSIDY GRANTS TO GOVERNMENT SCHOOLS (a)

SOUTH AUSTRALIA 1965-66 TO 1970-71

	1965-66	1966-67	1967-68	1968-69	1969-70	1970-71
	\$	\$	\$	\$	\$	\$
Primary Schools	224,700	229,100	231,600	229,000	312,400	311,200
High Schools	156,800	154,600	155,400	154,000	173,700	171,300
Technical Schools	79,800	80,100	79,500	80,000	82,000	84,800
Area Schools	37,200	40,800	43,700	41,000	60,200	64,000
Total	498,500	504,600	510,200	504,000	628,300	631,300

(a) Excluding major capital works.

9.26 Capital works such as halls and swimming pools are included in Section III and are assisted from loan funds. Upper limits are set on the amounts which may be granted, approval for plans must be obtained from the Public Buildings Department, and applications must be lodged one or two years in advance. Difficulties arise because applications for grants will be considered only if the school can show that its portion of expected costs is in hand. The Department has recently agreed to construct shells for canteens in all schools, leaving the internal equipment to school bodies, and to provide structures for use as assembly halls, as previously mentioned.

9.27 The whole principle of relying so heavily on parental contributions to equip schools and to provide what may be regarded as essential parts of their capital equipment has long been questioned.

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Apart from the inequalities between schools which it may occasion, it results in a general level of physical provision which is low in relation to modern views regarding the scope and nature of education. In the case of swimming pools and halls, for instance, a single generation of parents has been required to meet half the cost of a facility which their children will use for only a limited period. To meet this objection, the Government has given approval for school bodies to borrow money under Government guarantee to meet the cost of major works, enabling repayment over a period of years.

9.28 The arguments which may be advanced in support of the subsidy system are twofold. It somewhat reduces the demands made on public funds to equip and run the schools, and places part of the burden on those using the service. It has also been regarded as an important means of involving the parents and citizens in the work of the schools. Given the task of raising money, parents have a focal point for organisation, a means of contributing to the standard of education their children receive and some say in determining directions of development within schools through their control over the expenditure of a portion of school funds. However, the savings achieved through the provision of equipment on subsidy are very small in relation to the total cost of education, except so far as the operation of the system succeeds in reducing demands. The encouragement of parental contribution does have some desirable results, but by the emphasis it places on material provision it may limit the horizons of parental concern with education. The interest of parents in the schools could be preserved in the absence of subsidies by allowing them to add to essential equipment provided by the Government and by giving committees and councils broader powers, as we recommend in paragraph 17.58. The retention of subsidy methods of finance for such items as physical education equipment, musical instruments and audio-visual equipment is a relic of the days when all such education expenses were a charge on parents. In many countries assembly halls, cafeterias, indoor gymnasia and so on are all regarded as basic in the same sense as we have been accustomed to regard classrooms.

9.29 Victoria has recently announced its intention to replace the subsidy system for school equipment and grounds maintenance by school budgets, which we also recommend. The Education Department in South Australia favours the provision of equipment regarded as essential by modern standards out of State funds, because the scale on which equipment is now required greatly surpasses the range which can be matched on a dollar-for-dollar basis by parents. Details of its proposals are included in the following section of this chapter (see paragraphs 9.34-9.36). In our view, the provision of the buildings and equipment necessary for education, and of the cost of their maintenance, should not be related to the school's capacity to raise income.

9.30 Accordingly, we **RECOMMEND** that:

The subsidy system should be discontinued. Buildings essential to the operation of the school and the cost of maintenance of grounds should be provided out of public funds, and the budgets to schools which we recommend in paragraph 17.48 should include amounts to cover the cost of all equipment regarded as necessary for modern educational practice.

BUILDINGS AND EQUIPMENT

9.31 The school building programme covers the provision of extra buildings to accommodate increases in the school population and the replacement and upgrading of old and temporary buildings. Over the past period the increase in temporary buildings has been such that, according to a communication to us from the Director-General, over 40 per cent of classrooms in South Australian government schools are temporary timber constructions. The replacement of older obsolete buildings, particularly in inner suburban areas, is in many cases urgent, and here the problem of acquiring land to extend seriously inadequate playing areas presents difficulties.

9.32 On our estimates of pupil numbers, 41,200 new places will be needed in primary schools between 1970 and 1981, and 21,400 in secondary schools. The present costs per pupil place as set out in the National Survey of Educational Needs are \$612 for primary schools and \$1,300 for secondary schools. To these should be added allowances for land, furniture and equipment. In Chapter 15 we make these allowances, which raise the cost per pupil place to \$700 for primary schools and \$1,450 for secondary schools (see paragraph 15.15). The cost of providing the additional places on this basis would be \$60m. at present prices. To this must be added an allowance for replacement of obsolete and temporary buildings now being used. We were informed that approximately 100,000 places in primary schools and 30,000 in secondary schools were in need of replacement at an estimated cost of \$114m., making a total of \$174m. over the 11-year period to 1981. The standard of new school buildings, especially of those primary ones designed on the concept of flexible units, is impressive. However, cost estimates are based on standards which make no allowances for halls which might double as gymnasias, and in our visits to schools we were impressed by certain other general deficiencies which were also raised in submissions to us.

9.33 The most important of these relate to staff amenities and to the provision of luncheon facilities for pupils and of halls which might also be used as gymnasias in established schools. Staff rooms provide no separate desks or quiet place where staff in secondary schools may work in spare periods. There is also need for additional

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rooms which could be used for such purposes as parent-teacher interviews. The community does not yet accept the need for facilities which would enable pupils to eat their lunches in conditions which would be regarded as standard in industrial establishments of comparable size.

9.34 The Education Department has since 1967 accepted the responsibility of providing some equipment for new schools. Such grants help to overcome the disabilities of new schools which had previously to wait for the building-up of funds by parent bodies. However, the Department considers that a much wider range of equipment than at present provided is needed in new schools and that the demands of modern educational methods require that equipment in established schools should be raised to a new level. It believes that for primary schools equipment covering science, music, mathematics, physical education, library books, art and craft, and general educational aids such as duplicating apparatus should be provided as well as equipment now regarded as necessary in visual aids. The cost for each new school would be some \$15,000 at present prices, and the cost of raising established schools to the new standard is estimated at nearly \$6m., or \$37 per primary school pupil enrolled in 1969. To equip new schools and upgrade old ones would, on the Department's estimates, cost about \$11m. over 10 years.

9.35 For secondary schools the estimated cost of supplying essential equipment is somewhat lower than it would otherwise be because of the assistance gained through Commonwealth science and library grants. To cover equipment for physical education and music, audio-visual aids and apparatus for language teaching, grounds equipment and general teaching aids it is estimated that the cost would be \$20,000 for each new school at current prices. According to the Department's estimates, to upgrade existing schools to new standards over a period of four years at about \$10,000 each and to allow for increasing sums to be spent on maintenance of equipment and grounds would, together with the cost of equipping new schools, amount to about \$4m. over 10 years.

9.36 It is difficult to estimate with any accuracy the likely cost of supplying equipment over a period as long as 10 years, during which changes in technology and teaching methods are likely to influence what is regarded as necessary. If the total costs estimated by the Department as being necessary for this purpose are spread evenly over the 10-year period, they amount to little more than \$7 per pupil per year, on the basis of 1969 pupil numbers and at present prices. It is desirable, however, that money should be available to upgrade old schools in a shorter period.

9.37 We accept the Department's estimate of the scale on which replacement of buildings will be necessary, since the rapid increase

in pupil numbers over the past period has resulted in the use of so many temporary buildings, and there are undoubtedly many schools which the passage of time and changed standards have rendered fit only for demolition. The housing of additional pupils is an inescapable expense. We are very conscious of the importance of adequate equipment in modern educational methods, and we have already recommended that it should be provided out of public funds as part of necessary educational expenditure. In our estimates of future costs in Chapter 15, we allow in general terms for the cost of building and equipment on the scale discussed here. However, we think there is a need to raise the level of school accommodation in certain specific ways.

9.38 Accordingly, we RECOMMEND that:

Facilities provided in schools should include a quiet work area for staff who have non-teaching periods, interview rooms, a structure which could be used as a hall and gymnasium, and seating accommodation either indoors or in landscaped outdoor areas to enable pupils to eat their lunches in relaxed and attractive surroundings.

TEACHING RESOURCES SERVICES

9.39 A close association between the Libraries Branch and the Audio-Visual Education Centre of the Education Department has been brought about through the development of multi-media approaches to learning. For this reason we make combined recommendations for the two areas after some separate discussion of each.

Libraries

9.40 The library, whether regarded as a room from which one obtains books or as a resource centre with provision for private study of books and of audio-visual material and with facilities for discussion in small groups, has become central to all modern methods of education. These methods give greater attention to self-instruction than in the past, to finding out rather than being told, and to training in methods of acquiring knowledge which will carry on into learning beyond formal schooling. There is within the Education Department a School Libraries Branch whose functions are mainly concerned with advice on the buying of books and the operation of libraries, the selection and in-service training of library staff, the administration of State and Commonwealth library grants to new schools and assistance to the Secondary Division in the administration of Commonwealth aid to libraries. The Branch acts as a consultant to the Department in all matters relating to school libraries, reports on library services and suggests desirable directions for changes. The Branch has begun to provide a central cataloguing service. At present it has insufficient staff to provide a full service, although this would greatly reduce the

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work required in school libraries. The Branch works closely with primary headmasters, but seems to be less fully integrated with the work of the Secondary Division. Co-operation between the Libraries Branch and the Audio-Visual Centre is well developed, though an even closer relationship may be desirable.

9.41 All new primary schools with more than five classrooms are provided with a central library, with a workroom attached. Other schools which qualify on grounds of size are provided with a room converted for the purpose. Every secondary school is provided with physical premises for a library.

9.42 The new concept of the library as a resource centre has been brought nearer reality in some secondary schools through financial assistance provided by the Commonwealth. A grant of \$27,000,000 over the calendar years 1969-1971 was made to upgrade the standard of secondary libraries in both government and private schools. South Australia's share of this grant was \$858,000 a year, \$638,200 of which was allotted to government schools. It was decided in South Australia to concentrate the portion of the sum which the State decided to use for building purposes on the building of model library complexes in a limited number of secondary schools, and to spread the balance over all secondary schools in grants for books and equipment in proportion to their enrolments. Complexes costing up to \$150,000 each have been built at four selected schools, setting standards which it is hoped will be extended ultimately to all schools. The new complexes increase the area available for library services from about 2,000 square feet to 6,000 square feet, and convert the library into a multi-media centre, extending it beyond the printed materials which were regarded as its chief stock-in-trade in the past.

9.43 Without the Commonwealth grant, changes on the scale at present taking place would have been impossible in secondary schools. No similar injection of funds has enabled comparable developments in primary schools, although many are advancing their services beyond the printed word on their own initiative and at their own expense. There is evidence to suggest that reading and study habits are early established, making the case for advances at primary level similar to those at secondary level a strong one. In addition, changed methods of teaching in primary schools require the support of facilities and of specialist staff which will make possible the development of individual initiatives in learning. The new social studies course being introduced into primary schools requires a great deal of work of this kind by pupils.

9.44 The greater part of the responsibility for financing accessions and the selection of books rests with the individual school, advised by the Libraries Branch. Apart from Commonwealth money available to supplement school funds in the case of secondary schools, the

provision of central finance is limited to subsidising money raised within the school and to special grants to new schools. Since 1967 each new primary school has received a library establishment grant of \$800, and each new secondary school \$1,000. Library accessions are financed from amenities fees, from special library fees in some schools and from funds raised within the school, assisted by subsidies. Problems of equality of provision arise from two sources. The income per pupil varies between schools, and with it the subsidy. A case was cited where a six-year-old school with 600 pupils had fewer than 600 books. Apart from the total finance available to the school, the proportion of available income devoted to the library in competition with other school needs depends to a considerable extent on the enthusiasm of the headmaster for library development.

9.45 Book stocks are not a reliable guide to the quality of libraries because the value of the stock depends on the standard of the original accessions and on the rigour with which it has been continuously culled. Expenditure on accessions gives a more valid indication of likely quality, although here the age of the library and its initial standard will be relevant. Table 9.5 gives the number of books per pupil in library stocks and the expenditure per head in 1969 by school types. Information which would indicate the variations between individual schools was, unfortunately, not available.

Table 9.5

LIBRARY STOCK AND EXPENDITURE PER PUPIL IN GOVERNMENT SCHOOLS
SOUTH AUSTRALIA 1969

	Total Stock of Books per Pupil	Expenditure per Pupil \$
Infant Schools	4.2	0.65
Primary Schools	7.1	1.21
Area Schools	7.6	1.63
Technical High Schools	6.7	2.23
High Schools	7.4	2.46
All Schools	6.8	1.51

Source: Education Department.

9.46 The preliminary statement of standards for secondary school libraries in Australia, worked out by a special committee set up to advise the Commonwealth Minister of Education and Science in relation to the Commonwealth grant for secondary libraries, recommended minimum standards and targets for growth as set out in Table 9.6. No recent standards have been worked out for primary schools, though work on the project is at present being done. The secondary standards listed in Table 9.6 would require a minimum stock of 5,700 books for 800 students. At the accepted annual accession rate of 10 per cent of stock, accessions would amount to 570 books a

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year, which, at an average cost of \$3 each, would require an annual expenditure of over \$2 per pupil. At the desirable level, 12,000 books would be required, an annual accession of 1,200 books, and an expenditure of \$4.50 per pupil. Levels of expenditure in secondary schools for 1969 as shown in Table 9.5 fall nearer the minimum than the desirable level of accession. Since smaller schools require more books per pupil, present average expenditure would not cover minimum accession standards for any but the largest schools.

Table 9.6

TARGETS FOR GROWTH OF BOOK STOCK AUSTRALIAN SECONDARY SCHOOL LIBRARIES

Enrolment	Minimum Book Stock	Books per Pupil	Desirable Book Stock	Books per Pupil
50	1,000	20	1,500	30
100	2,000	20	3,000	30
150	3,000	20	4,500	30
200	3,000	15	5,000	25
300	3,500	11	6,000	20
400	4,000	10	6,000	15
500	4,500	9	7,500	15
800	5,700	7	12,000	15
1,200+	6,900	5	18,000	15

Source: Commonwealth Secondary Schools Advisory Committee, March 1969.

9.47 We were informed that, where there was a trained teacher-librarian in charge of a school library, the quality of the service, within the bounds of finance, was generally good, but that, where no such trained person was employed, the quality varied from reasonably good to rather poor. The present basis of provision of library staff to schools is as follows:

(a) PRIMARY SCHOOLS. Schools with Class I and II heads have a teacher-librarian employed half time in the library and half time in general teaching. In 22 of the larger schools with Class I heads full-time librarians were appointed in 1970, and two schools with Class III heads were provided with a half-time teacher-librarian each.

(b) SECONDARY SCHOOLS. Where possible in the larger schools the teacher-librarian is employed full time in the library, but it is generally expected that in schools with more than 600 pupils the librarian will teach one-fifth time in ordinary classes. In schools with enrolments below 600, half-time teacher-librarians are provided.

9.48 There are problems related to promotion for people trained as school librarians and working in libraries. For the first time, a secondary teacher was advanced in 1970 to the level of senior master while remaining in charge of the library. In general, however, teachers must give up library responsibility if they are to become seniors. In primary schools the position is similar. Inspectors assess librarians on

their conduct of normal class lessons rather than on the basis of their library function. Some headmasters allow chief assistants to be in charge of the library, but this is not general, and the fact that library service presents limited promotion prospects, although it involves extra training, makes it less attractive, particularly for men.

9.49 The provision of adequate library services in small and remote schools presents difficulties. Children in such schools may be the more in need of high-quality service because community library services are likely to be meagre, and the intellectual horizons of both pupils and parents may be limited. The State Library service has for some years operated library-box systems for such schools but lack of funds has forced it to limit the service to one-teacher and two-teacher schools, and the Education Department provides no service of its own in this area.

9.50 The training of teacher-librarians and of teachers in the use of libraries, particularly if they are to become multi-resource centres, is a matter of great importance. Adelaide Teachers College provides courses in school librarianship at first-year and second-year levels and is planning the introduction of a full fourth-year advanced diploma course specialising in the area, to begin in 1971. There is also a possibility that school librarianship will be offered at third-year level within the first diploma. Wattle Park and Western Teachers Colleges may offer school librarianship at fourth-year level next year also. At present 105 students are studying at that level at Adelaide Teachers College, and it is hoped that a sufficient number of these students to meet requirements will continue training as teacher-librarians. In addition to these pre-service courses a special one-term course is available to practising teachers who are released from normal duties on full pay to take it. In 1970, 111 teachers competed for the 30 available places in this course. Considerable developments are thus taking place in the training of specialist teachers to work in school libraries.

9.51 Library aides are at present employed only in the four secondary schools where library complexes have been built through the aid of Commonwealth funds. Although the employment of an extra 20 aides is included in the 1970-71 estimates, this does not necessarily mean they will be employed. No special training for aides yet exists.

9.52 We have already recommended that the purchase of library books should be covered by centrally allocated grants and that the scale of provision of non-professional staff, including library aides, should be greatly extended. Several other developments appear necessary to establish the importance of the library in teaching methods requiring greater pupil initiative and to ensure the proper integra-

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tion of audio-visual and printed materials in a single teaching-resource service, and these are discussed in the following section.

Audio-Visual Services

9.53 The educational use of non-print media is constantly expanding. School broadcasts, presented by the Australian Broadcasting Commission on the advice of committees of educationists, have long been an integral part of the school programme, especially since tape-recording has enabled their more flexible use. Films, film strips, epidiascopes and slides have been augmented by loop films suitable for use by a single viewer and by overhead projectors which enable the preparation of teaching aids to precede lessons. The possibilities of television as an educational medium have recently been greatly expanded by video-taping with the opportunities it presents of storing telecasts for viewing at convenient times, and of the sharing of locally produced material through television screens without the actual transmission of programmes.

9.54 The most effective ways of using all these new media are far from understood, and, as all are expensive, problems of choice arise in a situation where rational grounds for choice are not always available. Both technical and educational considerations are involved. Beyond the generally accepted propositions that the needs of particular educational programmes must dictate the choice between media and that a variety of methods of presentation is desirable, future lines of development are not clear. However, pending research evidence which might help to establish which media, and in what forms and combinations, are most effective for particular types of learning and for particular pupils, it is not possible or desirable to opt out of the situation by clinging to old methods. Today's pupils live in a world where non-print media are assuming increasing importance, and schooling restricted to more traditional media places the school in a museum world removed from life. Evaluation must accompany spending, but the revolution in classroom techniques should be welcomed by all educators.

9.55 Commonwealth money spent on audio-visual developments and libraries has hastened the use of more advanced types of equipment in secondary schools, and has brought a closer association between the Audio-Visual and Libraries Branches of the Education Department in the planning of new library complexes incorporating some audio-visual equipment. It has also raised new problems. For example, a number of schools were equipped with loop film projectors and a limited number of single-concept films from the money made available through Commonwealth science grants. It is difficult for the State to finance additional loop films at \$25 each on an individual-school basis. No central or area libraries of such films exist, and it is necessary in any case for the films to be readily available to their individual users. Secondary schools are to be provided with video-

tape recorders and monitor receivers from the Commonwealth library grant, requiring the education of teachers in their most effective use, and aides and technicians to record programmes and to service equipment.

9.56 Apart from this equipment, financed by the Commonwealth, the practice in the past has been for television sets, overhead projectors, tape-recorders and other such equipment to be bought out of school funds, assisted by subsidies from the Education Department. However, all new schools, both primary and secondary, will now be provided with such basic audio-visual equipment from State government funds, and we have recommended that existing schools lacking basic equipment should be similarly supplied (see paragraph 9.30).

9.57 The Australian Broadcasting Commission is responsible for the production and transmission of radio and television programmes for schools. These are produced in collaboration with the Education Department and on the basis of needs as determined by committees of educators. A liaison officer with the Commission is employed in the Department to assess the effectiveness of programmes, and teachers are often used in the preparation of programmes.

9.58 The other main source of audio-visual materials is the Audio-Visual Centre of the Education Department which both lends and produces materials. The Centre, under its own supervisor, is a part of the Division of Technical Education. The work of the Centre is broadly divided into two categories, one concerned with the loan of films, the other with production and services, including the checking of projectors.

9.59 The loan of films to schools, both government and private, is handled through a central office, and arrangements are being made for the two regional offices of the Department at Whyalla and Mount Gambier to hold stock and handle local loans. Loans of individual films total about 55,000 a year, a high rate of lending for a base library holding only some 7,500 prints. Since there is more than one print of most films, the number of titles held lies only between 2,500 and 3,000. The film stock is low in relation to loans and in comparison with that of similar centres in other States. Bookings for films other than documentaries must be made a term or even a year ahead, leaving no possibility of obtaining films at short notice. For documentary films a shorter period of advanced booking operates. Film strips, tapes and a limited number of slides and records are also available. Very few charts or wall pictures are held.

9.60 Film study, including film production in schools, is aided by the Centre, and a limited number of film strips and films is produced. Advice is given to schools on the purchase of audio-visual equipment, and help is given in its maintenance. At Kilkenny Technical College a television studio was opened in 1968 which serves a double function,

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first, and more important, that of training teachers through televised recording of teaching techniques and, secondly, that of training in the preparation and presentation of educational telecasts. Plans for the future of the centre envisage the extended production of educational television programmes to be taped for use in schools or relayed direct through a channel reserved for educational purposes.

9.61 We think that the Education Department should not at this stage become involved in film production for television or in educational television as an end in itself. The Kilkenny studio serves a valuable purpose in the education of teachers, but extension of its work into production or transmission is, in our view, unwise at the present time, although technical advances may change the situation in the future. The Australian Broadcasting Commission acts as a service agency to the schools, with which it has close liaison at all levels. There would thus seem to be no need for independent action by the Department to secure the programmes it needs. The Commission could not operate in the field of school programmes in South Australia if the Education Department were to withdraw into its own service. As schools are supplied with video-tape recorders it would be possible for the Australian Broadcasting Commission to extend the range of its educational telecasts since the repetition of programmes would then be unnecessary. The possibility of a national television channel devoted to educational programmes is again under consideration, since video-taping has altered the conditions which previously led to its rejection. The size of the Australian population, the expense of production, the limited number of people of high quality available to work in the field and the rate at which programmes become obsolete, in our view, make direct telecasting of programmes and their local production by the Education Department unrealistic. The Australian Broadcasting Commission is a national agency with national resources. As such, it has facilities and experience which it would be uneconomic to attempt to parallel.

9.62 If multi-media approaches to learning are to be developed in schools and more individualised methods of learning extended through them, the amalgamation of library and audio-visual services and the preparation of teachers for changed methods, as already recommended, are vital. Continuous research will be needed to evaluate the effectiveness of alternative media and combinations of media, and in particular to establish where less expensive aids are just as effective as more expensive ones. Expensive equipment is not, in our view, an immediate substitute for improved pupil/teacher ratios, but should rather be seen as a means of improving the quality of teaching and learning. Adequate provision of ancillary staff, including technicians, will be required with the increased use of audio-visual media, as will the development of area resource centres to enable the sharing of expensive equipment and "soft-ware". Above all, it must be accepted that demand must arise from the needs of

particular school programmes. Indiscriminate supply of sophisticated equipment unmatched by expenditure on a scale necessary to keep up an adequate supply of films, tapes and so on is wasteful.

9.63 The implications for the whole education system of the development of libraries as multi-media centres, a development which has already begun and will certainly grow, are widespread. There is no point in supplying material which teachers are not trained to use or for which the need does not arise directly from the programmes being followed in individual schools. The library or media centre, seen as a central service to pupils and teachers in all aspects of learning, requires that teacher-training programmes for all teachers, and not only for those training to be specialists in the field, be geared to an understanding of how to incorporate these services in teaching methods. The construction of curricula and time-tables based on the changed methods of learning which these services will make possible is vital, as is the acceptance of the librarian as an integral member of the teaching team. Constant evaluation of changed teaching techniques based on the use of new materials is also necessary to make sure that the money made available is used in the most effective way. Subject specialists engaged in teacher training need a full knowledge of the range of materials available in their subject areas and of the most effective ways of using them. Headmasters and practising teachers will need in-service preparation on the possibilities opened up by multi-media approaches.

9.64 The value of the service offered by school libraries and media centres would be extended by developments in three directions:

(a) The free time available to most South Australian pupils and teachers during the school day is limited. Experiments in keeping libraries open in some schools during school holidays and in the evenings have met with an encouraging response. The extension of these practices seems desirable.

(b) The greater sharing of resources between schools by the development of area resource centres would widen the range of books, tapes, video-tapes, loop films and charts available within easy distance. Such a range would be expensive to supply to every school, and would not be fully used there. School programmes would need to be staggered so that all users were not likely to want the full range of materials on a particular topic at the same time. Such a decentralisation of audio-visual resources seems in any case desirable.

(c) A development of central importance has been implicit in all earlier discussion. This is the integration of audio-visual and library services at all levels into a multi-media service.

9.65 Accordingly, we RECOMMEND that:

(a) *The Libraries Branch and the Audio-Visual Education Centre*

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should be amalgamated into a single Teaching Resources Service operating under the Director of Special Services.

(b) The in-service and pre-service education of all teachers should give increased attention to the use of multi-media approaches to learning.

(c) A training course for library aides should be introduced.

(d) Trained school librarians should be employed on a greater scale.

(e) Promotion prospects within library work should be such as would allow trained people engaged in it to gain promotion without returning to classroom teaching, and to receive compensation for the extra training in addition to normal teacher training required.

(f) The Teaching Resources Service should collaborate with the educational research section of the Education Department in the continuous evaluation of multi-media approaches to learning.

(g) Area resource centres, each serving a limited number of schools, should be developed to allow films, loop films, tapes, cameras and other teaching aids to be readily accessible and to enable their shared use.

(h) The supply of expensive equipment should be accompanied by the allocation of money for recurrent expenditure sufficient to enable its effective use, and by ancillary staff to service it.

(i) The Education Department should not at present go ahead with plans to produce films for television on any significant scale, or for their transmission, except through Australian Broadcasting Commission channels.

PHYSICAL EDUCATION AND MUSIC

9.66 Physical education and music are peculiar among the subjects taught as part of the normal school curriculum. They alone have specialist branches, attached, not to the schools Divisions, like other subject consultancies, but separately organised under the Director of Teacher Education and Services. These branches provide what are essentially consultant services over the whole school system, being more active in primary schools where no specialist teachers in the areas exist than in secondary schools where they do. The branches appear to be less fully integrated into the general planning and work of the schools than are other subject consultancies, perhaps because of their organisational separation, perhaps because of a less complete acceptance of the importance of the two subject areas. We have not discussed the special problems of other subject areas or the relative emphasis which should be given to various subjects within the overall curriculum. Our comments on music and physical education will therefore be short and general.

9.67 **PHYSICAL EDUCATION.** The purpose of physical education in the schools is seen as extending beyond the development and main-

tenance of physical fitness in pupils to building attitudes and providing experience in a range of activities which will have continuing relevance throughout life and which are especially important in industrialised societies. Specialist teachers are trained for secondary schools through a four-year course at Adelaide Teachers College. The numbers trained and employed have been insufficient to provide specialist teachers for all secondary pupils. In 1969 an estimated 900 secondary classes were taught by people without specialist training. Because physical education teachers do not now train in universities (although physical education will in future be available as an option in the Bachelor of Education course at Flinders University), they are at a disadvantage in the secondary promotions and salary structure. There is no inspector of physical education, and two advisers who are members of the staff of the Branch serve the whole secondary area.

9.68 In general, physical education in primary schools is taken by class teachers, and its frequency and quality depend on their resourcefulness, knowledge and enthusiasm. Limited advisory services operate through seven members of the staff of the Physical Education Branch. In addition, approximately 150 primary teachers have had in-service preparation in the field. Concern about the position of physical education in the schools amounts in fact to a plea that it be considered in the same light as other subjects, in that a proportion of the time-table be automatically devoted to it, teachers prepared to teach it, programmes worked out, specialist inspectors allocated to advise and assess, and equipment be provided for it. We have already recommended that equipment be centrally provided. We endorse the acceptance of physical education as an essential part of the curriculum with a status in no way different from that of the academic subjects. The possibility of having specialist teachers at primary level we shall discuss along with the similarly based case for primary teachers who are music specialists. If physical education is a subject of equal status with other subjects, the provision of interior gymnasia and of the necessary equipment will have to be given higher priority.

9.69 MUSIC. The Music Branch has the aim of promoting musical activity and appreciation in schools. The focus of the Branch is on practical music-making, either through assisting and advising classroom teachers or by direct teaching. Except for the Supervisor, all of the 20 professional staff employed in the Branch are demonstration assistants. These are organised in two groups. One group gives demonstration lessons to primary classes in metropolitan and nearby country areas in vocal music and music-making with tuned percussion instruments and recorders. The other group gives instrumental instruction to pupils on a group basis in a relatively small number of primary and secondary schools. A regional officer of the Music Branch is employed at Port Augusta and another at Whyalla. As in the case of physical education, specialist teachers are employed at secondary, but not at primary, level.

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9.70 A number of common problems exist in the two areas of physical education and music. The existence of special branches in them preceded the introduction of subject consultants in other curriculum areas, and may no longer be the most effective way of providing consultant service to teachers, although the nature of the work undertaken by the Music Branch may place it in a special category. There is an evident tendency for people holding senior positions in the schools Divisions to make and implement decisions in the areas of music and physical education without reference to the Branches. Examples are the decision to employ ballet teachers on a part-time basis in some primary schools and the employment of a half-time music consultant in the Secondary Division. We think there would be advantages in regarding both music and physical education in the same way as other subjects, and attaching specialist staff to the schools Divisions to act as advisers, so ending the present organisational segregation of these two subjects. The case for training and employing specialist teachers at primary level on a basis which would enable them, where necessary, to be shared between schools also seems to us to be a strong one, especially in music, where special abilities are involved and the level of competence required of effective teachers needs lengthy study. Specialist inspectors in each field would also help to raise the status of the subjects and the level of teaching in them.

9.71 Accordingly, we RECOMMEND that:

Physical Education and Music should cease to be organised in special branches, and be accepted into both the primary and secondary curricula on the same basis as other subjects requiring specialist consultants and inspectors and specialised teacher education.

PSYCHOLOGY BRANCH

9.72 Psychological services to schools are organised through the Psychology Branch, operating under a Chief Psychologist and attached to the Director of Teacher Education and Services of the Education Department. We are not here concerned with that part of the work of the Psychology Branch which relates to the supervision of special education in separate schools and in opportunity classes. Such activities will be discussed in Chapter 13. Under the Chief Psychologist and the Assistant Chief Psychologist, who have overall responsibility for work both in special and normal schools and classes, the Branch has a Guidance Section composed of a Senior Guidance Officer and 13 guidance officers, all of whom are professionally trained psychologists, for work in normal schools. Three regional guidance officers, one of them stationed in Darwin, work in special as well as in normal schools and classes. One half-time and one full-time speech therapist and five full-time and two part-time social workers completed the staff available for work in normal schools in 1970.

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9.73 The Branch provides a consultant service to schools on educational and psychological issues. Much of its work is concerned with assessing and counselling individual pupils having particular difficulties; it does not provide a clinical service, but refers serious cases to the Department of Mental Health. It is responsible for assistance in social work, speech therapy, remedial teaching and educational and pre-vocational guidance, and for advice to teachers on attainment testing and on the use of group tests of ability and attainment. It makes recommendations for the placement of pupils in special facilities and undertakes research appropriate to its activities. Important as all these functions are, the Branch sees its main work as that of a consultant service which brings to bear on school organisation and teaching methods the special aspects of psychology relevant to them. By discussion with headmasters and teachers conducted both informally and through in-service courses the Branch seeks to promote a school setting which will maximise the service which the school provides for its pupils.

9.74 In terms of psychologists employed in relation to pupil numbers, South Australia has for many years been the least well served of the Australian States. In Table 9.7 guidance staff working in the area of special education and the Chief Psychologist and Assistant Chief Psychologist are all included to give the total of 24 guidance officers there shown for South Australia and the Northern Territory.

Table 9.7

GUIDANCE OFFICERS IN RELATION TO SCHOOL ENROLMENTS AUSTRALIAN STATES 1970

	Total Pupils (a)	No. of Guidance Officers	Guidance Officers per 10,000 Pupils	Pupils per Guidance Officer
New South Wales	749,431	280	3.6	2,677
Victoria	572,124	81	1.4	7,063
Queensland	291,939	48	1.6	6,082
South Australia (b)	238,384	24	1.0	9,933
Western Australia	169,163	71	4.2	2,382
Tasmania	78,839	33	4.7	2,389
Total	2,099,880	537	2.6	3,910

Source: Education Department.

(a) Pupil numbers at 1st August 1969.

(b) Including Northern Territory.

9.75 The proposed employment of an additional eight guidance officers in 1971 will raise the number to 32 and raise the number per 10,000 students to 1.3. The number of pupils per guidance officer would then be 7,450. This level of provision would still be lower than that in any other State. The difference would be greater than

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that indicated by comparing this figure with those in the Table because other States annually increase the total number of guidance officers employed, and because the guidance officers in some States, for example Victoria, are not involved in special education, which is conducted by a section separate from the Psychology Branch. If we take into account only the 13 field officers, and the proportion of time spent in normal schools by the regional officers, the number of pupils in normal schools and classes rises in South Australia to 15,892 per guidance officer. This number would be reduced to 10,325 if the extra eight officers to be appointed in 1971 are all available for work in normal schools, and no members of the present staff resign. In some Australian States a psychologist is available to serve every large secondary school and its feeder primary schools. The intention in about half of the States is that guidance officers should be provided on this scale, and that this general field service should be backed up by a variety of specialist officers.

9.76 The following extract from the 1969 report of the Chief Psychologist gives an indication of the number of pupils involved in the district responsibility of each guidance officer:

One Guidance Officer is expected to provide guidance service to a single district. The officer concerned, in most cases, will have taught for two years or a little more, and have spent, on the average, one year in the Psychology Branch. A typical district average is that for the North-East Metropolitan area comprising:

23 Primary Schools with 10,020 students

10 Infant Schools with 3,474 students

5 High Schools with 4,584 students

4 Technical High Schools with 2,234 students

9 Private Schools — number of students unknown.

The total number of students in the district, exclusive of those from private schools, is 20,312. The guidance officer concerned must also play some part in country work with her colleagues.

9.77 In their first year of service as guidance officers recruits to the Psychology Branch are in effect officers in training who are not in a position to undertake independent responsibility for schools or districts. If South Australian provision were to reach the average for all States, a total of 61 guidance officers would be required, involving a doubling of staff after the eight new recruits were added to present numbers. The plans of the Education Department, as outlined in the National Survey of Educational Needs in 1970, envisage by 1975 an increase in the staff of the Psychology Branch to bring the numbers employed to a level which would provide one psychologist per 5,160 pupils, the Australian average in 1966. Such a level of provision would be very much below the 1970 average of 3,910 pupils per psychologist.

9.78 Many submissions to the Committee urged an extension of guidance services. The long waiting period before normal requests

for assistance can be met both discourages requests for assistance and increases the number of cases which have become urgent because of delays in attending to them.

9.79 In addition to the relatively low level of its establishment the Branch has serious staffing problems. Guidance officers are specialists in a particular area of psychology which makes them an integral part of the field of education. In addition to holding a degree with a psychology major they need to be specialists in fields relevant to learning. A great volume of research work has elucidated areas of functioning of specific importance to schooling. Learning, remembering, perception, motivation, concept formation, and a growing body of knowledge in social psychology covering aspects of interaction between teacher and child and among pupils themselves are all aspects of what has become a specialised area of psychology. Educational psychology is relevant to basic educational decisions such as patterns of school organisation, teaching methods and pupil grouping as well as to the problems of individual children requiring special help. Indeed, the emphasis of psychological services in education is moving from the "problem" child as an individual towards helping teachers to provide learning experiences and a classroom atmosphere which will minimise the incidence of such "problems".

9.80 If their advice in these areas is to be both realistic and acceptable to the teachers with whom they work, guidance officers require a background in general educational theory which extends beyond their specialised field, and, preferably, experience in working as a teacher. Although it is considered that there is a place in the Branch for a few psychologists lacking this educational background, their usefulness is confined to fairly specific areas such as testing, and they are not in general considered suitable for more senior positions or for giving advice to teachers on the lines described above. In general, then, guidance officers require a degree with a major in psychology, teacher training and experience in teaching.

9.81 Until 1970 guidance officers were employed as teacher-psychologists under the Minister of Education. In 1970 they became public servants whose salaries were fixed in relation to those of psychologists working in other government departments. Whether employed as teacher-psychologists under the Minister of Education or as guidance officers under the Public Service Board, problems in relation to the salary levels of psychologists employed in the Branch and to their advancement prospects have persisted. As teacher-psychologists they were regarded as seconded teachers, entering service as guidance officers at the level of teaching salary they had previously received. The result was that people doing the same work in the Psychology Branch were paid at senior master or assistant level according to their position on recruitment to the Branch. Those who entered at the

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level of assistant experienced great difficulty in moving beyond this range. Now that they are employed as public servants, the salary range provides little compensation for the educational qualifications they need in addition to their basic degree, and the prospects are more limited than those available to equally qualified people working in other fields of education. The result has been considerable and continuing turnover among guidance officers. The positions to which they most frequently move are lectureships in educational psychology in teachers colleges. The results of such a turnover are serious. In their first year guidance officers are in a sense serving an internship, learning their role by working with more experienced colleagues. Training reduces the time that experienced officers have available for their own work, but this is perhaps the least serious effect. Teachers in the schools find the support and assistance they are able to gain from more mature and experienced guidance officers the more valuable. They are, perhaps naturally, less inclined either to talk or listen to younger people. Yet the salaries and prospects provided within the Branch are such as to be attractive only to younger people beginning their careers, and a high proportion of guidance officers are as a result relatively young and inexperienced. The degree of turnover among guidance officers is indicated by the fact that 38 per cent of those employed at Branch headquarters in 1970 had had less than one year's experience in the Branch since their current appointment to it, and 62 per cent had had less than two years' experience. A few included in each of these counts had had some experience during a previous period of employment.

9.82 Although it seems reasonable that guidance officers should work public service hours and have the same holiday arrangements as public servants, we regard them as an integral part of the teaching service. We have recommended in Chapter 17 that all employees of the Branch should be employed under the Minister of Education (see paragraph 17.67). This, as we there point out, would not prevent their conditions of service being different from those of teachers. We think there would be benefit in facilitating secondment of psychologists between the Branch and teachers colleges on a part-time or full-time basis. If the exchange were to operate both ways, conditions of service and salaries would need to be comparable between the two positions to prevent the present one-way drain from the Branch. In Great Britain educational psychologists and teachers college lecturers span much the same salary ranges, with, if anything, a slight advantage to the former. We have given attention to the question of salaries and promotion prospects in the Psychology Branch because any proposals for expansion of the Branch must take account of these issues.

9.83 In addition to guidance officers, social workers and speech therapists are employed in the Psychology Branch. For historical reasons, most of the work of social workers has been concerned with

assistance to the families of children in special educational facilities. However, there is a considerable and growing demand for the help of social workers with problems of students in normal schools. If such work is to be accepted as part of the responsibility of the Education Department, a substantial increase in the establishment of social workers in the Psychology Branch would be required. There were in September 1970 five full-time and two part-time social workers employed, although the establishment is nominally smaller. Public Service Board approval has been sought for the employment of a senior social worker. The one half-time and one full-time speech therapists employed in September 1970 were inadequate for the range of work they might usefully undertake. Two cadets are at present being sponsored through the Melbourne College of Speech Therapy because of the acute shortage of people available for employment in this field.

9.84 Assistance in vocational guidance is offered by guidance officers to individual children and career advisers in schools. The contact with individual children is of necessity limited, and the career adviser is a teacher with normal responsibilities who undertakes this work as an extra commitment. The Secondary Division, in an attempt to overcome the inadequacies of the present service offered both in this sphere and in the general area of guidance and counselling, proposes to employ counsellors-career advisers within schools who would teach part time. If suitable people can be obtained it is proposed to employ a staff of nearly 90 in this capacity by 1981. In support of such appointments, the Division argued that the need for guidance and counselling is greater than can be met by class teachers and the occasional assistance which the Psychology Branch is at present able to offer. Changes in curricula, in the nature of the school population and in the range of occupations available, and the increasing complexity of social life in the community beyond the school combine to make the present level of counselling services available to secondary pupils inadequate. The appointment to school staffs on the basis of one per 500 pupils of teachers who would divide their time between counselling, guidance and teaching would, in the view of the Secondary Division, both ensure that each pupil had access to information on courses and employment and provide counselling for students experiencing special difficulties.

9.85 Although there is a clear need for the expansion of information services in schools regarding courses and careers, as will be discussed later, the counselling of students by people who are not experts in this field is a different question. We think there would be dangers which would outweigh any theoretical advantages in the dilution of the psychological services by the employment of people without full psychological training in such roles. We think it unlikely that, in the absence of a specialist, pupils will choose to confide in a person simply because he has been designated for this purpose. On balance, we are not persuaded that it would necessarily be a good

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thing if they did. Those teachers who in the performance of their normal work have been accepted by pupils as worthy of confidence will be, and in our view ought to be, those chosen by students as likely to be helpful. We also think that many serious problems can satisfactorily be dealt with only by people who are not identified with institutional arrangements or personalities which may themselves be a source of disturbance in pupils. A larger number of guidance officers attached to small areas would seem to be the preferable solution to the present shortage of counselling services.

9.86 In the matter of vocational guidance, what is needed cannot, in our view, be provided simply by information about possible employment, although information is, of course, basic. Those teachers who have the responsibility of providing a full range of information about possible employments should have up-to-date information and the time both to gain it and to make it available on request. However, their role should be confined to the provision of information. Action more basic to the whole school programme and organisation is involved in assisting pupils in their occupational choice. Within a curriculum, brought closer to the world beyond the school, pupils should by continuous study and, where possible, by involvement in the outside world, gradually build up a knowledge of the scope and implications of occupational choice. Through decision-making within the learning process and in the government of class and school they should be given practice in making decisions of increasing importance as they grow older. Only a small proportion of pupils should, as they approach the end of their schooling, require individualised discussion of their occupational choice, since most pupils should then have knowledge of alternatives and be aware of how to obtain information from such sources as the careers master. An approach to vocational guidance which sees it as an optional extra grafted on to the "real" work of the school is in our view erroneous.

9.87 Our inquiries and the large number of submissions made to us on the matter lead us to recommend that the number of guidance officers employed in the Psychology Branch should be considerably expanded. We think that counselling of students except in the normal course of teaching duties and in the way of making information available about courses and possible careers should not in general be undertaken by those without full psychological training. Such counselling is only one aspect of a broader role which those who have specialised in educational psychology can usefully play in the schools, and which in our view can be more successfully undertaken by people standing outside the individual school. The number of guidance officers employed should be sufficient to enable each to work over a smaller area than at present and be responsible for a number of schools no greater than he can regularly visit at frequent intervals. The establishment of guidance officers would need to be doubled to give South Australia a service equal to that of the present Australian

average. Such an increase would have to be spread over a period, both because recruitment on such a scale would be impossible at one time in the present conditions of supply and because a sudden and substantial increase would not enable new staff to be integrated satisfactorily into the work of the Branch.

9.88 Accordingly, we RECOMMEND that:

- (a) The number of guidance officers employed in the Psychology Branch of the Education Department in relation to pupil numbers should be raised over a period of five years to a level at least equal to that of the average of the Australian States at the end of the period.*
- (b) Promotion prospects and salaries within the Branch should be such as will enable it to attract and hold qualified staff, and to exchange educational psychologists between the Branch, the research section of the Education Department and the teachers colleges.*
- (c) Teachers responsible for educational and careers information in schools should be relieved of teaching responsibilities to the extent necessary to make their work in this area effective. A clear distinction should be made between their role and that of guidance officers giving personal counselling based on their psychological training.*

CHAPTER 10

Pre-School Education

NATURE AND VALUE OF PRE-SCHOOL EDUCATION

10.1 A large number of submissions to the Committee urged the extension of pre-school education to a higher proportion of the age group in South Australia and drew attention to undesirable effects of the present method of financing kindergarten provision. This community concern reflects an upsurge of interest in early education which is not confined to Australia.

10.2 Pre-school education is everywhere receiving increasing attention as research confirms the importance of the early years not only in the development of personality characteristics, a proposition which has long been accepted, but in the development of the intellectual abilities needed for success in formal schooling. The level of performance of many children in school is, to a much more important extent than was once thought, already circumscribed at the moment of entry, not so much by heredity, which merely sets the upper limit of development in ideal circumstances, but by the range and type of experience present in the environment. Vernon states the currently accepted conclusion on environmental influences thus:

In the course of development the individual builds up an enormous storehouse of concepts and skills, by means of which he interprets and copes with the world more or less effectively. As D. O. Hebb and Piaget have shown, these skills or plans are developed through use in reacting to environmental stimulation. Except, perhaps, some of the earliest and simplest sensory-motor reflexes, we cannot regard them as "given" in the innate structure of the nervous system or as maturing "in vacuo" purely through genetic determination. We *learn* to perceive, to imagine, to reason, to judge; and as Harlow pointed out, we learn how to learn just as much as we learn how to ride a bicycle or learn spelling and arithmetic . . . a healthy plant requires good seed, but it also requires suitable warmth, moisture and nutriment. Similarly the human being requires physical and emotional security and a richly stimulating environment if his intelligence is to develop.¹

10.3 Although controversy about the relative influence of genetic factors and environment in the determination of abilities persists, there can be no doubt that environment plays an important part. The exact degree of its influence cannot be known until the environment of every child is such as to make its maximum contribution to the realisation of innate potential. For this reason, and because the environment is amenable to social action to a degree to which genetic factors are not, we support the view that, so far as social action can contribute to the attainment by each child of his potential, the community ought to take it. The early years have been identified by

¹ Philip E. Vernon, in J. E. Meade and A. S. Parkes (eds.), *Genetic and Environmental Factors in Human Ability*, Edinburgh and London, Oliver & Boyd, 1966, p. 5.

Bloom² and others as the period of maximum growth in intelligence, when deficiencies in the environment have effects which are increasingly difficult to overcome as the child grows older. Evidence based on the work of Hunt³ and others suggests that a great deal of later learning is built in a hierarchical fashion on early experiences and perceptions, so that the absence of certain stimuli in the early environment of a child may make the later mastery of more sophisticated types of learning difficult and perhaps impossible.

10.4 The level of employment open to individuals in industrialised societies depends increasingly on academic achievement. We can no longer believe that the level of intellectual achievement reached rests on native ability alone. If the opportunity to acquire the basic experience on which success in schooling also rests is not available to all children, the community cannot claim to have given every child an equal opportunity to develop his talents. So far as pre-school education can contribute to more equal opportunities to profit from later schooling, its provision is an essential part of "the career open to talent".

10.5 Many arguments may be advanced in favour of making kindergartens available to all children. Kindergarten experience supplements and enlarges the physical and social environment of the home. Opportunities for the association with peers for which the three-year-old is ready are limited. Graded social experience which gradually introduces the child to wider fields and lessens his dependence on his mother prepares him in the short run for primary school, and in the long run for the development of relationships of varying intensity with many people. The child learns to respect the rights of others through social experience in a group supervised by impersonal authority such as a kindergarten provides. Opportunities for imaginative play and the development of satisfying skills are extended by the variety and scale of equipment available in the kindergarten. Because the kindergarten is designed as a safe environment for adventure it can allow the child greater freedom to experiment than can be permitted in the home, which is not specifically designed for this purpose. Cognitive development may be promoted by contact with adults skilled in methods of extending the child's understanding of his environment and able to assist in the growth of skills basic to successful school performance.

10.6 Kindergartens, if widely available and backed by adequate medical and psychological services, can provide opportunities for the early identification and treatment of handicaps of all types at a period in the child's life when corrective measures are likely to be most effective. Apart from the more serious handicaps such as severe speech

² Benjamin S. Bloom, *Stability and Change in Human Characteristics*, New York, Harper & Row, 1965, p. 218.

J. McV. Hunt, *Intelligence and Experience*, Ronald Press, 1961.

defects which may require specialist treatment, the kindergarten teacher as a skilled observer of children is able to detect areas in which individual children may need special help. She may provide opportunities within the kindergarten and co-operate with parents in an attempt to provide suitable conditions for each child to achieve a level of functioning regarded as normal for his age in social, emotional and cognitive spheres. Contact with a kindergarten and active participation in its work will help many parents to modify their child-rearing practices in ways that will benefit their children.

10.7 Some children are in special need of kindergarten experience. Homes vary in the quality of their physical, social and cultural environment and in the level of adult interest and encouragement which the child encounters in them. Poorer homes will not be able to provide the space and variety of equipment available in richer ones. Income level will influence the extent to which the child can be taken on excursions which enlarge his knowledge of the environment. The smaller or more socially isolated family will provide fewer opportunities for the child to find companionship among others of similar age.

10.8 Recent studies have drawn attention to the absence in many homes of types of experiences and language patterns important as a basis for formal learning. These deficiencies occur most frequently in poorer homes when there are poorly educated parents. A longitudinal study in the United Kingdom⁴ which has followed some thousands of children from birth to maturity has shown that children from such homes begin school with a disadvantage which is liable to persist throughout the period of schooling. Their inferior school performance is not necessarily genetic in origin, but may rather be seen as a result of deficiencies in their environment. The term "culturally deprived" has been applied to these children, and in several countries, notably Israel and the United States of America, special kindergarten programmes have been developed for them which include short daily periods of instruction.

10.9 Many investigators have seen the failure to develop certain uses of language as central to the less privileged child's poorer school performance. Concluding a review of research on the relationship between language and thought process, Denis Lawton writes:⁵

There is little doubt that there exists a social-educational problem: a great deal of potential talent is wasted, or, looking at the problem from a different point of view, the education of large numbers of working-class children is below satisfactory standard. There is evidence to support the view that inadequacy of linguistic range and control is a very important factor in this under-achievement, and that

⁴ J. W. B. Douglas, *The Home and the School*, MacGibbon and Kee, 1964; and Douglas, *et al.*, *All Our Future*, Peter Davies, 1968.

⁵ Denis Lawton, *Social Class, Language and Education*, Routledge & Kegan Paul, 1968, p. 157.

linguistic inadequacy is a "cumulative deficit", i.e., it is a disadvantage which generates a vicious circle of difficulties increasing in magnitude as school life progresses.

Reporting on a successful kindergarten programme for disadvantaged children, Bereiter and Engelmann identify the language inadequacies of these children as a basis for schooling:⁶

The language deficiencies of disadvantaged children were seen to consist not of deficiencies in vocabulary and grammar as such, but of failure to master certain uses of language . . . The disadvantaged child masters a language which is adequate for maintaining social relationships and for meeting his social and material needs, but he does not learn to use language for obtaining and transmitting information, for monitoring his own behaviour, and for carrying on verbal reasoning. In short, he fails to master the cognitive uses of language, which are the uses that are of primary importance in school.

10.10 Other investigators, following a Montessori approach, have laid greater emphasis on structured concrete experience in kindergartens as a means of compensating for special deficiencies in home background. Whatever the approach, early intervention is increasingly seen as vital. The Plowden Committee, for example, after reviewing the evidence, recommended that provision should be made to enable all children over the age of three to attend nursery school and that priority should be given to areas where large numbers of children could be shown to be materially or culturally deprived.⁷ It may be that the differences in the stimulation given to pre-school children by their home environment are not so extreme in South Australia as in some other countries. However, there has been no local research into the matter, and, like all industrially advanced societies, we do have large numbers of children who find difficulty in coping with the demands of modern schooling and whose capacities might well be increased by early action. It should, however, be emphasised that there is as yet no conclusive proof that school performance will be improved in a long-term way by kindergarten experience. The evidence merely suggests that it is likely. We have, in addition, immediately identifiable groups with special disabilities, such as Aboriginal and migrant children.

10.11 Attempts at compensatory education in pre-school aim at laying the basis in experience and perception on which school learning will build. Most depend on consciously planned experiences carried out in contact with a trained adult. In their more directed focus they are at variance with the emphases of current kindergarten practice. Present programmes are seen by those favouring greater attention to cognitive development as more effective in supplementing the home background of the more fortunate child than in providing assistance to the disadvantaged child in areas where he is particularly

⁶ C. Bereiter and S. Engelmann, *Teaching Disadvantaged Children in the Pre-school*, Prentice Hall, 1966, p. 42.

⁷ *Children and Their Primary Schools*. Report of the Central Advisory Committee for Education, H.M.S.O., 1967.

in need of it. Our view is that every child has a range of needs and, provided that teachers are prepared for their tasks in ways which enable them to respond appropriately to the individual development of each child, no necessary conflict between the two views exists.⁸ Whatever reappraisal of kindergarten programmes may follow the recent experiments in compensatory education, the more urgent problem is to ensure the extension of kindergarten provision so that children who are more particularly in need of pre-school experience have an opportunity to partake of it.

ORGANISATION OF PRE-SCHOOL EDUCATION

10.12 Pre-school education is organised and financed in Australia by a combination of parental, charitable and governmental effort, combined in varying proportions in different States. The level of provision is largely determined by the extent of government financial assistance, particularly in its contribution towards building costs. At one end of the spectrum is the Australian Capital Territory where the Commonwealth Department of Education and Science erects the buildings and appoints, pays and supervises the staff wherever it is satisfied that a sufficient level of local interest exists. The parents are responsible for equipping, cleaning and maintaining the centre, and pay contributions varying between 18 and 20 cents per session. Government contributions towards running costs are the highest in Australia, amounting in 1968 to \$80.00 per annum per child in kindergarten. Varying patterns of State supervision and subsidy exist in other States. Tasmania displays the highest degree of State initiative and responsibility for kindergartens. The Education Department establishes and supervises pre-school centres, parents repaying half the cost of the building over an extended period. Teachers' salaries, building, maintenance, and half the cost of equipment are met by the Department. The Victorian Government provides a building grant of up to \$6,000 per centre. It also meets teachers' salaries and pays a maintenance grant. In Western Australia per capita subsidies are paid by the Government to kindergartens affiliated with the Kindergarten Association, and administration and training are supported through that body. In addition, building grants are made to support the erection of up to six new kindergartens a year at the rate of \$3,000 per building. Local government bodies often supplement the government building grant. In Queensland the Government makes a small grant towards building costs and subsidises running costs. New South Wales has the lowest level of government assistance and the the lowest level of government-assisted kindergarten provision.

10.13 In South Australia the government grant is channelled through the Education Department to the Kindergarten Union of

⁸For a discussion of these issues see *Quarterly Review of Australian Education*, Vol. I, No. 4, and *Supplement*, Australian Council for Educational Research, Melbourne, June 1968.

South Australia. The grant assists in maintaining the Kindergarten Teachers College, and contributes to the payment of kindergarten teachers' salaries and part of the Union's administrative costs. The Union appoints all teachers on behalf of its affiliated kindergartens and supervised centres. Except for four kindergartens in underprivileged areas, local committees are usually responsible for paying 30 per cent of the salaries of their teachers and for all other running and maintenance costs. There is no government assistance with building costs, and local committees must acquire land and raise 40 per cent of the cost of land and buildings, which cost on the average about \$21,000, before they can negotiate a loan through the Union for the balance. The initiative for building new kindergartens does not come from the Union, but depends on interested people organising themselves to take the initiative in a locality.

10.14 The Kindergarten Union is a voluntary body in the management of which a large number of interested citizens and representatives of committees of branch kindergartens take part. A Board of Management, advised by standing committees responsible for finance, for the Kindergarten Teachers College and for South Australian liaison with the Australian Pre-school Association, controls the affairs of the Union. Many experienced educationists serve on these committees, membership of which is by invitation. There are fifteen voting members of the Board of Management, eight of whom are elected by the Kindergarten Union Council which itself is composed of an elected member from the Committee of each branch kindergarten. The Principal of the Kindergarten Teachers College, the Pre-school Adviser and the General Secretary of the Union are *ex officio* members, and the South Australian Government is represented by a non-voting observer from the Treasury. Parents play an indirect role in the control of the Union, since many members of kindergarten committees are parents of kindergarten children. The pattern of organisation is demonstrated in the accompanying chart from the Handbook issued by the Kindergarten Union in 1969.

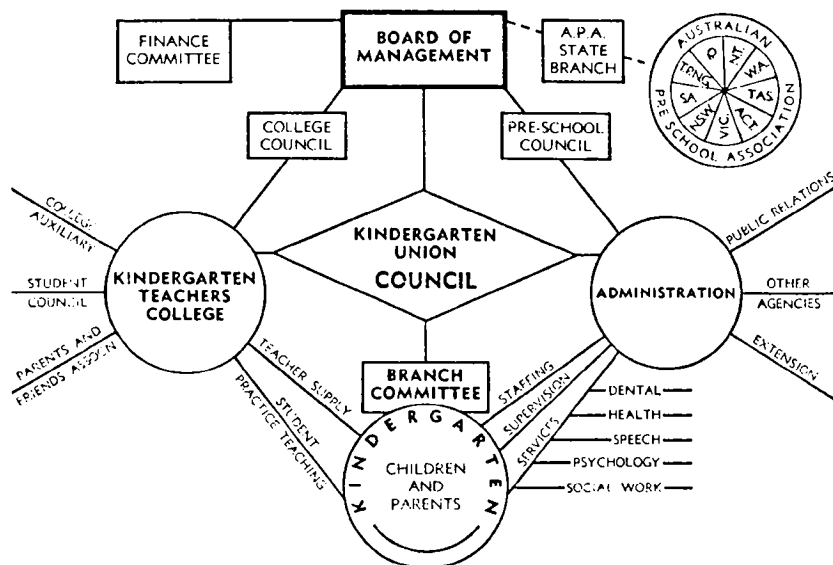
10.15 The Union operates with a very small administrative staff, restricted in size and in activities by lack of funds rather than by lack of demands made upon it. Four supervisors and a pre-school adviser superintend the work of the 129 centres all over the State. Frequent visits by a supervisor help to overcome the isolation of the small number of staff employed in each kindergarten, only one of whom in some cases is fully trained. A psychologist, a speech therapist and a social worker, all of them part-time, work under the pre-school adviser. Their special responsibility is the children attending kindergartens who have been referred by social agencies, clinics and doctors. There were 465 such children in 1968. The full-time secretary of the Union and five clerical staff complete the administrative structure.

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10.16 From its inception in 1905 until the end of the Second World War the Union concentrated on work with underprivileged children. Committees of interested women raised funds as a philanthropic endeavour, and teachers were drawn from families which could afford

Chart 10.1

ORGANISATION OF THE KINDERGARTEN UNION OF SOUTH AUSTRALIA



to finance their daughters through a period of training and contribute to their support when as teachers their salaries were little more than pocket money. Attendance at kindergartens was free and the location of the ten centres run by the Union before 1939 underlines the social-service nature of its operations. The date of establishment and the location of each of these ten centres are as follows:

- 1906 Franklin Street, Adelaide.
- 1908 Hindmarsh.
- 1908 Grey Ward, Adelaide.
- 1910 Halifax Street, Adelaide (now Keith Sheridan).
- 1918 Clayton, Kensington (now McKellar Stewart).
- 1921 Little Citizens, North Adelaide (now Barker).
- 1925 Lower North Adelaide (now Lucy Morice).
- 1926 Hackney.
- 1930 West End Mission (now Lavis).
- 1933 Port Adelaide.

10.17 After 1945 there was a great upsurge of interest in pre-school education, encouraged by Commonwealth Government entry into the field in 1940 with the establishment of the Lady Gowrie Centre in South Australia and its counterparts in other States as research and

demonstration centres. War-time increases in the demand for labour had led to temporary expansion in child-care centres, and the idea was gaining ground that the social and educational experience to be gained in a well-run kindergarten was beneficial for all children, not just for those whose home circumstances might offer fewer opportunities. The fact that families were smaller also increased the demand for kindergartens. Parents began to take the initiative, in contrast to the earlier period when the effort had been made by some on behalf of the children of others.

10.18 Governments have made grants to the Union since 1907. The Union had established 10 centres by 1933, and the number remained stationary until after the war. In 1947, when parents' groups intent on establishing kindergartens approached the State Government for assistance, they were referred to the Kindergarten Union which, in making them affiliates, began to change the character of the organisation and the direction of pre-school development. Affiliated centres were assisted on grounds which still operate, four of the original Union kindergartens receiving special assistance.

10.19 Until 1953 the Union's requests for assistance from the Government, based on arrangements with individual centres as outlined, were usually met, and so income increased with the increase in affiliated centres, though kindergarten teachers were still paid very poorly and administration was underprovided. Since 1953 annual increases in grants have not been related to numbers of affiliated centres. Although special increases in grants have been made to allow the pay of kindergarten teachers to follow increases granted to primary teachers, these have not included allowances to cover the gradual movement of primary teachers' salaries to a position of equality between male and female teachers.

10.20 There are, then, two types of financial restriction on the expansion of kindergartens assisted from public funds through the Kindergarten Union:

(a) Those having their origins in the degree of initiative and financial support required from parents. Expansion can take place only where parents have sufficient interest, organisational experience and income to form a committee and raise the \$8,000-odd towards the cost of land and building required before a loan can be negotiated. They must also be prepared to meet 30 per cent of the teachers' salaries, repayment of loan and running costs other than teachers' salaries.

(b) Those arising from the limited public funds made available to pre-school education. Even within the limits of the restrictions outlined above, expansion is discouraged because the Kindergarten Union is forced to limit the number of centres to which it grants affiliation because its income does not necessarily expand with the number of its affiliates. To have more affiliates merely means spreading assistance

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more thinly. Centres may, moreover, be prevented from qualifying for affiliation by the scarcity of trained teachers, a scarcity largely caused by lack of finance to expand training facilities and by low pay.

PRESENT PROVISION

10.21 The following Table sets out enrolments in government-assisted kindergartens in the 1960's. By 1969 there were 7,159 enrolments in 129 centres. This represents an increase of 23 centres since 1959, a rate of growth substantially smaller than that in the previous 10-year period, when 35 centres had been added. However, enrolments in government-assisted kindergartens rose significantly in relation to the relevant age groups (three- to five-year-olds) in the population. Over the period 1961-1969, the number in these age groups increased by about 6 per cent, while enrolments rose by 40 per cent.

Table 10.1

ENROLMENTS IN GOVERNMENT-ASSISTED KINDERGARTENS

SOUTH AUSTRALIA 1960-1969

1960 (August)	4,827
1961 "	5,115
1962 "	5,434
1963 (December)	5,821
1964 "	6,028
1965 "	6,194
1966 "	6,455
1967 "	6,645
1968 "	6,848
1969 "	7,159

Source: Kindergarten Union.

10.22 Before a measurement can be made of the extent to which kindergartens are available to children of pre-school age in South Australia it is necessary to define which of the centres catering for pre-school children should be accepted as being of appropriate standard and to which age group provision should be related.

10.23 There were, in 1969, 203 centres in the Adelaide metropolitan area and 76 in the rest of the State drawing free milk for 11,592 pre-school children. Of these, some 7,000 were in kindergartens affiliated with the Kindergarten Union, including the Lady Gowrie Child Centre. Of the centres catering for the remaining children very little is known. Many, by their titles, are clearly private child-minding centres operated on an all-day basis. The number of these in the metropolitan area is estimated at 58, catering for about 1,400 children.

10.24 South Australia has no legislation requiring State registration and supervision of pre-school centres. In addition to State registration, some other States have publicly subsidised day nurseries, thus

recognising the fact that kindergartens, because of their restricted hours of operation, are of limited assistance to working mothers with young children. There is some public supervision of child-minding centres run as business ventures in South Australia. Licensing is undertaken by all but three local councils under a model by-law drawn up in 1962, and the Departments of Health and of Social Welfare also undertake periodic inspections. However, supervision is limited to aspects of physical accommodation and hygiene. These full-day child-minding centres fill a need, but, since neither their purpose nor their programme is primarily educational and there is no check on the qualifications or numbers of their staff, we exclude them from our estimates of pre-school provision.

10.25 To gain some picture of kindergartens outside the Kindergarten Union, the Committee sent a questionnaire⁹ to 96 unaffiliated centres which were not obviously all-day nurseries. Of these, 77 replied, 39 of them in the metropolitan area and 38 in the remainder of the State. Table 10.2 summarises the answers given to the main questions asked.

Table 10.2
SURVEY OF 77 SOUTH AUSTRALIAN KINDERGARTENS
NOT AFFILIATED WITH THE KINDERGARTEN UNION, 1969

	Metropolitan	Non-Metropolitan	Total
Number of Centres	39	38	77
Children Attending	1,540	1,395	2,935
Average Number of Children per Session	32	29	30
Staff Employed	108	84	192
Kindergartens with No Qualified Staff	19	23	42
Kindergartens Run as Private Business Ventures	18	6	24
Buildings Specially Designed as Kindergartens	15	9	24
Annual Fees (Average)	\$51.60	\$45.42	\$48.59
Have Sought Affiliation with Kindergarten Union	8	8	16

10.26 Most kindergartens outside the Union are run by committees, and the average fees charged are higher than the contribution directly made by parents in Union kindergartens. There is one staff member to every 12 children at individual kindergarten sessions, a ratio similar to that operating in, and approved by, the Kindergarten Union, but the qualifications of staff as set out in Table 10.3 are very low, and, if fees are the sole source of income of the centres, staff must be poorly paid. Nearly 73 per cent of staff have had no formal training which would qualify them to work in pre-school education. The Kindergarten Union also employs a high percentage of untrained staff, but every centre is under the direction of a trained staff member. Of the 77 unaffiliated centres, 42 had no staff with any training. Some staff members without qualifications in the pre-school field had other training, mostly in nursing, which had given them some experience with young children.

⁹ See Appendix E.

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10.27 The questionnaire invited general comment on pre-school education in South Australia. Comments received stressed a number of common points. Most centres desired government aid, but had not applied for subsidy through association with the Kindergarten Union because they were aware that they did not comply with the require-

Table 103

QUALIFICATIONS OF STAFF IN 77 SOUTH AUSTRALIAN KINDERGARTENS NOT AFFILIATED WITH THE KINDERGARTEN UNION, 1969

	Metropolitan	Non-Metropolitan	Total
Diploma of a Kindergarten Teachers College	2	5	7
Some Pre-School Training in a Recognised College but No Diploma Held	22	4	26
Primary or Infant Training in a Teachers College	10	9	19
No Qualifications	74	66	140
Total Staff	108	84	192

ments of affiliation. The shortage of qualified teachers available for employment made any foreseeable change in staff quality unlikely, and several committees, though working towards the erection of a building acceptable in terms of Union requirements, saw no early possibility of achieving their goal. The two basic needs of pre-school education in the State, as seen by these groups actively engaged in the field, were concerned with finance and staff-training. Government financial assistance with building costs, to improve and extend existing facilities and to subsidise running costs so that costs could be covered by charging moderate fees, was seen as the first need. Some centres reported that they were running at a loss and faced the prospect of closing if no assistance was forthcoming. The second need, of equal importance, was for an extension of opportunities for the full-time and part-time training of pre-school teachers. Many unqualified staff would welcome part-time training which would enable them to combine work and education. It was also suggested that centres operating with untrained staff would appreciate regular information and advice on suitable programmes of activity for kindergarten children.

10.28 If we can assume that the 80 per cent of centres circularised which replied to our questionnaire are typical of kindergartens not affiliated with the Kindergarten Union, some 55 per cent of them could not be accepted as pre-school centres of appropriate standard because their staff includes no person with any relevant training. Those whose staff includes partially or fully trained people could not be guaranteed as being of appropriate standard, since only a very small percentage of staff have full pre-school qualifications and there is no supervision of their programmes or physical facilities. This is not to say that centres not affiliated with the Kindergarten Union do not provide experiences valuable to the children who attend them,

or that all such centres fall below appropriate standards. It is merely to assert that their standards cannot be guaranteed. It is clear that increased government assistance to allow extension of training facilities for pre-school teachers and some assistance with building costs could raise many centres not at present eligible for government assistance to standards which the community could unreservedly endorse.

10.29 The level of participation in pre-school education will clearly vary according to the age group to which places are related. The Plowden Committee, for example, recommended that places should be available for all three-, four- and five-year-olds, and the Australian Capital Territory is planning its provision with this age group in mind. In 1969 there were places in government-assisted kindergartens for 10.9 per cent of this age group in South Australia.

10.30 Since South Australia is moving from a relatively low level of provision, and since only 1.6 per cent of children in Kindergarten Union centres in 1969 were under the age of three and one-half years we have set three and one-half as the lower limit of the group to which we relate provision. All four-year-olds are included. Among five-year-olds in South Australia in 1969, 83.4 per cent of males and 84.2 per cent of females were in school at the time of the age-grade census in August. Since the census follows a school intake in July it overstates the proportion of the age group in school in months immediately preceding a school intake. For this reason we include one-fifth of five-year-olds in our base age group. Accordingly we relate kindergarten provision to half the three- to four-year-olds, all the four-year-olds, and one-fifth of five-year-olds. In this combination there was an estimated 36,800 children in 1969. There were places in government-subsidised kindergartens for 19.5 per cent of them. This compares with 14.8 per cent in 1961. If we assume that centres replying to our questionnaire cover 80 per cent of children in unsubsidised kindergartens, there were places in such centres for about 3,700 children. There would on this assumption be 10,800 children, or 29.4 per cent of our age group, attending a kindergarten of some sort in 1969.

Interstate Comparisons

10.31 Interstate comparisons of kindergarten provision are difficult to make in Australia. In all States government financial assistance is limited to those centres recognised by government departments or a kindergarten association as following an approved education programme under a suitably trained teacher. New South Wales and Tasmania have classes in infant schools called kindergartens catering for children of pre-school age but not strictly comparable in hours or programme with centres usually accepted as kindergartens. However, they are clearly part of government-assisted pre-school provision, and as such are included in Table 10.4. Some States license kindergartens

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which they nevertheless do not accept for purposes of subsidy. New South Wales kindergarten provision would be more than trebled if such centres were included, and Western Australia's nearly doubled. Table 10.4 shows the number of government-assisted kindergarten places in the various Australian States for 1968. Subsidised provision is related to our base age group as defined above. South Australia ranks fourth, though a wide gap separates it from Victoria. If provision within schools is excluded, South Australia's position rises to third. A participation rate equal to that of the Australian Capital Territory would have required 20,300 kindergarten places in South Australia in 1969, or 13,100 more places than were available in that year. A rate equal to that of Victoria would have required an increase of 4,700 over the existing number of places in December 1969.

Table 10.4

ENROLMENTS IN GOVERNMENT-ASSISTED KINDERGARTENS AUSTRALIA 1968

	No. of Enrolments	Participation Rate per cent
New South Wales	4,738 (a)	3.4
Victoria	36,308	32.7
Queensland	7,400	12.3
South Australia	6,766 (b)	18.2
Western Australia	4,686	14.9
Tasmania	5,243 (c)	37.9
Australian Capital Territory	2,570	56.0
Australia	67,711	17.0

Source: Australian Pre-School Association and Tasmanian Education Department.

(a) Including 338 in schools.

(b) Not strictly comparable with figure shown in Table 10.1.

(c) Including 2,381 in schools.

Finances of the Kindergarten Union

10.32 Our analysis of costs of the Kindergarten Union is based on the submission made by the Union to the Committee, and relates to 1968, the latest year for which details were available. In 1968 the State Government met \$547,000 of the Kindergarten Union's total running expenses of \$924,462. Parents and local committees contributed \$357,737, leaving \$19,725 to be raised centrally by the Union. The government contribution was 59 per cent of total expenditure. The Union itself decides on the allocation of the government grant between its various areas of expenditure. In 1968 it spent 16 per cent of the grant on the maintenance of the Kindergarten Teachers College, including student allowances, 11 per cent on supervisory and administrative functions and 73 per cent on teachers' salaries.

10.33 In 1968, the running of the Kindergarten Teachers College cost \$86,175, including \$42,166 paid in student allowances. If we

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exclude the cost of training teachers, the expenditure of the Union on administration and on the operation of its 125 branch kindergartens was \$838,287, 43 per cent of which was met by parents and local committees. The cost per child, and the sources from which it was met, are set out in Table 10.5.

Table 10.5

DISTRIBUTION BETWEEN VARIOUS SOURCES OF THE COST OF KEEPING EACH CHILD
IN A KINDERGARTEN UNION KINDERGARTEN IN 1968

	\$
Government Contribution (Excluding Cost of Training)	68.10
Parents' Weekly Contributions	36.00
Fund-Raising by Local Committees	16.84
Other Sources	2.95
Total Cost per Child	\$123.89

10.34 The Union's statement of the cost of running an individual centre for 60 children in two sessions of 30 each was \$7,279 in 1968, made up as follows:

Teachers salaries:	\$	\$
<i>Director</i>	2,610	
<i>Trained assistant</i>	1,985	
<i>Untrained assistant</i>	1,364	
		5,959
Kindergarten running costs		800
Repayment of instalments on building loan (assuming committee has first acquired land and raised some \$6,000 towards a \$12,000 building)		520
		\$7,279

The Kindergarten Union would normally pay \$4,309 of the salaries listed, the balance being met by parents' weekly contributions and fund-raising by the local committee. Four kindergartens in less privileged areas were subsidised more heavily, paying only \$900 between them.

10.35 The information supplied by the Australian Pre-School Association indicated considerable variation within Australia in government expenditure per child in kindergartens in 1968. The grants included those made for teacher training and capital purposes as well as assistance in running costs. Total government expenditure related to kindergarten enrolments, other than those in government schools, ranged from \$16 to \$108 per child.

Geographical Distribution of Kindergarten Union Centres

10.36 The method of financing pre-school education since 1947, when the Union ceased taking initiative for the establishment of

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centres, leaving the task to local parent groups, makes it likely that since that year the main expansion of kindergartens will have been in areas where parents are better able to bear the cost and more appreciative of the benefits to be derived by their children. In order to test this hypothesis we have related the provision of Kindergarten Union kindergartens in each local government area of metropolitan Adelaide to our base age group in the area, projecting population figures forward from the 1966 census. Where the location of a kindergarten was within a few blocks of a local government boundary, its places were divided equally between the area in which it was located and the neighbouring area.

Table 10.6
KINDERGARTEN PARTICIPATION BY LOCAL GOVERNMENT AREA
METROPOLITAN ADELAIDE, AUGUST 1969

Local Government Area	Base Population (b)	No. of Kindergarten Places	Participation Rate per cent	Male Work Force in Census Categories 0 and 1 (c) per cent
Adelaide	379	180	47.50	20.29
Brighton	494	251	50.81	31.10
Burnside	762	301	39.50	40.03
Campbelltown	1,404	254	18.09	16.84
Col. Light Gardens	56	30	53.57	18.21
East Torrens (a)	16	—	—	57.64
Elizabeth	1,318	224	17.00	14.00
Enfield	2,266	270	11.92	11.05
Glenelg	295	118	40.00	21.39
Henley & Grange	412	153	37.14	28.18
Hindmarsh	339	20	5.90	6.33
Kensington & Norwood	319	85	26.65	13.83
Marion (a)	1,966	516	26.25	17.47
Mitcham	1,379	453	32.85	30.44
Munno Para (a)	629	—	—	6.98
Payneham	523	117	22.37	16.93
Port Adelaide	1,186	114	9.61	7.08
Prospect	430	106	24.65	17.91
St. Peters	313	106	33.87	10.77
Salisbury (a)	1,693	248	14.65	15.77
Tea Tree Gully (a)	1,168	120	10.27	15.55
Thebarton	390	75	19.23	6.98
Unley	885	238	26.89	21.65
Walkerville	108	—	—	42.31
West Torrens	1,279	239	18.69	19.70
Woodville	2,029	361	17.79	11.47
Total Adelaide				
Metropolitan Area	22,038	4,579	20.77	19.60

(a) Metropolitan part.

(b) One-half of three-year-olds, all four-year-olds, one-fifth of five-year-olds. 1966 census figures projected to 1969.

(c) Professional, technical and related workers, and administrative, executive and managerial occupations.

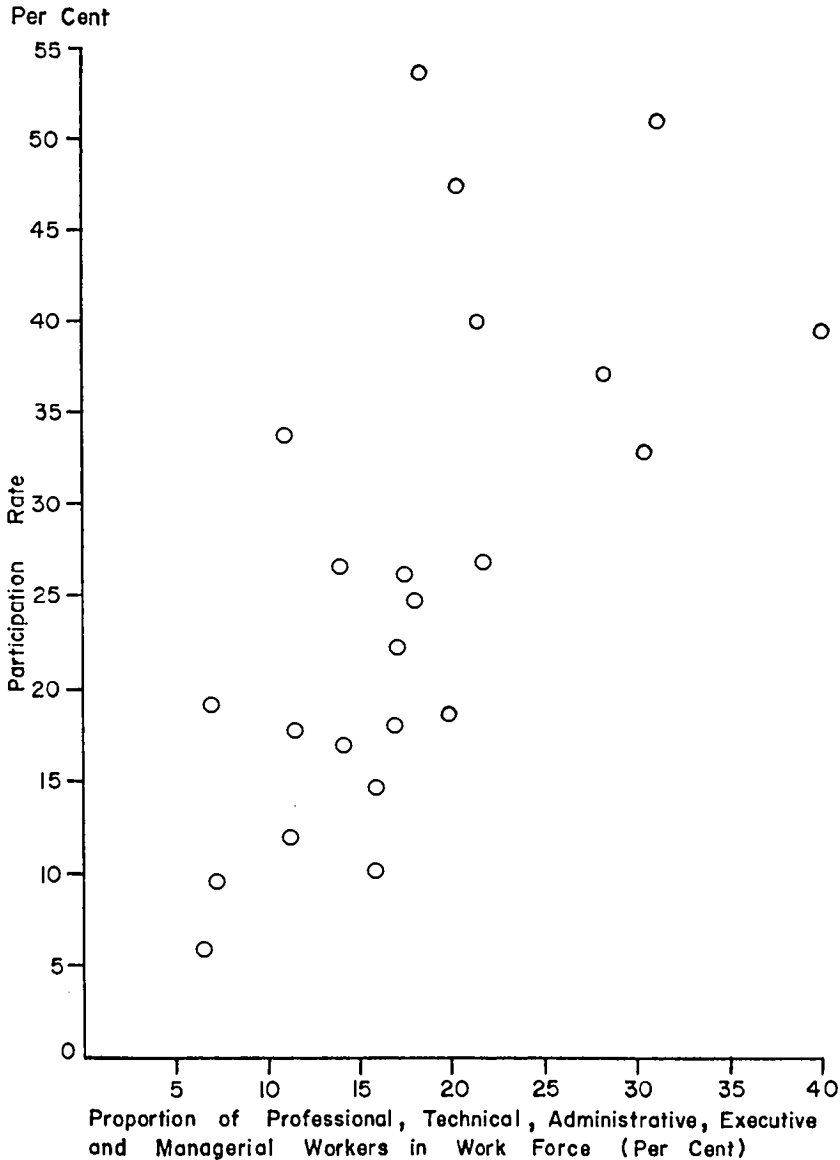
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10.37 Although the division into local government areas is no more than a statistical convenience, Table 10.6 gives some indication of the varying levels of provision in different parts of metropolitan Adelaide. It also shows, as a simple index of the socio-economic level of each municipality, the proportion of its male work force in the

Chart 10.2

PRE-SCHOOL PARTICIPATION RATES AND PROPORTION OF PROFESSIONAL, TECHNICAL AND RELATED WORKERS, AND ADMINISTRATIVE, EXECUTIVE AND MANAGERIAL WORKERS IN WORK FORCE IN LOCAL GOVERNMENT AREAS

METROPOLITAN ADELAIDE 1969



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categories of professional, technical and related workers, and administrative, executive and managerial occupations at the time of the 1966 census.

10.38 Although the relationship between kindergarten participation rates and the socio-economic level of the area as measured by the proportion of its male work force in the categories stated was not as strong as is sometimes assumed, there was a relationship between the two, as illustrated in the scatter diagram (Chart 10.2). Hindmarsh and Port Adelaide are extreme examples of established areas with considerable numbers of children in the age group where kindergarten participation rates were low. The proportion of the male work force in the categories of professional, technical and related workers, and administrative, executive and managerial occupations was also low in these areas. Among localities with more than 30 per cent of the male work force in the stated categories, all except East Torrens and Walkerville, which also had few children of kindergarten age, had participation rates much higher than that of the metropolitan area as a whole.

10.39 There were 2,438 children in kindergartens affiliated with the Kindergarten Union outside the metropolitan area in August 1969. This represented an 18.67 per cent participation rate. Centres were concentrated in the larger towns, and a high proportion of their directors had had their training in primary or infant rather than pre-school areas. The attendance at several country centres was higher than the usual metropolitan maximum of 60 children, a number of centres having more than 100 enrolments.

10.40 The provision of kindergartens in sparsely populated districts is difficult, since pre-schooling is essentially a local affair which must take place within a limited radius of the child's home. Mobile kindergartens, one of which exists in the Australian Capital Territory, are a possible means of providing some of the advantages of kindergartens for rural children. The conditions of training of kindergarten teachers discourage the provision of specially trained teachers in areas remote from Adelaide. The limited number of living allowances available to trainees and the absence of boarding allowances favour students who can live at home while training. Kindergarten teachers are able to choose the centre where they will teach, so there is no posting to country areas as with Education Department teachers. In these circumstances, the fact that the non-metropolitan participation rate in pre-schooling so closely approaches that of Adelaide is remarkable. It may perhaps be explained by the fact that a high proportion of country kindergarten teachers are married women trained as primary and infant teachers.

PRESENT PROVISION FOR TRAINING PRE-SCHOOL TEACHERS

10.41 The Kindergarten Union runs the only establishment for the training of pre-school teachers in the State, the Kindergarten

Teachers College. Students enter, usually after a fifth year of secondary schooling, for a three-year diploma course. A Commonwealth grant of \$670,000 has recently been made to meet the cost of new premises for the College, expected to be occupied by 1972. However, the College is financed out of the general funds of the Union, and, unless special government grants are made to meet increased running costs, expansion beyond the present intake of 40 students will not be possible. The capacity of the new College will allow an intake of 70 a year, increasing the total number of students to 199 from its present 105. The new building has been designed to allow for later expansion to cope with 300 students, giving a possible output of teachers, after allowing for 10 per cent wastage over the three years, of 90 a year.

10.42 The cost of running the College for 96 students in 1968 was \$86,175, including \$42,166 for student allowances, making the cost per student, exclusive of allowances, \$458. If increased running costs over the period could be met the Union planned to enrol students to 1975 as set out in Table 10.7. These plans, outlined to the Committee in 1969, were not fulfilled in 1970, when only 33 students in fact entered courses at the College. In all, 185 applications were made to enter the College, but a high proportion of those not offered living allowances transferred to government teachers colleges where all students receive financial support. The College now plans to admit 55 students in 1971, but fears that the same considerations will again reduce the number accepting places.

Table 10.7

KINDERGARTEN TEACHERS COLLEGE

PROPOSED ENROLMENTS TO 1975

	1969	1970	1971	1972	1973	1974	1975
Year I	40	40	40	55	70	70	70
Year II	39	38	38	38	52	66	66
Year III	26	36	36	36	36	49	63
Total	105	114	114	129	158	185	199

10.43 The College course is designed to prepare teachers of children from three to eight years of age, with emphasis on the pre-school years. Because of the small number of students a high proportion of part-time staff is used, and the range of academic subjects offered is limited. There is only one grade of lecturer in the Kindergarten Teachers College and the range payable from September 1969 is \$4,065-\$4,315, plus a \$100 allowance for a degree or \$60 for a one year's course beyond the diploma level of a kindergarten teachers college. In 1969 there were seven full-time lecturers employed, including a male lecturer appointed at a salary above the normal range. Salaries are considerably lower than those paid to lecturers in other teachers colleges, where there are three levels of lecturer, with salaries ranging

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from \$5,100 to \$8,000. The part-time lecturing staff at the Kindergarten Teachers College are paid at hourly rates ranging from \$3.50 to \$9.00 according to the subject taught. If the lecturers at the Kindergarten Teachers College were spread between the three ranges at departmental teachers colleges in the same proportions as lecturers employed there, and its Principal paid at the same rate as other college principals, the cost of running the College would have been greater by \$25,300 in 1969. This sum would have represented a 22 per cent increase on total running costs, and would have increased the running costs of the College, exclusive of student allowances, by nearly 50 per cent.

10.44 There is no opportunity at present in South Australia to gain qualifications in the pre-school field beyond the initial diploma. To gain further specialist training the Union assists an occasional lecturer from the Kindergarten Teachers College through a one-year post-diploma course at the Melbourne Kindergarten Teachers College. Only one undergraduate course in pre-school education exists in Australia, and no postgraduate ones. There are at present no short courses at the Kindergarten Teachers College such as exist in some other States for people with a high level of general education, teacher training in other areas or experience in the pre-school field. Nor is there any provision for part-time training for under-qualified people at present teaching in kindergartens, or for those who may wish to teach there. No funds are provided for research.

10.45 One-half of the students are paid living allowances while they train. There is no boarding allowance. Since allowances are awarded on an academic basis and not subject to a means test, they do not necessarily attract into training students whose social background would help to give balance to the pre-school teaching force by reducing its bias towards the more prosperous groups in the community. The Committee's survey of students entering South Australian tertiary institutions in 1970 (see Table 14.8) showed that over 42 per cent of those entering the Kindergarten Teachers College had fathers in professional, technical and related occupations, or in administrative, executive and managerial ones. Thirty-two per cent of students entering the College who were paid living allowances also fell in this group. At the time of the 1966 census only 15 per cent of the male work force was in the categories listed. Students entering training to be kindergarten teachers were, on the basis of their fathers' occupations, closer in their social composition to university students than to students entering internal courses in government teachers colleges, 30 per cent of whom had fathers in the occupational categories mentioned above.

10.46 A comparison between the allowances which are paid to all teachers in training with the Education Department and those paid to one-half of those training to become kindergarten teachers illustrates the disadvantages under which the Kindergarten Teachers College

labours in attracting students to whom the level of the living allowance is a matter of importance. The allowances were as follows in 1969:

	Kindergarten Teachers College	Education Department	
First year	\$580	\$900	} Plus boarding allowance if living away from home.
Second year	\$620	\$950	
Third year	\$680	\$1,020	

The cost of running the Kindergarten Teachers College, \$111,737 in 1969, would have been increased by \$19,900¹⁰ if allowances had been paid on the same basis as at other teachers colleges. This increase and that required to place lecturers at the Kindergarten Teachers College on the same salary level as those in other teachers colleges would have raised total running costs by 40 per cent.

KINDERGARTEN STAFF

10.47 Of the 347 staff working in 129 branch kindergartens in July 1969, 182 had received some training. Of these, 100 held the diploma of the Kindergarten Teachers College, 30 had completed a special one-year course not now available, 39, mostly married women working in country centres, had trained in teachers colleges of the Education Department, and 13 had overseas training. The remaining 165 staff were untrained assistants whose pay at full-day centres ranged from \$1,304 in the first year to \$1,364 in the fourth and subsequent years.

10.48 The teacher/pupil ratio in Union kindergartens was 1:20.2 at August 1969. There was one trained teacher to 38.1 children enrolled. This figure is misleading in terms of the number of children in the care of an individual staff member at any given time, since most centres work two sessions a day with a different group of children in each and average attendance is somewhat lower than enrolments. The annual turnover of trained staff, on the basis of 1968 resignations, was 16 per cent.

10.49 Kindergarten teachers with training are paid at two rates, one for assistants, the other for directors of centres. The holder of a three-year Diploma from the Kindergarten Teachers College normally becomes a director after two years' service. The rates of pay operating in July 1969 were:

- (a) Trained assistants — first year \$1,985, rising to \$2,108 in the fifth and subsequent years.
- (b) Directors — first year \$2,252, rising to \$2,910 at the tenth year.

A primary or infant teacher in the Education Department would at the same date have been paid \$2,585 in her first year of teaching if

¹⁰ Figure supplied by Kindergarten Union.

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she had had two years' training, or \$2,902 if she had had three. Her prospects of advancement would also have been greater.

10.50 The State Government in 1969 made a special grant of \$11,433 to enable the number of steps in the directors' scale to be reduced to ten, making directors' salaries equal to those of classified assistants in departmental schools before the introduction of equal pay.¹¹ Their length of training and degree of responsibility, however, make the equation of directors with certificated assistants rather than with classified assistants appropriate. If the pay of directors of kindergartens had been equal to that of certificated teachers, and the pay of trained assistants equal to that of classified assistants in primary schools at July 1969 rates, this would have resulted in an increase of \$152,910 in the wages bill of the Union. Such an increase would have raised the running costs per child by \$21.79 per annum; it would have represented an increase of 35 per cent in the total amount paid to trained kindergarten teachers and would have amounted to a 16 per cent increase in the total expenditure of the Union.

DEMAND FOR PRE-SCHOOL CENTRES

10.51 Certain standards in relation to building and equipment and to the training and number of staff have to be met before kindergartens can be accepted as branches of the Kindergarten Union and become eligible for subsidy. In addition to the 129 operating branch kindergartens in 1969, 16 committees had Union membership. They had accepted Union standards and agreed not to open till they achieved these. Over the last 10 years there had also been inquiries from 58 groups either anxious to establish kindergartens, or, in 30 of these cases, already operating them without subsidy, usually with untrained staff.

10.52 The branch kindergartens of the Union in August 1969 had waiting lists of 5,134 children. Of these children, 3,429 were aged three to four, and 1,655 aged four to five. Applications to be placed on the waiting list are usually accepted when the child is three years old, so that the lists record a larger number of names than under present policy would be immediately eligible. The largest of these waiting lists were at Rostrevor with 136 names, and at Christies North with 102 names.

10.53 There is thus a quite large expressed demand which is not being filled, and a number of existing kindergartens which could presumably be raised to satisfactory levels if financial assistance and trained staff were available. The expressed demand is certainly artificially restricted because of the known lack of places in existing kindergartens and because of the areas where there is no kindergarten to receive applications for places.

¹¹ Additional grants are being paid from 1st July 1970 to bring about equal pay in three annual instalments.

10.54 As attendance is not compulsory it is difficult to estimate the potential demand for kindergartens. Demand will clearly be different according to the degree of initiative and level of contribution expected of parents. Parents who are unwilling to take initiative are not on that account to be regarded as likely to spurn kindergartens if they exist or if attendance at them is either cheap or free. It may, moreover, be desirable to take special steps to entice into kindergartens those children whose parents are least likely to send them there. Provision of more equal opportunities to benefit from schooling requires that facilities be easily available for such children. Such an argument applies especially to migrant and Aboriginal children and those whose home circumstances are either materially or culturally deficient. It may also apply to those local government areas in which participation rates are at present particularly low.

10.55 In Victoria and the Australian Capital Territory, where parental demand is more easily expressed because of assistance with building costs, the proportion of children in government-assisted kindergartens is higher than in South Australia. Assuming 60 children a centre, it would require expansion at the rate of 28 centres a year over 10 years in South Australia to equal Canberra's present participation rate related to 1969 population figures.

Table 10.8

EFFECTS OF VARIOUS RATES OF EXPANSION IN GOVERNMENT-ASSISTED KINDERGARTEN
PLACES OVER A TEN-YEAR PERIOD

Annual Expansion in Centres at 60 Pupils per Centre	Number of Places after 10 Years	Participation Rate as Percentage of the Base Age Group in 1981 per cent
10	13,800	25.9
15	16,800	31.6
20	19,800	37.2
25	22,800	42.9
30	25,800	48.5
35	28,800	54.1
40	31,800	59.8
50	37,800	71.0

10.56 However, in plans for future provision it must be borne in mind that population in the relevant age groups will increase over the coming decade as the immediate post-war baby boom is reflected in increased births. According to our estimates¹² the base age group to which we have related provision will have risen from 36,800 in 1969 to 53,200 by 1981. There were, in December 1969, 7,159 places in government-assisted kindergartens, resulting in a participation rate of 19.5 per cent. Assuming that there will be 7,800 places in government-assisted kindergartens by 1971, Table 10.8 shows the effects of

¹² See Appendix A.

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various rates of expansion over 10 years on kindergarten participation related to this base age group, assuming 60 children per centre. Over the 10-year period from 1958 the number of government-assisted centres rose at the rate of 2.3 per year. A continuation of this rate of expansion would give a participation rate of 16.3 per cent in relation to the base age group in 1981, so that some acceleration in the rate of expansion would be necessary to prevent participation from actually falling.

FUTURE CONTROL AND MANAGEMENT OF PRE-SCHOOL EDUCATION

10.57 The Committee is convinced of the value of pre-school education, and, in particular, of its importance to children whose home background is in special need of enrichment through kindergarten experience. South Australia is not alone among the Australian States in its relatively low provision in this area. In fact, its achievement compares favourably with that of some other States. However, the pattern of development has tended to favour children in more affluent areas, and the level of assistance has not kept pace with the growth of demand. Nor do the present arrangements for public assistance take account of the greater need of many children whose parents express no demand because they lack appreciation of the benefit which their children might gain from kindergarten, lack organising experience, or lack the money at present needed to establish a kindergarten and support their children's attendance at it. On behalf of these children it seems appropriate for the community to take more positive steps, especially in the light of present knowledge regarding the importance of pre-school years in social, emotional and cognitive development.

10.58 We believe that the provision of kindergartens in some areas should be given priority and that they should be erected at public expense and be provided free or require only a nominal contribution from parents towards their recurrent expenses. Except on these conditions kindergartens will continue to be unavailable to the children who are most in need of them. Attendance at school is not compulsory before the age of six and the decision about whether and when a child should attend kindergarten should, we think, remain a parental one, although some groups of parents should be especially encouraged to allow their children to attend by making facilities easily available and by active persuasion. For children more fortunately situated some degree of parental responsibility in the erection and maintenance of kindergartens we regard as a reasonable contribution towards the expense of education before the compulsory age.

10.59 The financial burden of erecting kindergartens, at present borne entirely by parents, should be shared by the State where total responsibility is not accepted by it. In the Australian Capital Terri-

tory buildings are erected at public expense and equipment and furnishing are a parental responsibility; in Victoria a State subsidy on building exists. An arrangement similar to either of these should, we suggest, be considered as an alternative to the present South Australian arrangement in areas where it is not regarded as necessary to provide kindergartens wholly at public expense. The parents' share, if any, of capital costs could be raised by guaranteed loans along the lines of the scheme recently approved for government schools (see paragraph 9.27).

10.60 If certain areas are to be given priority in terms of publicly assisted kindergarten development, it will be necessary for some authority to determine priorities and to decide where kindergartens should be provided at public expense. It will also be necessary to allot responsibility for the management and supervision of kindergartens provided on the new basis.

10.61 The Committee considered the proposition, urged in some submissions, that any free kindergartens should be run by the Education Department and provided in areas where the Department judged them to be necessary. Such an arrangement would have many advantages. The Department has information derived from experience in infant classes which would enable it to identify areas where children entering school were below the State average in their ability to cope with formal learning. Areas where a high proportion of children come from non-English-speaking homes, or where poverty or less well-educated parents limit the opportunities for the type of development which is the foundation of school achievement, would be known to it. In some areas there is, for various reasons, a higher concentration of families which are the responsibility of a single parent. This also would be known, as would the percentage of children whose family circumstances qualified them for special welfare assistance. All this information would be highly relevant in the allocation of priorities in kindergarten provision. Because it is responsible for infant classes, the Department would be in a favourable position to devise kindergarten programmes specifically directed at preparing educationally underprivileged children for school work, and to provide valuable continuity of experience between kindergarten and formal schooling. Kindergartens might be more readily accepted by parents as a normal part of education if they were organised as part of the State school system. Such a development would be consistent with trends in some other countries. The United States Educational Policies Commission, for example, regarded the continuity of programme which kindergartens within the school system could provide as important in promoting more equal educational opportunity.

10.62 Although we think it important that the Education Department's experience should be used in the siting of kindergartens, and that arrangements should be made which will facilitate continuity of

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educational experience between kindergarten and school, we have, for several reasons, not recommended that the Department should run the free kindergartens, at least in the immediate future, or have sole responsibility for siting them.

10.63 The first, and most important, reason is that we regard decentralisation and community involvement in education as desirable in themselves wherever they can be achieved without sacrificing other important values such as equality of opportunity. Pre-school education is an area in which community involvement already exists and is particularly valuable since early education must be a joint concern of home and school. The existence of separate responsibility for pre-school education in the Kindergarten Union has allowed the development of alternative approaches to the education of young children which has in turn influenced State education at infant levels. Such cross-fertilisation is desirable as it provides more than one centre of initiative.

10.64 The Education Department is likely to be fully preoccupied with the problems it faces as the authority responsible for compulsory education in a period of considerable complexity and change, when there is already an accumulation of problems. To add a new area to its responsibilities would be to add unnecessary burdens.

10.65 Pre-school education is not compulsory, and it is for this reason appropriate that voluntary effort and parental initiative should supplement government provision. The community has been served for a long period by many individuals without whose efforts in the Kindergarten Union we should have considerably fewer kindergartens than we have. The Union has done important work in raising the level of interest in kindergartens and in ensuring that those receiving government assistance conform to world pre-school standards. Its original purpose was to provide for underprivileged children some of the advantages enjoyed by children of more prosperous parents. If free kindergartens are to be provided for some children, we think it appropriate that the Union should run them. The possibility of pre-schooling being undertaken in close physical proximity to infant schools, and of a working co-operation between them, is not ruled out. This question, and the possible direct provision of kindergartens by the Education Department in the future, we leave for consideration by the Pre-School Committee whose establishment we are recommending.

10.66 The Union has succeeded in involving parents in the work of kindergartens in ways that are especially desirable in the education of young children, and its work among parents has undoubtedly contributed to beneficial changes in child-rearing practices. If all kindergartens were managed by the Union, parents' committees could operate in the new free kindergartens in the same way as they do in

present ones. Parents, perhaps understandably in view of the short period of association which most parents have with a kindergarten, have elected few fellow parents to the Union's Board of Management. Their participation in policy-making, indirect though it is, is nevertheless greater than that of parents in the State system.

10.67 For these reasons, we think the Kindergarten Union should continue to play an active part in the pre-school field. However, increasing sums of public money will be needed as publicly assisted kindergarten provision expands. This must involve more direct public accountability than can be provided through a voluntary organisation. We are therefore recommending two means of increasing publicly accountable participation in pre-school affairs. The first is through the establishment of a Pre-School Committee appointed by the Government to control the allocation of funds and establish priorities in kindergarten development. The Kindergarten Union, we suggest, should act as its agent, being responsible for the supervision of kindergartens whose location and level of assistance from public funds would be decided by the Pre-School Committee. The second is through more formal and substantial government representation on the Board of Management of the Kindergarten Union. These arrangements will enable the Kindergarten Union to keep its organisation intact, and will at the same time broaden the expert points of view brought to bear on planning. The Union will need to be more strongly supported from public funds to allow the growth in its administrative staff to keep pace with the greatly increased demands that will be made upon it as the number of kindergartens for which it is responsible expands.

10.68 Accordingly, we are proposing that a new body, responsible to the Minister of Education, be appointed. This will enable expert opinion beyond the Kindergarten Union, including that of the Education Department, to be brought to bear on the overall planning of pre-school education and on the allocation of funds, whilst retaining the actual running of kindergartens in the hands of those experienced in the field, with parental participation, through the Kindergarten Union. This new body, which we suggest should be called the Pre-School Committee, should decide on priorities between areas, having regard both to the present level of provision and its estimate of need. It should determine where kindergartens ought to be provided at public expense and on public initiative and what should be the level of public assistance and parental contribution in others. We think that there might be several levels of public financial support, with intermediate stages between the present level of assistance and free kindergartens. Variations both in assistance with building costs and in parental contributions would be possible, and in some areas subsidies could be made conditional on the provision of a percentage of free places.

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10.69 The Education Department, for reasons previously outlined, is in a particularly favourable position to provide information relevant to the siting of kindergartens. The Committee may also decide to locate some kindergartens in school grounds to increase the possibility of co-operation with infant schools. For these reasons, and to provide continuity of educational experience, a member of the Committee should be a senior departmental officer. Another member of the Committee should be a person associated with the work of the Kindergarten Union. We propose that this member should be selected by the Minister of Education from a panel submitted by the Union. This should allow the experience which has been built up over a period to be used at the planning level. One member of the Committee should be a senior member of staff of a university department concerned with social administration. Knowledge of social conditions in South Australia is important in the establishment of priorities, in judging the appropriate level of parental contribution and in identifying pockets of poverty which, within more prosperous areas, may require special attention. As well as the Chairman and these three expert members, we are suggesting that the Committee should include three other people with interest in, and knowledge of, the pre-school area in order to allow a greater degree of public participation at the planning level.

10.70 Accordingly, we RECOMMEND that:

- (a) There should be a substantial increase in government financial support for the provision of pre-school education, both to permit an expansion in the number of places and to provide adequate staff at appropriate salaries.*
- (b) The Kindergarten Union should continue for the present to be the major agency for the running and supervision of government-assisted kindergartens.*
- (c) The Board of Management of the Kindergarten Union should be augmented by three members appointed by the Minister of Education.*
- (d) A Pre-School Committee responsible to the Minister of Education should be appointed by the Minister to plan the overall development of pre-school education, to decide on priorities between areas in the allocation of public money for kindergartens, and to determine where kindergartens need to be provided at public expense, where it is reasonable to expect some degree of parental initiative and contribution, and what the level of that contribution should be.*
- (e) The Pre-School Committee should be constituted along the following lines:*

A Chairman.

A senior member of the administration of the Education Department.
A person with experience in the pre-school field selected from a panel proposed by the Kindergarten Union.

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A senior staff member of a university department of social administration.

Three other members.

10.71 The members of the Committee would be part-time, but the Committee would require a full-time executive secretary.

DEVELOPMENT OF TRAINING OF PRE-SCHOOL TEACHERS

10.72 The present arrangements whereby the Kindergarten Teachers College is financed out of the general government allocation to kindergartens means that college expansion can take place only at the expense of kindergarten expansion. Separate financial provision would allow the rate of college expansion to be related to planned kindergarten expansion rather than be decided in competition with other demands on a limited total sum.

10.73 There is already a measure of co-operation between the Kindergarten Teachers College and colleges training infant teachers for departmental schools. There are good arguments for developing this association further, since both are studying child development over the same span of years though with different emphases. The Kindergarten Teachers College is a small institution and the danger of isolation for its students and staff would be lessened by close co-operation with other institutions. It may be that the Kindergarten Teachers College is too small for the effective recruitment and use of specialist staff, and that the sharing of staff between it and colleges preparing teachers for infant classes in schools would be beneficial. Courses leading to higher qualifications for those engaged in educating young children could perhaps be jointly organised for infant and kindergarten teachers, and arrangements made for the training of teachers who desired after initial training to move from one area to the other. Association between kindergarten and infant teacher training should also make possible greater educational continuity for children.

10.74 The changes taking place in pre-school education in other countries, particularly in the field of early compensatory education for culturally deprived children, underline the need for continuous adaptation of kindergarten programmes to ensure that they are effective in meeting the needs of underprivileged children. We think it important that funds should be made available to allow the Pre-School Committee to commission research in pre-school education to enable changes to be based on local needs (see paragraph 14.36).

10.75 We are proposing that the Kindergarten Teachers College should operate under the Institute of Colleges that we recommend in Chapter 11, with a council to govern its internal affairs similar to

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those suggested for other colleges of advanced education. This will enable the College to retain its own distinctive character and include in its management many of the same people as at present, while associating it with a wider area of higher education. Under this arrangement the College would be financially supported from government grants paid through the Institute of Colleges, through which forward planning of the scale of kindergarten teacher training would take place. The association of all the institutions concerned with teacher education in the Institute of Colleges should make possible the running of joint courses and the sharing of staff where that is considered desirable. Pre-school education is a vital aspect of continuing education, and for many children may be regarded as the essential basis on which success at higher levels rests. Recognition of its importance requires that the training of kindergarten teachers receive the same level of community support as the training of teachers for other levels of schooling. For this reason we are recommending that kindergarten teachers in training should be paid allowances on the same basis as those available to students preparing to teach in government schools.

10.76 To maintain the quality of staff with the increased numbers in training which will be required, and to ensure that able people can give their attention to the demanding reappraisal of kindergarten programmes which is already going on and may be expected to continue, the College needs to be able to attract well-qualified staff. For this reason we are proposing that lecturers at the Kindergarten Teachers College be paid at the same rates as those of comparable qualifications and experience in other colleges of advanced education. We also see a need to develop university courses, particularly at the postgraduate level, specialising in early childhood education as a means of equipping lecturers to train kindergarten teachers.

10.77 Through the Institute of Colleges forward planning can take place which will ensure that places are available in training to meet the requirements of the rate of kindergarten expansion determined by the Pre-School Committee. The new college at present being constructed will be inadequate to cope with the number of teachers required, and early plans will need to be made for expanded training facilities.

10.78 Accordingly, we RECOMMEND that:

(a) The Kindergarten Teachers College should be operated as an autonomous college associated with the Institute of Colleges whose establishment we recommend in paragraph 11.60, and under conditions similar to those suggested for other colleges which are members of the Institute.

(b) Students should be paid allowances on the same basis and under the same conditions as those recommended in paragraph 16.133 for students sponsored by the Education Department, and the payment

of allowances should be arranged by that Department from a special allocation made to it for the purpose.

FUTURE PROVISION OF PRE-SCHOOL CENTRES

10.79 The Committee regards expansion of pre-school facilities as an urgent matter, and proposes an initial rate of growth of 20 centres a year, the highest level which we think the supply of teachers can sustain. Such a rate will call for extra trained teachers each year in excess of the number which will be coming out of the Kindergarten Teachers College on present plans. Allowing for replacement of an annual loss of 16 per cent of trained staff, the rate which at present operates, the number of additional trained staff in excess of those already teaching in Kindergarten Union kindergartens who will be required for each of five initial years of expansion is set out in Table 10.9.

Table 10.9

ADDITIONAL TRAINED STAFF REQUIRED EACH YEAR TO EXPAND GOVERNMENT-ASSISTED
KINDERGARTENS AT 20 A YEAR OVER FIVE YEARS

Year 1	69
Year 2	76
Year 3	82
Year 4	88
Year 5	95

10.80 The Kindergarten Teachers College will graduate only 36 teachers a year in 1972 and 1973, and the maximum output from the new college as at present planned will be 63 in 1975 and thereafter. It will be necessary for the college to expand further and for consideration to be given to acquiring another site. In addition to normal full-time courses, part-time courses and short courses providing refresher training for those already qualified in the field but not at present teaching in it will be required. Special short courses might well attract numbers of married ex-primary teachers who would be a valuable acquisition to the pre-school teaching force. A number of kindergartens at present outside the Kindergarten Union could be raised to acceptable standards if facilities for part-time training were available. It may be necessary for colleges training infant teachers to increase their intake, and, in co-operation with the Kindergarten Teachers College, provide a good part of the course for the increased numbers of trainees needed. Improved pay for kindergarten teachers should both attract more students into kindergarten training and encourage those already trained who have been out of the field for some time to return.

10.81 The rate of expansion we have recommended would, if 1972 were the first year of its operation, provide government-assisted

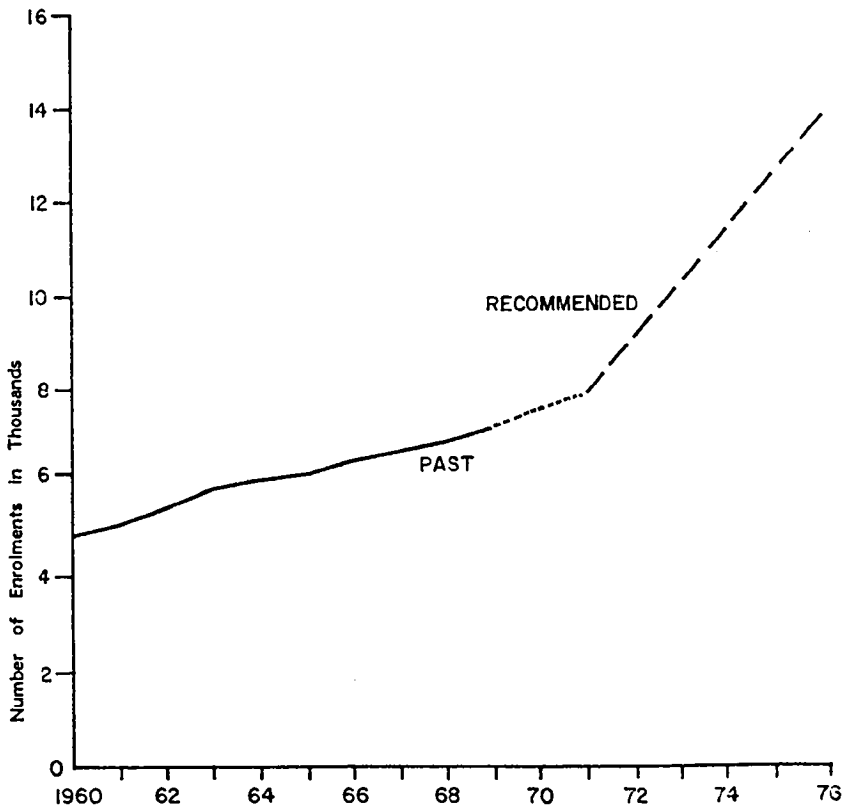
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kindergarten places for about 30 per cent of our estimated numbers of children in the base age group by 1976. The number of government-assisted kindergarten places which this level of expansion would provide over five years is seen in relation to actual expansion since 1960 in Chart 10.3. During the period 1960-1969 enrolments increased by 48 per cent. Expansion at the rate we recommend would result in an increase of more than 75 per cent over five years.

Chart 10.3

ACTUAL AND RECOMMENDED PRE-SCHOOL ENROLMENTS

SOUTH AUSTRALIA 1960-1976



10.82 It is not possible to specify what proportion of new kindergartens should be erected and provided at public expense until the Pre-School Committee has examined the situation and made its recommendations on priorities. We should expect, however, since provision is at present very uneven between localities, that a higher proportion of the initial five-year increase than of the continuing increase thereafter would be on public initiative. Pre-school education is relatively cheap in comparison with other levels of education,

and there is good reason to believe that money spent on it may make a more significant contribution to the development of potentialities in many children than equivalent sums spent at more advanced levels.

10.83 Accordingly, we RECOMMEND that:

(a) The number of government-assisted kindergartens should be expanded at an initial annual rate of 20 centres, each accommodating 60 children in two groups of 30. Plans should be made to sustain this rate of expansion for five years, the Pre-School Committee recommending an appropriate rate of growth in the subsequent period.

(b) The Pre-School Committee should as a matter of urgency consider arrangements which would increase the output of pre-school teachers to the level necessary to sustain the rate of growth recommended above.

10.84 We expect that community attitudes towards pre-school education will change over the coming period. Primary schooling was once provided by voluntary organisations and subsidised by governments. As it became accepted that all children should attend school, government initiative increased until full public responsibility for the provision of free schooling was accepted. A similar change in public attitudes towards pre-schooling is likely. For this reason we do not regard the recommendations we are making for the provision and management of pre-school education as necessarily providing the best long-term solution. They are rather based on our estimate of the present situation, including our estimate of public willingness to finance pre-schooling in competition with expanded financial support to other areas of education. We suggest that our recommendations should be reviewed in accordance with possible changes in public attitudes before the end of the next decade.

CHAPTER 11

Tertiary Education

11.1 In its examination of tertiary education the Committee has concentrated on three main aspects:

- (a) The provision of student places in tertiary education.
- (b) The structure of the system of tertiary education in South Australia.
- (c) The means by which a rational allocation of the resources available for tertiary education can be best achieved.

The Committee has not involved itself in matters of detail relating to courses, methods of teaching or the day-to-day management of tertiary institutions, or in the finance of tertiary education, which is recommended largely through Commonwealth agencies.

DEFINITION OF TERTIARY EDUCATION

11.2 In accordance with Australian usage, we define tertiary education as comprising courses the standard of entry for which involves the completion of full secondary schooling (i.e., in South Australia, five years of secondary schooling) or its equivalent. Some tertiary courses may commence at a level corresponding to the fifth year of secondary schooling, but the first year of such courses does not count as tertiary.

11.3 Tertiary institutions are those that offer tertiary courses. Some institutions, such as the universities, are involved only in tertiary courses; others offer lower-level courses as well as tertiary courses. With respect to the latter, it is important to recognise that the demarcation between tertiary and other post-secondary education is not clear-cut; and that the boundaries of tertiary education may change with time.

11.4 In South Australia, the principal components in tertiary education are the universities, the colleges of advanced education and the teachers colleges. The oldest and largest tertiary institution in the State is the University of Adelaide which was established in 1874. The University of Adelaide remained the only university until the creation of the Flinders University of South Australia in 1966. The largest, by a long measure, of the colleges of advanced education is the South Australian Institute of Technology, which was founded in 1889 as the South Australian School of Mines and Industries. The Institute has been involved in tertiary work from early in the century when engineering courses were established jointly with the University of Adelaide. More recently its tertiary work has been considerably expanded although more than half its enrolments are still in other than tertiary courses. The non-tertiary courses are in process of gradual transfer to other institutions. In 1967 the South Australian

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School of Art (established in 1861 as a School of Design) was recognised by the Commonwealth Advisory Committee on Advanced Education as an institution with tertiary enrolments; and the Roseworthy Agricultural College (established in 1885) and the School of Dental Therapy (established in 1967) have been so recognised in 1970. The teachers college component in tertiary education is represented by Adelaide Teachers College (established in 1876), Wattle Park (1957), Western (1962), Bedford Park (1966) and Salisbury (1968).

NUMBERS OF TERTIARY STUDENTS

Universities

11.5 Table 11.1 sets out the movement in new and total enrolments for the universities from 1954 to 1970. Over that period total enrolments multiplied two and one-half times. The annual rate of growth has been variable; it has exceeded 10 per cent in three years and has averaged about 6 per cent. The rate of growth has tailed off in recent years. This has occurred partly through the imposition of quotas in 1967 and the raising of matriculation standards, partly through the termination by the University of Adelaide of certain sub-graduate courses and partly through the transfer of other courses to other tertiary institutions. Of the total enrolment of 10,176 in 1970, 8,268 were enrolled in the University of Adelaide and 1,908 in the Flinders University of South Australia.

Table 11.1

UNIVERSITY ENROLMENTS (a) SOUTH AUSTRALIA 1954-1970

	New Enrolments	All Enrolments	Rate of Growth of all Enrolments per cent
1954	1,050	4,115	—
1955	1,053	4,165	1.22
1956	1,208	4,281	2.79
1957	1,345	4,759	11.17
1958	1,378	5,189	9.04
1959	1,364	5,714	10.12
1960	1,518	6,110	6.93
1961	1,665	6,250	2.29
1962	1,700	6,824	9.18
1963	1,847	7,416	8.68
1964	2,086	8,203	10.61
1965	2,215	8,658	5.55
1966	2,515	9,364	8.15
1967	2,381	9,658	3.14
1968	2,194 (b)	9,803	1.50
1969	2,265 (b)	10,164	3.68
1970	2,279 (b)	10,176	0.12

Source: Commonwealth Statistician and Universities.

(a) Includes students enrolled in the Faculty of Technology of the University of Adelaide who complete most of their courses in the South Australian Institute of Technology.

(b) These figures are not strictly comparable with those for the preceding years because of changes in the definition of new enrolments.

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11.6 Some indication of the change in the propensity of young people to attend universities is given by comparing all enrolments with the numbers in the age group 17-22 years in the population. Most university enrolments come from this age group. The comparison is shown for South Australia in Table 11.2. It can be seen that there was a gradual increase up to 1963 in the proportion of the relevant age group attending universities. Since 1963 the proportion has declined.

Table 11.2
ALL UNIVERSITY ENROLMENTS AS A PROPORTION OF THE POPULATION
AGED 17-22 YEARS

SOUTH AUSTRALIA 1954-1970

	per cent
1954	7.44
1961	7.95
1962	8.29
1963	8.49
1964	8.43
1965	8.27
1966	8.45
1967	8.26
1968	8.08
1969	8.06
1970	8.02

11.7 Interstate comparisons of the propensity of young people to attend universities are given in Table 11.3, based on data published by the Commonwealth Statistician. It is of interest to note that in 1954, of all States, South Australia had the highest proportion of its young people enrolled at universities. By 1969 the unevenness between the States had been reduced and the South Australian position had fallen to below that of the Australian average. Between 1954 and 1969 the proportion of the population aged 17-22 years who were enrolled at universities increased by 8 per cent in South Australia, whereas for the other States the proportion about doubled, the increase varying between 84 per cent for Western Australia and 134 per cent for Tasmania. These comparisons are, of course, affected by the nature of courses offered at the various universities and the alternative opportunities for tertiary education in the various States. In particular, until the 1960's, many primary teacher trainees in South

Table 11.3
ALL UNIVERSITY ENROLMENTS AS A PROPORTION OF THE POPULATION
AGED 17-22 YEARS

AUSTRALIA 1954, 1961 AND 1969

	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	Aust. (a)
	per cent	per cent	per cent	per cent	per cent	per cent	per cent
1954	4.27	3.80	3.88	7.44	3.63	2.84	4.27
1961	7.20	4.82	7.31	7.95	5.65	4.89	6.50
1969	9.24	7.59	8.30	8.06	6.68	6.64	8.44

(a) Including Australian Capital Territory and Northern Territory.

Australia were enrolled at the University of Adelaide for the Associateship in Arts and Education.

Colleges of Advanced Education

11.8 Table 11.4 sets out enrolments in the South Australian Institute of Technology from 1961, the earliest year in which data are available in the appropriate form. The Table includes non-tertiary courses and odd-subject enrolments in order to set the activities of the Institute in perspective, but in this chapter we are concerned with tertiary enrolments alone. Tertiary-course enrolments include students enrolled for degree courses in the Faculty of Technology of the University of Adelaide, who are also included in the figures in Table 11.1. They do not include enrolments at the Whyalla branch. It can be seen that non-tertiary enrolments, although declining with the phasing-out of non-tertiary courses, are still almost as numerous as tertiary enrolments. However, odd-subject enrolments have fallen away very greatly. Tertiary-course enrolments have stabilised since 1965 as the Institute has imposed quotas on entry, raised its entrance requirements and adopted a stricter policy on students making unsatisfactory progress. The S.A.I.T. accounts for the bulk of tertiary enrolments at colleges of advanced education in South Australia. In 1970 enrolments at other colleges were: Whyalla branch of the S.A.I.T., 137; Roseworthy Agricultural College, 143; South Australian School of Art, 396; the School of Dental Therapy, 32.

Table 11.4
SOUTH AUSTRALIAN INSTITUTE OF TECHNOLOGY (a)
NUMBER OF STUDENTS 1961-1970

	Tertiary Courses	Non-Tertiary Courses	Odd Subjects
1961	2,160	1,940	6,641
1962	2,374	2,028	6,768
1963	2,745	2,327	6,042
1964	2,636	2,581	6,193
1965	2,942	2,986	5,311
1966	2,929	3,467	4,997
1967	3,047	3,316	2,299
1968	2,913	2,913	3,011
1969	2,992	2,946	1,586
1970	2,864	2,570	972

Source: South Australian Institute of Technology.

(a) Excluding Whyalla branch.

Teachers Colleges

11.9 Table 11.5 sets out first-year and total enrolments in the teachers colleges for 1954-1970. The enrolments include full-time students reading university courses, who are also included in Table 11.1. They exclude enrolments at the Kindergarten Teachers College, which in 1970 amounted to 104. Provision for part-time and external study at teachers colleges commenced in 1962, and part-time and external enrolments are shown from that date onwards. Detailed consideration of the training of teachers and teachers college enrolments

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is contained in Chapter 16. For the purpose of this chapter, it is sufficient to note the extraordinary growth in total full-time enrolments in teachers colleges, multiplying nearly ninefold in sixteen years. This growth is compared with the growth in other States in Table 11.6. While rates of growth have varied from State to State, all States have exhibited very considerable growth in teachers college enrolments.

Table 11.5

ENROLMENTS IN TEACHERS COLLEGES (a)

SOUTH AUSTRALIA 1954-1970

	First-Year Enrolments (b)	All Enrolments	
		Full-Time	Part-Time and External
1954	232	511	—
1955	272	588	—
1956	405	752	—
1957	426	892	—
1958	513	1,072	—
1959	631	1,323	—
1960	766	1,619	—
1961	1,002	2,021	—
1962	1,150	2,419	318
1963	1,151	2,655	422
1964	1,281	2,984	834
1965	1,177	3,053	968
1966	1,415	3,353	1,750
1967	1,290	3,498	2,183
1968	1,344	3,689	2,103
1969	1,498	3,820	1,992
1970	1,759	4,480	2,465

Source: Minister's Reports and Reports of the Division of Teacher Education and Services.

(a) Excluding Kindergarten Teachers College.

(b) All first-year enrolments are full-time enrolments.

Table 11.6

FULL-TIME ENROLMENTS IN TEACHERS COLLEGES

AUSTRALIA 1954, 1961 AND 1969

	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	All States
1954	3,096	2,426	879	511	770	311	7,993
1961	5,332	5,707	1,044	2,021	1,341	563	16,008
1969	10,165	11,468	3,621	3,820	2,270	1,128	32,472

Source: State Departments of Education.

All Tertiary Institutions

11.10 Table 11.7 brings together for 1961-1970 enrolments in the three main components of tertiary education in South Australia and eliminates double counting. Statistics for the universities exclude

students of the Faculty of Technology of the University of Adelaide who are taught in the South Australian Institute of Technology, and include those teachers college students who are taught in the university. Statistics for the colleges of advanced education include the Faculty of Technology students and teachers college students who are enrolled in the South Australian School of Art. Statistics for the teachers colleges include only those students who are enrolled for wholly teachers college courses, whether full-time, part-time or external.

Table 11.7

ENROLMENTS IN TERTIARY INSTITUTIONS

SOUTH AUSTRALIA 1961-1970

	Uni- versities (a)	Colleges of Advanced Education (b)	Teachers Colleges (c)	Total	Rate of Annual Growth of Total per cent	Proportion of Total to 17-22 Age Group per cent
1961	5,680	2,409	891	8,980	—	11.42
1962	6,216	2,740	1,449	10,405	15.87	12.64
1963	6,778	3,150	1,601	11,529	11.08	13.20
1964	7,533	3,083	2,109	12,725	11.04	13.08
1965	7,929	3,407	2,324	13,660	10.73	13.05
1966	8,452	3,461	3,292	15,205	11.13	13.71
1967	8,690	3,627	3,864	16,181	10.63	13.83
1968	8,889	3,540	4,012	16,441	10.17	13.55
1969	9,290	3,649	4,082	17,021	10.35	13.51
1970	9,590	3,572	4,970	18,132	10.65	14.29

(a) Excludes students of the Faculty of Technology of the University of Adelaide who are taught in the South Australian Institute of Technology.

(b) Includes South Australian Institute of Technology (including Whyalla branch), South Australian School of Art, Roseworthy Agricultural College, and School of Dental Therapy.

(c) Includes only students enrolled for wholly teachers college courses. Also includes Kindergarten Teachers College.

11.11 This Table is very important as it summarises the present provision for tertiary education in South Australia and indicates the most recent trends. In the 1960's the rate of growth of tertiary enrolments has been relatively steady. Over the decade the proportion of young people aged 17-22 years attending tertiary institutions has been rising. However, given the very rapid rise in retention rates in secondary schools, the provision of tertiary places in relation to pupils in the senior grades of the secondary schools has been declining. The universities' enrolments relative to the 17-22 years age group have just been maintained, whereas those of the colleges of advanced education have fallen, the ratio declining from 3.6 per cent in 1963 to 2.8 per cent in 1970. This decline is of particular concern since special efforts have been made through the Commonwealth Advisory Committee on Advanced Education to foster the colleges and considerable resources are being put into them. In fact, the share of the colleges of

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advanced education in total tertiary enrolments during the 1960's has fallen from 26.8 per cent in 1961 to 19.7 per cent in 1970, while the share of the teachers colleges has risen correspondingly, the latter having been boosted by the great increase in part-time and external enrolments. In 1970, university enrolments constituted about 53 per cent of the total, colleges of advanced education 20 per cent and teachers colleges 27 per cent. The last figure understates the role of the teachers colleges, because it excludes students enrolled at other tertiary institutions who may be undertaking some teachers college work. It is important to note that in Table 11.7 all enrolments are counted equally, whether full-time or part-time or external. Thus, they refer to the number of persons undertaking tertiary education. They do not measure the volume of activity in tertiary education, which would have to be expressed in terms of equivalent full-time students.

11.12 An indication of the comparative provision for tertiary education in the Australian States is given in Table 11.8, based on data published by the Commonwealth Statistician. The provision of tertiary places is somewhat uneven as between States; South Australia, at the Australian average, ranks second.

Table 11.8

TERTIARY ENROLMENTS AS A PROPORTION OF POPULATION AGED 17-22 YEARS

AUSTRALIAN STATES 1968

	per cent
New South Wales	10.2
Victoria	12.9
Queensland	11.0
South Australia	11.4 (a)
Western Australia	11.3
Tasmania	10.2
Australia (b)	11.4

(a) The data on which this figure is based are not comparable with those in Table 11.7, mainly because teachers college part-time and external enrolments are excluded.

(b) Including the Australian Capital Territory.

11.13 Data from the Fourth Report of the Australian Universities Commission (Table 7) and the Second Report of the Commonwealth Advisory Committee on Advanced Education (Appendix D) indicate a considerable unevenness in the planned expansion of the number of places in the universities and colleges of advanced education over the next few years. This is illustrated in Table 11.9 below. The expected expansion varies within wide limits; for South Australia, it is close to the Australian average.

11.14 The distribution of tertiary enrolments between universities, colleges of advanced education and teachers colleges is illustrated in Table 11.10, which is based on the same data as Table 11.8. Teachers college enrolments refer to full-time students enrolled for courses

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wholly undertaken within the colleges and do not include teachers college students enrolled at universities or other institutions. For Australia as a whole, approximately one-half of all teachers college full-time students are enrolled for wholly college courses. It can be seen that there are great differences between States in the pattern of the provision of tertiary places. These differences appear to stem from historical origins rather than from deliberate decisions of policy. The pattern in South Australia is fairly close to that for Australia as a whole.

Table 11.9

EXPECTED EXPANSION IN NUMBER OF ENROLMENTS AT UNIVERSITIES AND COLLEGES OF ADVANCED EDUCATION

AUSTRALIAN STATES 1968 TO 1972

	per cent
New South Wales	39.1
Victoria	47.6
Queensland	25.8
South Australia	38.4
Western Australia	59.5
Tasmania	26.6
Australia	42.8

Table 11.10

TERTIARY ENROLMENTS BY CLASS OF INSTITUTION

AUSTRALIAN STATES 1968

	N.S.W. per cent	Vic. per cent	Qld. per cent	S.A. (b) per cent	W.A. per cent	Tas. per cent	Aust. (c) per cent
Universities	85.0	54.5	76.6	64.9	58.4	64.0	70.1
Colleges of Advanced Education	7.1	33.8	10.7	24.4	32.0	26.0	19.9
Teachers Colleges(a)	7.9	11.7	12.7	10.7	9.6	10.0	10.0

(a) Full-time students enrolled for wholly teachers college courses.

(b) See footnote (a) to Table 11.8.

(c) See footnote (b) to Table 11.8.

11.15 Some idea of the absolute magnitude of the present provision for tertiary education in South Australia can be formed by comparing the number of new enrolments in tertiary institutions with the average number in the age group, say, 17-19 years in the population. This is only an approximate measure of the proportion of a generation enrolling at a tertiary institution. It tends to underestimate the true figure because many new students are aged more than 19 years, and consequently come from generations which are normally progressively smaller. This is offset to some extent by the inclusion of overseas students in the figures. The number of new enrolments at tertiary institutions, excluding transfers from one course or institution to another, was approximately 4,100 in 1970 (see paragraph 11.27), and the average number in the age group 17-19

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years in the population was 21,500. It follows that about 19 per cent of the members of a generation enrol at a tertiary institution at some time or other during their lifetime. The proportion which successfully completes a course at such an institution is, of course, a good deal smaller. Slightly less than twice as many men as women enrol at tertiary institutions; this implies that about 25 per cent (or one in four) of a male generation and about 13 per cent (or about one in eight) of a female generation enrol at a tertiary institution.

Table 11.11

PART-TIME ENROLMENTS AS A PROPORTION OF ALL ENROLMENTS 1954-1969

	Universities per cent	South Australian Institute of Technology per cent	Teachers Colleges (a) per cent
1954	54.5	N.A.	—
1955	51.5	N.A.	—
1956	48.1	N.A.	—
1957	46.9	N.A.	—
1958	48.5	N.A.	—
1959	47.9	N.A.	—
1960	46.3	N.A.	—
1961	43.0	N.A.	—
1962	42.8	N.A.	21.9
1963	42.7	N.A.	26.4
1964	42.4	87.6	39.5
1965	38.6	86.2	41.7
1966	35.4	82.8	53.2
1967	34.8	72.4	56.8
1968	33.7	68.1	52.4
1969	32.3	67.0	48.8

Source: Commonwealth Statistician, and South Australian Institute of Technology, and Reports of Division of Teacher Education and Services.

(a) Students enrolled for wholly teachers college courses.

Part-Time Studies

11.16 The Tables given in this chapter so far do not distinguish between full-time and part-time enrolments. Table 11.11 illustrates the trend in the proportion of part-time enrolments at the universities, the South Australian Institute of Technology and the teachers colleges. There has been a steady decline in university part-time studies. We believe that this is to be expected as entry to the universities becomes more competitive and as greater opportunities to enter tertiary education direct from school occur. Moreover, we believe that full-time study is the best form of study at universities. Part-time study is also becoming less important at the South Australian Institute of Technology which, until comparatively recently, was almost wholly an institution of part-time study; the Institute is now moving towards a situation in which, perhaps, one-half of its tertiary students will be full-time. Part-time and external studies were introduced into teachers colleges in 1962 and grew rapidly over the next

few years, as students who had left the colleges without having completed the Diploma in Teaching were encouraged to complete their courses by external study. From the mid-year intake in 1970 all new students will spend a minimum of three years at college, and the number leaving college with a formal qualification should rise. Consequently it is likely that the proportion of part-time external students will decline.

11.17 We had put to us in a number of submissions that opportunities for part-time studies in tertiary institutions should be expanded or at least maintained. A common reason advanced was that employers preferred their employees to join them direct from school and then proceed to study part time rather than to join them several years later when they had completed their tertiary education. This we believe to be an out-of-date view. An increasing proportion of young people wish to continue with full-time tertiary education. Employers will therefore have to recruit from among these if they are to maintain the quality of their organisations, for recruitment direct from school will be from a generally less able group. At the same time tertiary education is becoming a prerequisite for an expanding proportion of jobs. Many large employers recognise the advantages of recruiting employees who have completed their basic tertiary education; these employees are more adaptable, are ready for specialised in-service training and can devote their efforts more whole-heartedly to the interests of their employers. On the other hand, some students are late developers, others develop an interest in study in conjunction with their employment, and again others cannot for family or financial reasons study full time. Moreover a combination of work and study may be a good way to acquire an informed interest in certain courses; and, in some fields, sandwich courses in which practical training is part of the education process are especially appropriate. Accordingly, adequate and convenient facilities for part-time study should be provided; and we believe that the South Australian Institute of Technology in particular should continue to provide such facilities in the same way as it has in the past. We also support the development of external studies at the teachers colleges as a means of upgrading the qualifications of teachers.

Female Students

11.18 A matter of considerable interest is the relative numbers in which males and females attend tertiary institutions. The South Australian Institute of Technology has very few female students (at present only about 10 per cent of enrolments are women), although the proportion will probably rise in the future. Table 11.12 sets out proportions of secondary school students aged 17 years and over, of new university students and of first-year teachers college students who are females. There is little evidence of significant trends in the sex distribution of students. Broadly speaking, only half as many girls as boys persist at school to the highest grades and rather less than half

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as many enter universities. The proportion of entrants to teachers colleges who are women is traditionally higher than the proportion of entrants to the universities; the corresponding proportion of entrants to colleges such as the South Australian Institute of Technology is lower.

11.19 It is clear that the propensity of females to enter tertiary institutions is only about half that of males, and there is no evidence of any substantial "catching up" on the part of the females. On the assumption that there are no differences of educational significance between men and women in their general abilities, a great waste of talent is occurring through the much lower retention of girls at secondary school. Very many young women who do not enrol in tertiary institutions must be much more able than many young men who do. This phenomenon is associated with society's traditional attitudes to women, with employers' prejudices and with the problems which married women face if they are employed. Some of these factors are amenable to only slow amelioration, but we believe that efforts should be made to increase the proportion of women enrolling in tertiary institutions. This will have to be done partly by changing attitudes, partly by modifying employment conditions for married women and partly by diversifying course offerings.

Table 11.12

SEX DISTRIBUTION OF STUDENTS

SOUTH AUSTRALIA 1954-1969

Proportion of Females Among:

	Secondary School Pupils Aged 17 and over	New University Enrolments	First-Year Teachers College Students
	per cent	per cent	per cent
1954	N.A.	36.6	62.7
1955	33.7	38.6	63.1
1956	31.9	41.5	67.3
1957	34.7	34.1	63.7
1958	33.9	35.0	63.2
1959	29.7	33.7	58.4
1960	28.9	32.5	62.9
1961	27.5	30.9	61.6
1962	28.5	32.2	63.7
1963	28.3	31.0	61.1
1964	31.6	31.3	59.7
1965	30.1	30.0	61.3
1966	30.4	29.5	61.5
1967	31.0	31.4	68.0
1968	32.6	30.4	62.3
1969	33.7	31.2	67.2

Source: Commonwealth Statistician and Education Department.

FUTURE PROVISION FOR TERTIARY EDUCATION

11.20 It should not be necessary to argue in detail the great importance of tertiary education. It has become customary in recent

discussions to underline the economic advantages which flow from higher education. The individual, by equipping himself with sophisticated skills, raises his earning power relative to others and fits himself for high-level employment. Indeed it is becoming increasingly difficult to obtain responsible and interesting jobs without a tertiary education. From the point of view of society, the steady march of technological progress is dependent on an increasing flow of highly educated persons in the fields of technology, economics, business administration, psychology, education and so on. Expansion of tertiary education appears to be a co-requisite, and probably a prerequisite, of economic growth. Economic growth is important, not only because it leads to higher material standards of living, but perhaps more particularly because it gives an economy the potential to devote more of its resources to cultural pursuits, to the provision of welfare services for the less fortunate, to aid for poorer foreign countries and to other purposes. In South Australia, where the endowment of natural resources is meagre, tertiary education brings with it the power to make the most of the skills of the people. In the long run, it is the ability of the work force which is of critical importance.

11.21 The preceding paragraph placed emphasis on tertiary education as an investment, leading to higher income for the individual and greater production or potential production for the nation. We think that this is important, but we do not wish to emphasise it at the expense of purely educational arguments. One of the goals of education at all levels is to contribute to the fulfilment of the individual by providing him with the opportunity to develop and to use his inherent interests and abilities. Tertiary education for a considerable number in the community is the crown of such fulfilment. At this level, education is not concerned only with the conservation and transmission of knowledge, which are functions it shares with primary and secondary education, but with its extension through the discipline of untrammelled rational inquiry. In its ideal form, mind, heart and will serve each other to make the most of an individual's potential. They are directed by an understanding of human values which is both fostered and modified by the process of inquiry itself, even when this appears to have purely vocational ends.

11.22 In discussing the provision of tertiary education in South Australia, one faces the critical question whether places in the tertiary sector should be provided for all those with the capacity for tertiary education who seek places. This question is seldom asked with respect to secondary education, although it is only since the Second World War that the provision of secondary places in accordance with demand has been universally accepted in Australia. No one disputes that the provision for secondary education beyond the age of compulsion should be determined by demand. Why, then, ask the question for tertiary education? The reasons appear to be two. First, tertiary education is expensive and resources are limited. Sec-

only, tertiary education often involves education and training in highly specific skills for particular vocations, and the question arises whether the entry into these vocations should not be limited to the likely future needs for appropriately skilled people.

11.23 Accordingly, there may be some conflict between the aspirations of the community for continuously rising educational standards and the resources and needs of society. We believe that this issue was well set out in the Report of the Committee on the Future of Tertiary Education in Australia (the Martin Report), Volume I, paragraphs 1.41 to 1.44; and we quote these paragraphs in full.

The community needs highly educated people, and individuals aspire to higher education of one kind or another. The Committee believes that, especially at this stage of Australia's development, there is no essential conflict between these two motives for the provision of higher education. It is certain that there is no conflict when the situation is considered from the point of view of general education. In Australia it is accepted that higher education should be available to all citizens according to their inclination and capacity. This provides opportunity for individuals to achieve their aspirations, and at the same time serves the needs of the community in creating an appropriate climate for a dynamic and advanced economy. It does not mean that the provision of higher education for all who have the desire and the capacity for it should be pursued regardless of cost; but it does mean that it should be the objective towards which Australia should work. The Committee believes that this opinion about the availability of higher education is a correct one. It therefore rejects the opposing view, that there is some smaller fraction of the population to which higher education should be restricted, as being inconsistent with the type of society desired by a majority of Australians, and certainly not in the economic interests of the nation.

The possibility of conflict between individual aspirations and community needs may arise, however, in regard to some types of specialised training. Should the nation make facilities available to all students wishing to become doctors or engineers or lawyers, if it is doubtful whether the community will need this number? The nub of this question lies in the meaning of "need". It is possible, of course, to attempt to forecast the demand for skilled manpower of various kinds. Such forecasts must be hazardous. Future requirements depend on the future level of national production, on future production techniques, and on the future wants of the population. While it might be desirable to attempt to predict shortages of various kinds and to take steps to overcome them, the dangers of the reverse operation are great. The consequences of producing an unnecessary shortage are much more serious than those of producing an unnecessary plenty.

The Committee believes that, in general, conflicts between students' aspirations and community needs should be allowed to be resolved by the operation of supply and demand in the market. Students' aspirations are not insensitive to the scale of remuneration and job opportunities for different callings. Consequently, shortages and surpluses tend to produce corrective forces. In fields involving higher education, there is a lag of some years between entry and graduation so that this year's output of graduates tends to be related to the state of the market four or five years ago. This leads to some maladjustments in the supply and demand for highly trained labour. The Committee believes that research into future labour requirements is useful both for aiding the decisions of students and of educational institutions and for guiding business and government; it does not subscribe, however, to the view that the entry of students into the various courses of higher education should be restricted by forecasts of future needs. Such a policy would not only run the risk of grave error but it would also restrict educational opportunity to an undesirable degree.

Moreover, because of the uncertainty of vocational demand, it may be neither practical nor reasonable to guarantee to all young people a particular career, but it should be part of the national policy to ensure that opportunities for training in a variety of fields will be open to talent. The Committee believes that the pool of talent among the youth of this country is greater than some have thought, and that it is certainly greater than the number of places at present available in institutions of higher education.

11.24 We agree with the Martin Report that "higher education should be available to all citizens according to their inclination and capacity". There are, however, three limiting factors to which we should draw attention. First, there cannot be any unconditional promise to provide educational facilities for any number who have the inclination to undertake study for a particular calling. In highly specialised fields of training it may be quite impossible to provide facilities without restrictions on the number of students, e.g., the need for clinical material itself puts a limitation on medical training facilities. This is emphasised in the last paragraph quoted above from the Martin Report. At the same time unless some attention is paid to manpower requirements, the educational system may produce many frustrated and unhappy individuals. This is of particular relevance in planning the size and number of teachers colleges and other specialised institutions. Secondly, if higher education is to be available to all who have the *capacity*, its extent will depend on the definition of capacity. For practical reasons, capacity is usually defined in terms of achieving a certain level of results in an examination at the end of secondary schooling. This is, of course, arbitrary; and it is well known that the passing of such an examination is no foolproof test of capacity to benefit from tertiary education. The Martin Report implied that universities should provide places for those students who had at least a 60 per cent chance of completing their courses in minimum time.¹ This appears to be an objective definition of capacity, but itself depends on the standards employed by universities in assessing satisfactory performance. If tertiary education were to be available to all with the "capacity", the community's aspirations for more education would undoubtedly result in a reappraisal of what is understood by "capacity". Wherever the line is drawn, there should be provision of non-tertiary further education for those who want to go beyond secondary education but have not the capacity (as defined) for tertiary education. Thirdly, it seems to us wrong to give the provision of tertiary education an absolute priority. If resources are limited, extra places in the tertiary sector may have to yield, for example, to the employment of more teachers in the secondary schools or greater provision of pre-school facilities. We do not say that they should so yield, but the possibility must be contemplated.

11.25 We affirm that South Australia should work towards the ideal of providing higher education to all its citizens according to

¹ *op. cit.*, Vol. 1, paragraph 3.143.

their inclination and capacity, but we recognise that in the short run various factors may legitimately prevent its perfect attainment.

Trend in New Enrolments 1970-1981

11.26 The Committee is not able, nor does it wish, to lay down a precise programme for the provision of places in tertiary institutions in the future, but sets down in the following paragraphs some estimates of the magnitudes likely to be involved. The analysis is carried out in terms of new students, because control of the size of tertiary institutions is maintained mainly through the admission of new students each year. However, before considering the future, it is necessary to assess the current provision of tertiary places. This is done in the next paragraph, in reference to the entry to institutions in 1970.

11.27 Table 11.13 sets out details of new enrolments at tertiary institutions in South Australia in 1970, with those who came direct from school set out separately. It is based on data supplied by the institutions and the Admissions Office for Higher Education. Total new enrolments include about 400 students who transferred from one institution or one course to another and became "new" enrolments in the second institution or course. This is a normal process, and places for such students must be provided. It is important to estimate the extent to which qualified applicants for admission to tertiary institutions failed to gain places. As far as the universities and the South Australian Institute of Technology were concerned there were about 5,700 candidates who made application for admission in November 1969. Although less than 60 per cent of these gained admission, the number of qualified candidates not admitted who would have accepted places if offered them was quite small; most of the excess applicants were either not qualified to enter or would not have accepted a place if offered one.² In fact there were only 84 qualified local candidates (excluding candidates who wished to transfer) who confirmed their wish to enter one of the universities or the Institute who did not receive offers. Of these some would not have enrolled if offered places. In the Committee's view only about 100 qualified candidates who wanted to enrol in tertiary institutions were without places in 1970. This is not to say that without quotas new enrolments would have been only about 100 higher, because the very existence of quotas acts as a deterrent to some students in seeking admission.

11.28 In 1969 there were 5,490 students in the fifth year of secondary school. It follows that 54 per cent of final-year secondary school students entered tertiary institutions in the following year. If students who left school in earlier years or had interstate or overseas qualifications or who transferred from another tertiary institution are added,

² Applicants are required to confirm their intention of seeking admission after the publication of the Matriculation examination results. Many do not do so. Moreover some applicants do not enrol, even though they are offered places.

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the number of new enrolments in 1970 amounted to 82 per cent of the number of final-year students in the previous year.

Table 11.13

NEW TERTIARY ENROLMENTS AT SOUTH AUSTRALIAN TERTIARY INSTITUTIONS 1970

	Direct from Grade XII in 1969	Other	Total
Universities (a)	1,679	675	2,354
South Australian Institute of Technology	343	511	854
South Australian School of Art	13	47	60
School of Dental Therapy	14	2	16
Roseworthy Agricultural College	30	19	49
Teachers Colleges (Education Dept.) (b)	872	272	1,144
Kindergarten Teachers College	27	5	32
Total	2,978	1,531	4,509

(a) Excluding entrants to Faculty of Technology courses.

(b) Excluding entrants to university courses, and to Roseworthy Agricultural College.

11.29 Given that the provision of new places in tertiary institutions was roughly adequate in 1970, in what way should the provision be increased in future years? It would seem reasonable to relate the number of new places in any year to the number of students in the fifth year of secondary school in the preceding year. But should the number of new places rise more than proportionately, proportionately, or less than proportionately to the number of fifth-year secondary pupils?

11.30 Unfortunately, satisfactory data on the carry-on rates between the final year of school and entry to tertiary education do not exist in Australia. However, there are some imperfect data from which carry-on rates to universities can be computed. These can be constructed only for States and for periods where there is a single threshold of entry to the universities. Table 11.14 sets out the best data which the Committee has been able to gather. The data in this Table, for what they are worth, indicate downward trends in the carry-on rates to universities, except in the case of Western Australia where there appears to be a discontinuity. The downward trends could occur because, as more and more young people persist to the final year of school, either the proportion of academically able in the final grade falls or the proportion interested in university study falls and consequently a smaller proportion of those in the final grade carry on to universities.

11.31 On the other hand, grade-to-grade retention rates have been rising in all grades of secondary education (see paragraphs 5.5-5.6). That is to say, increased retention from grade x to grade $x + 1$ has not been accompanied by reduced retention from grade $x + 1$ to grade $x + 2$. This suggests that, since all retention rates rise, the

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carry-on rate into tertiary education may also be expected to rise. In the United States of America, where retention rates to the final year of secondary school are very much higher than in South Australia (nearly 80 per cent compared with just over 20 per cent in 1968), carry-on rates to college (probably defined more broadly than our tertiary sector) have been rising steadily over a long period. Moreover, the extent to which school-leavers will seek tertiary education will depend on the diversity of offerings at the tertiary level. As the system diversifies, so will it satisfy the inclinations of more and more students. Thus the qualitative and the quantitative aspects of the provision of tertiary places are interrelated.

Table 11.14
CARRY-ON RATES FROM SCHOOL TO UNIVERSITY
AUSTRALIAN STATES 1955-1967

Year of Entering University	N.S.W. (a)	Vic. (b)	Qld. (a)	S.A. (c)	W.A. (b)
	per cent	per cent	per cent	per cent	per cent
1955	—	—	47.2	—	—
1956	—	—	49.3	32.5	—
1957	—	41.0	N.A.	34.8	—
1958	—	44.6	N.A.	30.2	—
1959	36.8	45.6	41.4	37.6	—
1960	39.5	42.2	43.9	32.1	—
1961	36.4	42.6	48.2	29.7	26.9
1962	34.4	38.8	45.4	26.6	28.4
1963	31.1	39.3	44.0	27.0	28.3
1964	30.5	41.1	37.7	23.2	41.0
1965	30.4	35.3	38.5	21.3	33.5
1966	29.7	35.2	—	—	36.6
1967	—	36.8	—	—	34.0

(a) New university students aged 16-19 years in year x divided by students in final year of school in year $x - 1$.

(b) New university students aged 16-19 years in year x divided by number attempting whole Matriculation examination in year $x - 1$.

(c) Proportion of leaving class in year $x - 2$ entering university in year $x - 1$ and year x , estimated by sample count of university records.

11.32 After weighing up these considerations we have reached the view that new tertiary places for students coming direct from school should probably rise at the same rate as the number of students in the fifth year of secondary school. The proportion of new students who come direct from school is rising, as evidenced by the decline in the proportion of part-time students. Accordingly, we think that it will probably be adequate if places for students not coming direct from school rise with the increase in the numbers in the 17-22 years age group. In 1970, the proportion of new enrolments direct from school was two-thirds. We believe that the provision of the number of new places should be kept continuously under review, special regard

being paid to the rate of growth of the numbers in the senior forms in the secondary schools. This is a task that the Tertiary Education Committee should undertake (see paragraphs 11.72 and 11.73). Table 11.15 sets out the Committee's projections for grade XII of secondary school, according to three sets of assumptions, and the annual rates of growth of the numbers in grade XII according to these assumptions. The Committee regards Projection B as the most plausible one. This projection assumes net migration of 10,000 per annum and medium retention rates into senior grades. On this basis, and taking into account the rate of growth of the 17-22 years age group (a little over 1.5 per cent per annum over the relevant period), the number of new tertiary students should rise by about 7 per cent per annum from 1970 to 1979 and then by about 4 per cent. The lower migration assumption (Projection A) scarcely affects the situation. The assumption of higher retention in grades XI and XII (Projection C) makes a significant difference over the period 1970-1976, and would involve rates of growth of about 10 per cent per annum over that period.

11.33 On the basis of Projection B, the number of students in grade XII are projected to rise from the actual figure of 5,490 in 1969 to 13,120 in 1980. This is an increase by a factor of 2.4. Over the same period, the population aged 17-22 years is likely to increase by a factor of 1.2. If we weight these factors in the proportions suggested in the preceding paragraph, by 1981 total new places should rise from an actual number of 4,509 in 1970 to about 9,000 in 1981. Total enrolments in the tertiary sector should rise roughly in the same proportions: from 18,100 in 1970 to about 36,000 in 1981. This growth will be mainly accounted for by rising retention rates in secondary schools, whereas the major contribution to growth during the 1960's was the growth in the numbers in the relevant age groups of the population (see Table 11.7). It is of interest to note that, if there are 36,000 tertiary students in 1981, these will represent 23 per cent of the age group 17-22 years as against 14 per cent in 1970. This increase is accounted for entirely by increased retention at school to grade XII, and is not the result of increased carry-on rates to tertiary institutions. These figures imply an increase of about two-thirds in the propensity to attend tertiary institutions over the period 1970 to 1981. Moreover, the number of new students in 1981 in relation to the average number in the age group 17-19 years in the population implies that by 1981 about 32 per cent of a generation will enrol at a tertiary institution (see paragraph 11.15). The figure of 23 per cent of the 17-22 years age group for 1981 is not large compared with current plans in Victoria, which appears to be leading the Australian States in this connection. According to figures published in the latest reports of the Australian Universities Commission and the Commonwealth Advisory Committee on Advanced Education, enrolments in universities and colleges of advanced education in Victoria in 1972 are planned to be about 19 per cent of the 17-22 years age group. If teachers college enrolments are added the figure would be raised to about 22 per cent.

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Finally, it should be pointed out that on the basis of Projection C, which assumes appreciably higher retention rates in the upper grades of secondary schools than Projection B, the number of new students would be multiplied, not by 2.0 as is the case for Projection B, but by 2.5. This would imply that, by 1981, about 29 per cent of the 17-22 years age group would be enrolled at tertiary institutions, and about 40 per cent of the members of a generation would enrol at tertiary institutions at some time or other during their lifetime. Although the estimates discussed in this paragraph are intended merely to indicate orders of magnitude, and are, of course, speculative in nature, we wish to emphasise that, even if a relatively conservative view of them is taken, a very large increase in the provision for tertiary education over the next ten years will be required.

Table 11.15

PROJECTED NUMBER OF PUPILS IN GRADE XII

SOUTH AUSTRALIA 1970-1981

	Projection A		Projection B		Projection C	
	No.	Increase	No.	Increase	No.	Increase
	'000	per cent	'000	per cent	'000	per cent
1970	5.83	—	5.83	—	6.31	—
1971	6.38	9.4	6.43	10.3	7.32	16.0
1972	7.04	10.3	7.14	11.0	8.38	14.5
1973	7.68	9.1	7.83	9.7	9.52	13.6
1974	8.41	9.5	8.56	9.3	10.56	10.9
1975	9.17	9.0	9.35	9.2	11.69	10.7
1976	10.01	9.2	10.15	8.6	13.01	11.3
1977	10.87	8.6	10.95	7.9	14.12	8.5
1978	11.70	7.6	11.85	8.2	15.29	8.3
1979	12.39	5.9	12.55	5.9	16.22	6.1
1980	12.81	3.4	13.12	4.5	17.00	4.8
1981	13.17	2.8	13.57	3.4	17.69	4.1

Projection A: Migration 5,000 per annum; medium retention.

Projection B: Migration 10,000 per annum; medium retention.

Projection C: Migration 10,000 per annum; high retention.

11.34 An increase in tertiary enrolments from 18,100 in 1970 to 36,000 in 1981 yields a rate of growth of 6.7 per cent per annum. This rate is rather less than the rate of growth over the period 1961-1970. However, in absolute terms the growth is very large indeed. The provision of an additional 18,000 places^a in tertiary institutions over an eleven-year period may well be beyond the financial capacity of South Australia and may even be beyond its capacity in terms of buildings and staff unless the planning of these places is treated as a matter of great urgency. Unless existing institutions are to grow very large, new institutions will have to be created in the second half of the 1970's; and we have, in fact, received suggestions relating to a new university in the northern part of the metropolitan area and

^a About one-third to two-fifths of these places would be for part-time or external students.

to a technological institution in the southern part. The question of the provision of an adequate number of tertiary places and the establishment of new institutions to achieve this are matters for the most urgent attention of the proposed Tertiary Education Committee.

11.35 The projections made in paragraph 11.33 imply that a high proportion of a generation, at least by current standards, will be undertaking tertiary education by the 1980's. This raises the questions whether there is likely to be a sufficient number of able students and whether the community will be able to absorb the products of tertiary education into appropriate occupations. Is one-third of a generation, for example, able enough to face the intellectual demands of tertiary education; or will failure result for many, and the community waste precious resources of teaching talent? Will something like twice the present rate of flow of graduates find places in the work force which will satisfy them, and make contributions to the community commensurate with the effort put into their higher education? We discuss these two issues in the following paragraphs.⁴

11.36 We have little doubt that those likely to seek higher education in the proportion that we have projected in paragraph 11.33 will be able enough to derive advantage from it. There are still many able students not entering tertiary education. Some do not complete secondary education, and others complete secondary education but choose to do other things. The main reasons for such possible wastage are poverty, lack of knowledge of facilities, lack of interest, failure at school for reasons other than ability, and parental discouragement. They rarely act separately; and in each individual's case there may be a good deal of interaction between the reasons, for example, poverty and parental discouragement. A disproportionately low proportion of children from homes with low incomes is attending tertiary institutions.⁵ Moreover, as the figures in Table 11.12 show, there is a smaller percentage of girls than boys in the upper forms of the secondary school, and a smaller percentage of girls than boys goes on to tertiary education from grade XII. Although we have no local evidence as yet on the matter, we think that there are many boys also from homes that can provide them with tertiary education who have the ability but not the desire to go on to such education. Even if, therefore, there were to be no major change in the courses offered by the present tertiary institutions, or in the intellectual demands made for the qualifications to be gained, there are, we believe, still many students with sufficient ability to master these courses who do not attempt them. We are confident that more of these students will be seeking a full secondary education and then more tertiary education.

⁴ For a similar discussion of the English scene in the early 1960's see *Higher Education*, Report of a Committee appointed by the Prime Minister under the chairmanship of Lord Robbins 1961-1963 (the Robbins Report), London, H.M.S.O., 1963, Chap. VI, pp. 49-54 and 71-74.

⁵ See paragraph 14.30.

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11.37 There will, of course, be many young people aspiring to tertiary education whose ability and interests do not lie in the traditional academic courses offered by tertiary institutions, and who would not be successful if they attempted existing courses. But we believe that there must be a greater differentiation of courses than there now is. Demand coming from outside the tertiary institutions, and innovation arising from initiative within the institutions, will lead to the introduction of courses suited both to new needs arising in the community and to the changing nature of the students moving out of the secondary schools.

11.38 Improvements and developments in primary and secondary education will also increase the number of young people who have both the will and the ability for higher education. It is impossible to estimate quantitatively what effect smaller classes and greater individual attention may have in influencing attitudes towards education as such, and therefore towards continuing it after the end of secondary schooling. Improvements in the education of teachers at all levels of schooling will have effects on both the development of the native abilities of the children they teach, and on the development of the interests and motives which lead an individual to seek tertiary education. The introduction in secondary schools of new courses and of new approaches to curricula will develop unexpected abilities, and students will show interest in different approaches and different curricula at both secondary and tertiary levels.

11.39 The secondary schools have found that under certain conditions the ability of many of their apparently less able students to benefit by schooling has been under-estimated. More careful attention to the nature of courses, as well as to methods of teaching, of learning and of assessment, and a better adaptation to the needs of individual students, have released abilities and developed interests in many students who in less favourable circumstances would have been considered failures. Similar kinds of educational changes, adapted to the different nature of tertiary institutions, will enable them to deal with the more varied intake of students that they can now expect. In spite of the increase in the proportion of a generation enrolling in tertiary institutions and the greater variety of interests and motives that this increase will bring, we do not believe there is any likelihood of a higher proportion of failures in the tertiary courses.

11.40 The main resource of any community is the developed intelligence and trained skills of its people, whether these are used to exploit its physical resources or to ensure its efficient and satisfying operation as a community. If the tertiary institutions respond both to the needs of the community for trained and highly educated men and women, and to the greater variety in the interests and purposes that they can expect in their students, we do not believe there will be any over-production of graduates from the institutions.

11.41 It is important to recognise that, to a large degree, job opportunities adjust to the nature of those seeking them. For example, in a period when even a full secondary education was rare, many posts in industry and commerce were filled by young people with perhaps only two or three years of secondary education. As the retention rates at secondary school have risen, employers have been demanding full secondary education as an entry qualification. Within the not-too-distant future full secondary education will become almost universal, and tertiary qualifications relatively common. When this happens, tertiary qualifications will be required for those posts.

11.42 There are few sectors of the economy, and few activities in the life of the individual and in the interrelated life of the community, which do not benefit from the higher education of a greater proportion of the population in one or both of the following ways:

(a) By increased productivity through a work force that is both more skilled in specific professions or technologies, and better able to adjust to change and to modify and improve the routines and procedures that are a major part of daily work.

(b) By improved ability of the individual to understand and to master his environment, to use his leisure with more satisfaction, to participate more effectively in the common activities of citizenship and to make contributions to social life and organisation.

11.43 We believe, therefore, that there will, in general, be adequate opportunities available to the graduates of the tertiary institutions to use their higher education to advantage. This is not to say that there will not from time to time be an over-supply of people in particular specialisations. Moreover, the availability of persons with types and levels of training which were scarce in past years may lead to changes in relative incomes, and alter the apparent status of particular occupations. This points to the need for avoiding very narrow specialisation. But if the education of the graduates imparts basic principles which can be used over a wide range of occupations, rather than narrow and specialised skills not transferable to other than identical operations in particular occupations, and if the graduates themselves are prepared to enter a wider range of occupations than has formerly been the case, we do not foresee problems in employing graduates; and we have no doubt that, as graduates, they will be able to contribute something valuable to whatever they do.

STRUCTURE OF TERTIARY EDUCATION

Colleges of Advanced Education

11.44 Until comparatively recently, the universities dominated tertiary education in Australia. As a result of recommendations contained in the Martin Report in 1964 which were aimed at achieving a major diversification in tertiary education, all Australian govern-

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ments have pursued a deliberate policy of nurturing the non-university sector of tertiary education. If we leave out the teachers colleges, the institutions in this sector have come to be known as "colleges of advanced education". In South Australia, the institutions so classified are the South Australian Institute of Technology, the South Australian School of Art, the Roseworthy Agricultural College and the School of Dental Therapy.

11.45 The recognition of the colleges of advanced education as major tertiary institutions has posed the question of what the relationship between the colleges and the universities should be. Precise distinctions between colleges and universities have not proved easy to draw. References to these distinctions have been made in the first two reports of the Commonwealth Advisory Committee on Advanced Education. In our view the best of the recent statements is to be found in the Report of the Commonwealth Committee of Enquiry on Academic Awards in Advanced Education (the Wiltshire Report), June 1969, at paragraph 4.9. We quote this paragraph in full.

(i) Because the vocational needs in the tertiary educational field vary so greatly from one discipline to another, the colleges are providing courses in which both the level and the length are varied to suit these needs. In order to maintain this flexibility, which is necessary to avoid either overtraining or undertraining, it is clear that there cannot be one single type of course structure to the exclusion of other types. Nevertheless, the Committee sees in many parts of Australia acceptance of a three year full-time course or its part-time equivalent as the "normal" length of a course. Other courses, some of two years' duration and some longer than three years, are also offered.

(ii) In the colleges there is a general recognition of the need to structure courses and design the syllabus for individual subjects so that an educational pattern is produced in which the vocational needs of the student are well accommodated. The resulting characteristics of such courses involve an emphasis —

- (a) in the treatment of a certain subject or subjects aimed at relating the studies directly to the work situation, thus tending to reduce the more general aspects of such subjects and the course as a whole,
- (b) on studies involving the application of knowledge, with a consequent reduced emphasis on studies of a more theoretical nature,
- (c) on practical skills to a greater extent in some disciplines than would be found in courses not specifically designed for vocational purposes, such skills being of significance to the occupational needs of the student, and
- (d) on planning the courses so that they are complete in themselves, thus fitting a successful student for his work in industry or commerce.

(iii) The entry requirements of the colleges generally are more flexible than have hitherto been customary in the case of studies of a formal nature at tertiary level. In this connection the Committee notes that an accepted criterion for admission to a course in the colleges is the production of evidence that the student can undertake it with reasonable likelihood of success.

(iv) The colleges are encouraging, for the most part, the provision of education on a basis which, for some part of the course at least, allows the student to come directly into contact with the work situation. In courses in many colleges this is accomplished by part-time attendance in which evening study is combined with some day-release from his place of employment, while in other cases one or more years are set aside for part-time attendance in a course which is otherwise con-

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ducted on a full-time basis. In some other colleges "sandwich" courses have been introduced or are under consideration.

(v) Staff are selected for the colleges on the basis of their vocational experience as well as their academic qualifications, and facilities have been, and are being provided which are related to those typically used in industry and commerce.

(vi) The colleges are maintaining their contact with industry and commerce and building up further association in a number of ways. Some of these, not necessarily applying in all colleges, are:

- the establishment of college councils with strong representation from industry and commerce,

- the use of advisory panels at course and subject level,

- the encouragement of academic staff in undertaking consulting work,

- the participation in specific industrial research or surveys, and

- the arrangement of conferences involving industry and commerce.

At present there appears to be little actual interchange with or secondment of academic staff to industry, but the Committee is satisfied that there is a reasonable likelihood that this will occur to a substantially greater extent in the future.

(vii) While the great majority of the courses provided by the colleges are designed to prepare the student for the initial phase of his professional career, increasing attention is being paid to courses beyond this phase. It has been recognised that the nature of the work performed by an individual often changes during the span of his working life and an extension of the initial training or even retraining will be necessary. Studies undertaken subsequent to the first course will not necessarily involve greater depth beyond that reached in the earlier work, though this may be the case. Such further studies in the colleges may involve an extension into areas covered only to a limited extent in courses already taken or they may involve new areas.

11.46 The main differences between the universities and the colleges thus appear to lie in the following factors, which may not all be present in any particular case:

- (a) College courses tend to have a more applied emphasis and to be more vocationally orientated.

- (b) College students can be expected to have vocational rather than academic interests.

- (c) Colleges have more flexible entrance requirements.

- (d) Colleges have a more direct relationship with industry and commerce.

- (e) Colleges are expected to pay more attention to teaching relative to research.

- (f) Colleges provide greater opportunities for part-time studies.

11.47 In the discussions that have taken place during the past two years on the role of the colleges, there has necessarily been some simplification in order to contrast the characteristics of colleges and universities. It has been said that universities are for the analytically minded students and colleges for the practically minded. We do not believe that there can be any such simple dichotomy. We believe that there are and there ought to be significant differences between universities and colleges, but that any attempt to categorise the institu-

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tions into two distinct sectors is bound to fail. There should be differences, but some overlap in the nature of courses offered and in the nature of students enrolled is unavoidable and is desirable. Moreover, tertiary institutions should be bound together by the common themes of intellectual endeavour and rational inquiry. We believe that tertiary education should be conceived as a unified system offering a wide variety of courses at a variety of institutions to students with different abilities and different interests.

11.48 The development of the colleges represents an expansion of the range of educational opportunity at the tertiary level. It is important that such diversification is not stifled by an aping of the universities by the colleges in an attempt to win esteem in the eyes of the public. It is of great importance to the colleges to establish their standing, so that the public does not regard them as inferior institutions. Consequently there is considerable temptation for the colleges to make themselves like the universities, which have for so long enjoyed high prestige. Some conflict between the pursuit of esteem and the diversification of tertiary institutions is likely; and care will be needed to see that the latter is not subordinated to the former. There is no reason why tertiary institutions should not at the same time differ greatly among themselves and be held in esteem in the community for their own particular qualities.

11.49 We believe that it is important that significant differences should be maintained between the universities and the colleges. These may be achieved through differences in vocational emphasis, although we think that it would be wrong to imply that there are not, or should not be, strong vocational elements in university education. They may also be achieved, perhaps more satisfactorily, by maintaining flexible standards of entry to colleges. They may be achieved by offering at colleges shorter or less demanding courses, or by providing sandwich-type courses.

11.50 If tertiary education is to be conceived as a system involving diverse institutions offering diverse courses, provision should be made for escalation from lower-level to higher-level courses and for transfer between institutions. This, in itself, makes some overlapping between colleges and universities and some machinery for close liaison between institutions desirable.

11.51 The existence of, or potential development of, a number of colleges of advanced education has led the States of Victoria, New South Wales, Tasmania and Queensland to establish bodies to co-ordinate and administer colleges of advanced education. In 1965 Victoria established by legislation the Victoria Institute of Colleges and in 1969 New South Wales likewise established the Advanced Education Board. In 1968 the Tasmanian Government established a Council of Advanced Education to take charge of tertiary education

outside the university and to establish and maintain the Tasmanian College of Advanced Education. In 1970 Queensland legislated for a Board of Advanced Education to supervise all tertiary education other than university education but including teacher education. In 1965 the South Australian Minister of Education appointed a committee under the chairmanship of Mr. R. A. Simpson to report upon the desirability of setting up a South Australian Institute of Colleges as suggested in the Martin Report.

11.52 The Simpson Committee reported in 1966, and its report contained a recommendation that an Institute of Colleges be established with the following powers and duties:⁶

(a) To foster the development and improvement of advanced education including the fields of technology, applied science, agriculture, commerce, the humanities, social science and other branches of learning in institutions other than the universities of South Australia.

(b) To admit to *membership* institutions wholly or largely engaged in presenting courses of a standard approved by the Institute of Colleges and to rescind membership if those standards are not maintained.

(c) To admit to *affiliation* institutions presenting a course or courses of a standard approved by the Institute of Colleges where such courses represent a minor portion only of the total activities of the institution, and to rescind affiliation if the standard of the course or courses is not maintained.

(d) To make, amend and revoke statutes subject to allowance by the Governor whereby degrees and diplomas are established.

(e) To award degrees and diplomas to students of member or affiliated institutions who have reached standards approved by the Institute of Colleges.

(f) To advise the Minister of Education and the appropriate Commonwealth agency on proposals for financial support made by the governing bodies of member or affiliated institutions.

(g) To give advice to the Minister of Education on the system of tertiary education within South Australia, other than University education, with a view to the provision of balanced opportunities for tertiary education, not only at the level of degrees and diplomas, but also at the less advanced levels of certificate and technicians' courses.

11.53 The Simpson Committee suggested that, apart from the South Australian Institute of Technology, the only other institutions which might possibly be admitted to the Institute were the Roseworthy Agricultural College and the Kindergarten Teachers College. However, the Committee did suggest that at some stage in the future the South Australian Institute of Technology might be broken up into three independent institutions concerned with Business Studies and Accountancy; Para-Medical Studies; and Technology, Applied Science and Architecture. The Committee also suggested the composition of the Council of the Institute of Colleges. No action has yet been taken on these recommendations.

11.54 We were told by representatives of the South Australian Institute of Technology that its Council had now withdrawn the

⁶ See Report of Advisory Committee on the Proposed Formation of a South Australian Institute of Colleges, pp. 18-19.

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support which it had originally given to the Simpson Committee's proposal for an Institute of Colleges. The Council's policy had changed following substantial modifications in the S.A.I.T.'s administrative and academic structure. The representatives expressed the view that the S.A.I.T. was so much the predominant college of advanced education in South Australia, handling some 85 per cent of all students enrolled for tertiary courses at such colleges, that the establishment of an Institute of Colleges would be an over-elaborate and wasteful piece of machinery. Furthermore, they argued that all present and future colleges of advanced education might well become part of the S.A.I.T., thus rendering an Institute of Colleges completely unnecessary.

11.55 We agree that the existence of only one major college of advanced education in this State is an argument against the establishment of an institute of colleges *under present circumstances*. However, there are strong reasons against the maintenance of this situation. We believe that it is in the interests of the diversification of higher education to ensure the growth of other colleges of advanced education. Indeed, there may be a case for splitting up the South Australian Institute of Technology into three independent colleges as suggested by the Simpson Committee. As is pointed out in paragraph 11.33, the very considerable increase in the number of tertiary students expected in the 1970's will require the establishment of new tertiary institutions. We do not believe that it would conduce to the diversity of the system of tertiary education in South Australia, or to its efficient management, if new campuses were to be established under the aegis of the South Australian Institute of Technology. The Institute's own considerable development is a sufficient responsibility for its management to carry; and, in any case, control of campuses remote from the centre is generally unsatisfactory. It is thus possible that, within the relatively near future, several substantial colleges will be in operation. We believe that an institute of colleges should be established. An additional argument of considerable weight is that, as a result of the Wiltshire Report, degrees are likely to be awarded in some courses in the colleges. We believe that it is desirable that these be awarded by an institute of colleges rather than by the colleges themselves. This is particularly the case for small institutions, the qualifications of which would carry less weight than those of an institute of colleges.

11.56 Our view that an institute of colleges should be established has been strengthened by our investigations into the organisation of teachers colleges, which form an important group of institutions within the tertiary sector. A detailed discussion of the organisation of teachers colleges is reserved for Chapter 16. In that chapter, we canvass the arguments relating to the establishment of the teachers colleges as independent corporate bodies, and recommend that they be so established. There are at present five well-developed teachers

colleges, each of some size. We have come to the conclusion that the colleges of advanced education and the teachers colleges should all be brought under the umbrella of a single institute of colleges.

11.57 Our proposal for a single institute of colleges to cover both colleges of advanced education and teachers colleges is at variance with the recommendations of the Martin Report, although it appears to conform with the intention of recent legislation in Queensland. The Martin Report recommended an institute of colleges for colleges of advanced education, and a separate board of teacher education for teachers colleges. We should certainly agree that, if our proposal for a single institute were not adopted, the recommendations of the Martin Report should be followed as the most desirable alternative. However, we believe that the case for a single institute of colleges in South Australia is a strong one. A single institute would confirm the status of all non-university tertiary institutions. It would facilitate the diversification of the interests of specialist colleges, promote flexibility and make possible new types of colleges. It would enable the provision of teacher education in the future to take place within general colleges of advanced education, thus overcoming the isolation of teachers in their training. It would be effective administratively and it would be economical.

11.58 We are aware that the purposes and interests of teachers colleges are different from those of most existing colleges of advanced education, and we discuss this question at some length in paragraphs 16.113-16.122. In itself, we do not think that this presents any greater difficulties than those encountered by the councils of universities, which nearly always incorporate faculties of widely divergent characters. However, it does point to the establishment of appropriate boards of studies to advise the Council of the Institute of Colleges on academic matters.

11.59 We believe that such boards of studies should be established as are appropriate; for example in teacher education, technological studies, business studies and so on. A board would advise the Council, possibly through an academic committee of the Council, on:

- (a) The special requirements of the studies to which it relates.
- (b) The approval of courses for which degrees and diplomas of the Institute are to be awarded.
- (c) Such other matters as may be referred to it by the Council of the Institute.

We envisage that a board would consist of members drawn from the academic staffs of member institutions, with a strong representation from the academic staffs of the universities and, perhaps, one or two members from the Council of the Institute.

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11.60 Accordingly, we RECOMMEND that:

(a) *An Institute of Colleges should be established, with the following functions:*

(i) *To make recommendations to the Government or Governments concerned as to desirable developments in tertiary education in institutions other than universities.*

(ii) *To award degrees and diplomas to students of member institutions who have completed approved courses.*

(iii) *To co-ordinate the courses offered by member institutions.*

(iv) *To make recommendations to the Government or Governments concerned as to the allocation of funds, both recurrent and capital, for the maintenance of member institutions.*

(v) *To approve the recurrent budgets and the staff establishments of member institutions.*

(vi) *To approve the capital budgets and individual building projects of member institutions.*

(b) *The Council of the Institute of Colleges should be constituted along the following lines:*

A President appointed by the Government.

A Vice-President appointed by the Council, who shall be the chief executive officer of the Institute.

The Director-General of Education, or a Deputy Director-General nominated by him as his representative.

The Director of Further Education.⁷

Four principals of member institutions, elected by the principals of member institutions to represent an appropriate spread of institutions.

Four members of the academic staffs of member institutions, elected by the academic staffs of member institutions to represent an appropriate spread of institutions.

One member nominated by the Council of the University of Adelaide, who shall be a member of the academic staff of that university.

One member nominated by the Council of the Flinders University of South Australia, who shall be a member of the academic staff of that university.

Six members informed of the educational needs of the relevant professions and vocations, appointed by the Government.

Two Members of Parliament, appointed by Parliament.

(c) *Boards of Studies in specialised fields should be established to advise the Council of the Institute on academic matters.*

11.61 We believe that, in order to ensure that the Institute fulfils its functions effectively, it will need to have a full-time chief executive

⁷ See paragraph 12.51.

officer of high status; and we suggest that he have the title of Vice-President as is the case in the Victoria Institute of Colleges. The Vice-President would need to be supported by a small secretariat.

11.62 There is also the question of the government of individual colleges of advanced education. We take the view that, in general, such colleges should be incorporated and they should be controlled by their own governing bodies. We think that institutions of higher education ought not to be under the direct control of government departments, because methods and attitudes which are appropriate to the management of a department of State are not necessarily appropriate to the control of a tertiary institution, which flourishes when governed by a measure of consultation that is not practicable in a government department. Moreover, the governing body of a college provides it with a group of informed and interested people who themselves can contribute a great deal to its development; and the existence of a number of separately run institutions facilitates variety and experimentation. While we think that individual colleges should be independent corporate bodies, we wish to emphasise that we envisage their operating under the umbrella of the Institute of Colleges. The Institute would exercise a control over the general financial arrangements of the colleges and the extent and nature of their growth; and would award degrees and diplomas for courses of approved standards that were offered by them. The individual colleges would have control over the appointment and promotion of staff, the expenditure of that part of their recurrent funds not committed to the financing of the staff establishments, the detailed design of buildings, the details of curricula and syllabuses within approved courses, teaching and examining methods, and the usual day-to-day operations of the institution. We think that the governing bodies of individual colleges should be constituted in accordance with the nature of the institution concerned, and should contain some representation of the academic staff and students of the college, and some cross-representation with other tertiary institutions. In particular, the governing body of a new institution might draw on older institutions for some of its membership.

11.63 Accordingly, we RECOMMEND that:

(a) *Non-university tertiary institutions of sufficient strength should be incorporated, and be controlled by their own governing bodies.*

(b) *The governing body of an incorporated institution of this type should be constituted along the following lines:*

A Chairman, who shall not be an employee or a student of the institution, to be elected by members of the governing body but not necessarily from among their number.

The Principal of the institution.

Three members of the academic staff elected by the academic staff.

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Three students elected by the students.

Three members of the academic staff of other tertiary institutions, appointed by the Government.

Ten members associated with or interested in the professions and industries for which students are being prepared, appointed by the Government.

Co-ordination of Tertiary Education

11.64 The notions that tertiary institutions form part of a system of tertiary education and that there should be some co-ordination to ensure balanced development and a rational allocation of the resources devoted to tertiary education, have developed only slowly during the past decade. The first movements along these lines came from the Commonwealth Government, with the establishment of the Australian Universities Commission in 1959 and the Commonwealth Advisory Committee on Advanced Education in 1965. The first body was "to perform its functions with a view to promoting the balanced development of universities so that their resources can be used to the greatest possible advantage of Australia" (Australian Universities Commission Act, 1959, Section 14(1)). The second body has similar functions with respect to colleges of advanced education. These two bodies operate in two of the three main sub-sectors of tertiary education; and they operate on a Commonwealth-wide basis.

11.65 More recently, formal or informal machinery for co-ordinating tertiary education has been instituted in a number of the States. New South Wales and Western Australia have introduced formal machinery; while in Victoria and Tasmania there are arrangements for liaison. In South Australia, we understand that there is some consultation between tertiary institutions on specific matters, but it is limited and occasional. There is no machinery for regular liaison or co-ordination. We think that this is a serious deficiency, particularly with respect to the underlying assumptions used in the drawing-up of triennial submissions for presentation to the Australian Universities Commission, the Commonwealth Advisory Committee on Advanced Education and the Commonwealth Department of Education and Science. We believe that there are powerful arguments for establishing procedures to facilitate the co-ordination of the plans of the various tertiary institutions. Since the expansion of tertiary education that is being demanded by the community will involve greatly rising expenditures, the need to ensure an efficient allocation of resources becomes greater and greater. Among the arguments that favour the establishment of appropriate machinery are those relating to the provision of an adequate number of student places in the various courses and their division between the various institutions, an appropriate diversity of courses, the establishment of new institutions, the avoidance of unnecessary duplication of facili-

ties, the transfer of students between courses and institutions, the articulation of tertiary to secondary education, and the priorities in tertiary education.

11.66 The only argument against the establishment of such machinery appears to be that it might endanger the academic freedom of the individual tertiary institutions. This issue was canvassed at length in the Report of the United Kingdom Committee on Higher Education in 1963 (the Robbins Report), and we shall not repeat what is so well set out there, except to record the view of that Committee, which we believe applies fully in the South Australian situation:

Freedom of institutions as well as individual freedom is an essential constituent of a free society and the tradition of academic freedom in this country has deep roots in the whole history of our people. We are convinced also that such freedom is a necessary condition of the highest efficiency and the proper progress of academic institutions, and that encroachments upon their liberty, in the supposed interests of greater efficiency, would in fact diminish their efficiency and stultify their development.^a

We believe that it should be possible to define the functions of any body to be established in a way that would respect the academic freedom of the constituent institutions and that the independence of the institutions should not be threatened by such machinery any more than it is by the constraints imposed on the institutions by the very limits of the resources which they employ. We believe that this can be achieved by clearly defining the co-ordinating body as an advisory one, advising both the Government and the tertiary institutions themselves. The co-ordinating body should have no powers of control over the constituent institutions.

11.67 It is useful to examine the arrangements that have been made in the four States referred to in paragraph 11.65. In New South Wales, the Higher Education Act, 1969, established three bodies: the Higher Education Authority, the Universities Board and the Advanced Education Board. The last two have functions relating to universities and colleges of advanced education respectively. The functions of the first body, which consists of five members, are defined in Section 15 of the Act as follows:

- (a) To promote the most beneficial and effective relationship between the universities and the colleges of advanced education.
- (b) To take such steps as it thinks fit to promote consistency between the recommendations made to the Minister by the Advanced Education Board and the Universities Board and to ensure that adequate information with respect to these recommendations is presented to the Minister.
- (c) To review, and advise the Minister on, such matters as the Minister may refer to the Authority.

It appears that the operations of teachers colleges, other than those which are part of colleges of advanced education, are not included within the purview of the Higher Education Act.

^a *Op. cit.*, paragraph 703.

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11.68 Western Australia has established a Tertiary Education Commission. It comprises a chairman and eight members, of whom the Vice-Chancellors of the University of Western Australia and of Murdoch University, the Director of the Western Australian Institute of Technology, the Director-General of Education and the Under-Treasurer are *ex officio* members. The Commission has the following functions:

- (a) Subject to the Minister, to promote, develop, and co-ordinate tertiary education having regard to the needs of the State and the financial and other resources available to it.
- (b) To consider the future development of tertiary education institutions including the establishment and development of new ones and, for that purpose, to confer with appropriate authorities in the State on the selection of sites and recommend to the Minister the acquisition and reservation of sites.
- (c) To review submissions of tertiary education institutions relating to triennial programmes and make recommendations to the Minister on the levels of financial support requested in those submissions.
- (d) To consider any request for a variation from an approved triennial programme of a tertiary education institution and make recommendations thereon to the appropriate Commonwealth or State Authority.
- (e) To consider:
 - (i) the terms and conditions of appointment and employment, including salary payable, of the staff, whether academic or otherwise, of each tertiary education institution; and
 - (ii) all claims relating to those terms and conditions, and make recommendations thereon to the governing authority of the institution.
- (f) To consider the fees to be charged by and paid to each tertiary education institution for classes or courses, examinations, and academic awards conferred and make recommendations thereon to the governing authority of the institution.
- (g) To consider proposals for the establishment of new tertiary education courses of study and to make recommendations thereon to the governing authorities of the respective tertiary education institutions for the purpose of achieving rationalisation of resources and the avoidance of unnecessary duplication.
- (h) To co-ordinate the criteria for entrance to tertiary education institutions for the purpose of avoiding multiple examinations; and
- (i) To determine the minimum requirements for new academic awards by tertiary education institutions and accredit those awards.

The Commission will have a full-time executive secretary. It has the power to establish committees to investigate any aspect of tertiary education.

11.69 In Victoria, the three universities and the Victoria Institute of Colleges have established a body called the Victorian Universities Committee. This Committee comprises three representatives from each of the four institutions, including the executive heads of the four institutions. There appear to be no formal terms of reference but the Committee may discuss any matter of common concern to the institutions involved. From such discussions recommendations may go to the governing bodies of the four institutions or to any one or more of them. The Committee has no power to make decisions which bind the four institutions concerned. The teachers colleges

are not represented on the Committee. The Victorian Committee has no formal constitution and does not report to any Minister. It is an informal liaison arrangement and does not appear to discuss major matters of co-ordination, such as the provision of the appropriate number of places for students in the various tertiary institutions. In addition to the Victorian Universities Committee, the Minister of Education has created an Advisory Council on Tertiary Education, comprising the Director-General of Education, an Assistant Director-General, the Director of the Catholic Office of Education, the Vice-Chancellors of the three universities, the Vice-President of the Victoria Institute of Colleges, a representative of the principals of teachers colleges, the Secretary of the Victorian Universities Schools Examinations Board and a representative of the independent schools. It has concerned itself with such matters as estimates of the number seeking tertiary education in the next decade and their distribution between different types of institutions, the future role of teachers colleges, and the reciprocal recognition of courses by tertiary institutions. It does not have the same degree of formal existence as the Tertiary Education Commission of Western Australia, which has a full-time executive chairman.

11.70 In Tasmania, the University, the College of Advanced Education and the Teacher Training Colleges in Hobart and Launceston have entered into a formal non-governmental arrangement, the objects of which are:

- (1) To emphasise the unity of tertiary education in the State and to integrate its efforts effectively.
- (2) To ensure co-operation generally and in particular in academic matters.
- (3) To facilitate arrangements by which the status of individuals or courses in one institution may be recognised by another for the purpose of contributing to the qualifications required for the awards of the University or the Colleges.
- (4) To facilitate the transfer where appropriate of students from one institution to another, with credit for work done.
- (5) To facilitate where appropriate the mutual use of resources.
- (6) To facilitate other forms of mutual assistance.
- (7) To provide suitable machinery for the exchange of information and for early consultation on matters of academic planning.*

The association is known as The Joint Consultative Council of the Institutions of Tertiary Education in Tasmania and includes the Vice-Chancellor of the University of Tasmania (as Chairman), the Principals of the three Colleges and four additional members, appointed two each by the University and by the College of Advanced Education from their academic staffs. The Joint Council has a liaison function and has no power to interfere with the autonomy or finance of the constituent institutions. Nor does it appear to have any formal relationship with a State Minister.

* Extract from a document of the University of Tasmania, dated 20th December 1968, setting out the agreement reached between the Vice-Chancellor, the Chairman of the College of Advanced Education, and the State Minister for Education on behalf of the Teacher Training Colleges.

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11.71 If there is to be machinery to promote the co-ordination of tertiary education in South Australia, should it be on the New South Wales/Western Australian pattern or the Victorian/Tasmanian pattern? The principal arguments for the latter are that it would avoid interposing a State authority between the tertiary institutions and the existing Commonwealth advisory bodies and that informal voluntary liaison between tertiary institutions is preferable to imposed procedures. These arguments carry some weight. However, if the advantages of co-ordination in the tertiary system are to be obtained some greater guarantee of effectiveness will be needed than can be obtained with a purely voluntary liaison body. Accordingly there would seem to be a strong case for a body along the lines of the Western Australian one, that one being somewhat less elaborate and less formal than that for New South Wales. This would seem to be appropriate to a relatively small State such as South Australia.

11.72 We wish to state very emphatically that the Committee should not concern itself with the day-to-day management of the tertiary institutions or with questions involving details of academic programmes, standards or staffing. The Committee should be purely advisory to the Government and the tertiary institutions, and should concern itself only with broad issues of policy. The broader aspects of the following matters are amongst those to which it might have regard:

- (a) The number of places to be provided in tertiary education, and the division of these places between the various tertiary institutions.
- (b) The expansion of existing institutions.
- (c) The creation of new institutions.
- (d) The diversity of courses.
- (e) The provision of new courses where considered desirable.
- (f) The avoidance of unnecessary duplication of facilities.
- (g) The provision of common facilities.
- (h) The escalation of students from lower to higher courses.
- (i) The transfer of students from courses in one institution to courses in another.
- (j) The priorities within the field of tertiary education, and in relation to other educational needs.
- (k) The articulation of tertiary to secondary education.
- (l) The relation of tertiary to other post-secondary education.
- (m) The provision of tertiary education in country areas.

Problems of co-ordination of individual colleges of advanced education including teachers colleges should be dealt with by the Institute of Colleges and not by the Tertiary Education Committee.

11.73 We have given some thought to the composition of the Tertiary Education Committee. The most difficult issue is whether the chief executive officers of the main institutions should be members *ex officio*. This is the situation in Western Australia. The arguments for this are that those persons are probably the most highly skilled in the State in matters of tertiary education, and that their membership will protect the independence of the tertiary institutions. The argument against is that they are interested parties and that as a result the Committee might exhibit a tenderness in its recommendations about tertiary institutions that is not in the interests of tertiary education in the State. In a small State like South Australia it would in fact be difficult to set up a sufficiently expert committee without including the executive heads of the main tertiary institutions. We have therefore come to the conclusion that the executive heads referred to above should be included but that the chairman should not be an executive head. We think that the chairman should be a person with wide experience and deep interest in higher education, but not necessarily a professional educationist. We think that the Committee should not be too large, but we believe that it will not be possible to obtain a sufficient spread of expertise without about twelve members.

11.74 Accordingly, we RECOMMEND that:

(a) *A Tertiary Education Committee should be established as an advisory committee, with the following functions:*

(i) *To advise the South Australian Government on developments in the field of tertiary education, the needs of the State in this field, and how best these needs can be met.*

(ii) *To advise the tertiary institutions of South Australia with a view to promoting co-ordination and mutual assistance and diversity, where appropriate, in the field of tertiary education.*

(b) *The Tertiary Education Committee should be constituted along the following lines:*

A Chairman appointed by the Government.

The Vice-Chancellor of the University of Adelaide.

The Vice-Chancellor of the Flinders University of South Australia.

The Vice-President of the Institute of Colleges.

The Director-General of Education.

The Director of Further Education.¹⁰

The Secretary-General of the Advisory Council of Education.¹¹

Five members appointed by the Government, of whom not more than two should be members of the staff of tertiary institutions.

¹⁰ See paragraph 12.51.

¹¹ In Chapter 17 we recommend the establishment of an Advisory Council of Education with a full-time chief executive officer of high status (see paragraph 17.29).

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11.75 The Tertiary Education Committee would advise the Government through the Minister of Education. We suggest that the Committee be required to present an annual report to Parliament, which would then, of course, be available to the public. We do not envisage that the Committee would require any full-time members, but it would be necessary to establish a small full-time secretariat to serve the Committee.

11.76 In a number of submissions that we received there were references to specific matters in the field of tertiary education. These matters were either within the province of individual institutions or of the kind which should be dealt with by the Institute of Colleges or the Tertiary Education Committee. The most important of these matters related to agricultural education, para-medical studies, the future role of the Elder Conservatorium of Music of the University of Adelaide and the status and development of the Whyalla branch of the South Australian Institute of Technology. The first two of these topics have been dealt with by the Committees appointed by the South Australian Government to inquire into agricultural education and para-medical studies respectively.¹² We have studied their reports, which we believe should be read in the wider context of the whole sector of tertiary education as examined in this chapter. As far as the other two issues are concerned, we think that the whole question of education in music at tertiary level and the question of the operation and establishment of tertiary institutions outside the metropolitan area are ones to which attention should be given by the Tertiary Education Committee when it is established.

¹² See Report by Advisory Committee on Para-Medical Studies (May 1970) and Report of Committee on Agricultural Education (August 1970).

CHAPTER 12

Further Education

12.1 Further education is concerned with the education of those who have left secondary school, whether having completed full secondary schooling or not, and who are studying courses other than those provided at tertiary level by universities, teachers colleges or colleges of advanced education. This chapter sets out the present provision for these students and discusses the probable future development of this post-secondary non-tertiary level of education.

12.2 The interests of further education are both wide and complex. Its institutions have to cater for students of all ages except those under compulsion to attend school, for students whose intellectual levels vary widely, and for adults whose interests range from language and philosophy studies to art and craft activities. It has to be prepared to introduce new courses and to modify existing courses, and to adapt its techniques, its equipment and its outlook to the needs of a world of increasing change. In the present institutions there is much less provision for women than for men. Many of their teachers are employed on a part-time basis, and many, particularly in trade and certificate courses, have received no formal teacher training. In England, further education has been referred to as "neglected educational territory",¹ but it is assuming, both there and in Australia, a greater importance as the demand from industry, commerce and the public generally expresses the desire for an expansion of its present provision.

12.3 The beginnings of further education in South Australia go back to the last century, when the Institutes Association offered courses both in the metropolitan and in country areas, although its offerings often consisted of scattered and intermittent adult education lectures. The South Australian School of Mines and Industries was established in 1889 to provide courses at all levels from trade to professional, with particular emphasis on mining and engineering. From the start of this century the Education Department, through education continuation classes, provided some adult education, the general programme being unsystematic and spasmodic. In 1914 the Workers' Educational Association was set up to present more systematic courses under the control of a Joint Tutorial Classes Committee, established in conjunction with the University of Adelaide, which provided evening classes in Adelaide mainly in liberal arts subjects. In the 1920's and 1930's classes and written courses were offered as well to country groups. This pattern of joint W.E.A.-University provision of courses continued until 1956 when the University established the Department of Adult Education under a full-time Director to take responsibility

¹ 15 to 18, Report of the Central Advisory Council for Education (England), H.M.S.O., 1959. (The Crowther Report.)

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for its extension programme. In 1956, too, the Education Department assumed a more active role, expressed particularly in the development of country centres for adult education.

PRESENT PROVISION

12.4 The activities of further education may be broadly classified into two main subdivisions which, although distinct in character, are not mutually exclusive. They are:

- (a) Further education leading to post-secondary qualifications.
- (b) Adult courses.

The South Australian Education Department, the Department of Adult Education of the University of Adelaide, and the Workers' Educational Association of South Australia share the main responsibility of providing the necessary facilities and courses. The South Australian Institute of Technology conducts a number of technician courses which are being transferred to the Education Department as circumstances permit. Some institutions and some industries also provide short courses designed for their own members or employees. These latter will not be discussed in any detail in this chapter, as they are not open to the general public.

12.5 Three other areas in the total provision for further education should be mentioned. The first of these is post-secondary non-tertiary agricultural education. Roseworthy Agricultural College offers some courses at certificate level in addition to its diploma courses. The Department of Agriculture undertakes what is essentially adult education through its extension work. In 1968 the South Australian Government appointed a Committee of Enquiry into Agricultural Education under the chairmanship of Mr. A. M. Ramsay, and, as its report will deal in detail with these matters, they will not be further discussed here.

12.6 The training of nurses is another area of further education which is of great importance to the community. It presents problems which are by no means wholly or even mainly educational and the Committee considers it as being outside its terms of reference. Moreover, the training of nurses has been under active consideration by the Hospitals Department.

12.7 The private technical schools, of which there are at present 16 licensed by the Minister of Education, also provide further education to a section of the public. A private technical school is defined as a school which offers trade courses, courses in dressmaking and allied subjects or commercial courses to its students for fee or reward. Any private school offering a normal primary or secondary course, even if the course includes woodwork or home science as one of its subjects, would not, however, be classed as a private technical school.

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In this State no private technical school offers trade subjects alone, so the schools can be classified into those teaching dressmaking and millinery, and those mainly concerned with commercial subjects. The courses offered vary in duration from four weeks to one year or more. The majority of the students and the staff work on a part-time basis. Many of the dressmaking schools are small and are conducted by the owners alone. The number of students varies from 10 to over 100. Schools concerned with commercial subjects are generally larger and have a greater proportion of full-time students; many of these students sit for external examinations. The Committee conducted a survey of private technical schools,² from which the data contained in Table 12.1 are derived.

Table 12.1

PRIVATE TECHNICAL SCHOOLS

SOUTH AUSTRALIA, AUGUST 1970

Type and Number	No. of Students		No. of Teachers		No. of Students taking P.E.B. Exams (a)		No. of Students taking other External Exams
	Full-Time	Part-Time	Full-Time	Part-Time	Leaving	Matriculation	
Dressmaking and Millinery (8)	53	401	5	6	—	—	—
Business Colleges (8)	791	1,014	34	60	348	48	583

(a) In 1969.

12.8 We now consider in greater detail the two main types of further education — that which leads to post-secondary qualifications and that which is concerned with adult education.

Further Education Leading to Post-Secondary Qualifications

12.9 On their entry to the work force many males and a smaller proportion of females continue with their education, seeking trade, technician and similar qualifications. This may take the form of trade training, either apprentice or other, or further study necessary to fit an applicant more adequately for his job. People already in the work force often seek advanced qualifications to prepare them for promotion. These needs are met by the offerings of two agencies, the Education Department in its technical colleges and through some courses conducted in adult education centres, and the South Australian Institute of Technology in its certificate courses.

12.10 Five metropolitan and four country technical colleges offer courses for apprentices, post-trade-certificate courses, and technician

² For questionnaire see Appendix G.

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and other departmental certificate courses. Some colleges offer subjects and courses in commerce and management. In addition, some courses, e.g., in food inspection and public health, are provided which lead to certificates granted by outside examining bodies. A number of separate vocational subjects, such as foremanship and electrical installation, have been provided since 1951, the variety of which has grown considerably. Colleges, particularly in those country areas where there is no separate adult education centre, also provide a range of general adult education subjects. Table 12.2 shows the development of provision in the metropolitan technical colleges since 1954. Total individual enrolments have increased by 60 per cent in the five years since 1964, and subject enrolments by 75 per cent. Although the number of subject enrolments in technician courses is small, this may grow very rapidly as courses are taken over from the South Australian Institute of Technology. In late 1970, subject enrolments in technician courses totalled 2,089, and the Education Department estimates that they will grow to approximately 4,000 in 1971. Enrolments in country technical colleges and in the Technical Correspondence School are set out in Tables 12.7 and 12.9 respectively.

Table 12.2

NUMBER OF ENROLMENTS IN METROPOLITAN TECHNICAL COLLEGES

SOUTH AUSTRALIA 1954-1969								
	1954	1959	1964	1965	1966	1967	1968	1969
Total Subject Enrolments	5,991	9,500	8,770	8,964	10,448	10,542	10,440	15,361
No. of Apprentices Receiving Instruction	2,760	5,060	5,553	5,983	6,551	6,398	6,093	5,893
No. of Apprentices Studying at Post-Trade Certificate Level (a)	121	359	805	617	701	896	878	887
Subject Enrolments in Technician Courses	—	—	—	—	—	—	23	499
Individual Enrolments in Adult Courses (b)	N.A.	N.A.	2,637	2,689	3,004	3,336	3,532	7,220
Total Individual Enrolments (c)	N.A.	N.A.	8,190	8,672	9,555	9,734	9,625	13,113

Source: Annual Reports of the Minister of Education.

(a) These figures are included in the second row of the Table.

(b) Includes adult post-trade enrolments.

(c) The sum of the figures in the second and fifth rows of the Table.

12.11 The South Australian Institute of Technology also provides technician certificate courses. From the time the Institute was designated a college of advanced education a transfer of these courses to the Education Department began. The transfer is contingent on the availability of suitable accommodation and staff. The Education Department had established an Automotive Technician Certificate

course in 1968, and in 1969 the first-year courses of the Electronic and Electrical Technician Certificate and a part of the Commerce Certificate were transferred from the Institute to the Education Department. In 1970 both first-year and second-year courses for these two technician certificates and the remainder of the Commerce Certificate were being undertaken by the Education Department, and, in addition, the first-year course of the Mechanical Technician Certificate. There are, however, 20 certificate courses still available at the Institute of Technology awaiting a suitable time for transfer. Table 12.3 sets out the number of students taking technician certificate courses at the South Australian Institute of Technology, including the Whyalla branch. The numbers show a decrease in 1970 due to courses being transferred from the Institute. For completeness, the number of students taking "odd" subjects is also included.⁸ The number of such students is decreasing rapidly as the resources of the Institute are directed more towards full-course students.

Table 12.3

NUMBER OF STUDENTS ENROLLED IN NON-TERTIARY COURSES AND IN ODD SUBJECTS

SOUTH AUSTRALIAN INSTITUTE OF TECHNOLOGY (a) 1964-1970

	1964	1965	1966	1967	1968	1969	1970
Certificate Students	2,472	2,706	3,184	3,077	2,764	2,853	2,440
Odd-Subject Students	6,206	5,326	5,016	2,334	3,055	1,634	1,012

Source: South Australian Institute of Technology.

(a) Including the Whyalla branch.

12.12 The Apprentices Act 1950-1970 provides that, for such trades as are declared by proclamation, no minor shall be employed except under an indenture of apprenticeship, and that, in such areas as are proclaimed, such apprentices shall attend specified schools or classes. In areas remote from these classes the apprentice may be required to take a correspondence course. The basic term of apprenticeship is four years, which may be reduced in a few trades under Federal awards to a minimum of three years, provided that certain academic qualifications are held by the apprentice, that he is over 17 years of age and that he undertakes continuous day-training of 20 weeks in the first year of his course and 280 hours of training in the second year. Apprentices receive considerable practical training in the technical colleges, and this is supplemented by practical experience on the workshop floor of their employers. A number of firms have established schools in their factories to ensure that the apprentice receives adequate practical experience in all aspects of the work. Theoretical training is given by the Education Department, except that the South Australian Railways provides day-training, both theoretical and practical, at trade level for its apprentices in trades where numbers warrant it.

12.13 The number of indentured apprentices receiving instruction increased to a maximum in 1966, and has decreased by approximately

⁸"Odd" subject students are those taking subjects not as part of a certificate course.

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4 per cent since that time, as Table 12.4 shows. Changes in the number of apprentices receiving instruction depend upon the economic growth of the State, the expansion of present industries, the establishment of new industries, the willingness of employers to recruit by this method, and the development of alternative means of acquiring trade skills. The number of apprentices studying voluntarily at post-trade-certificate level has shown a marked increase since 1954 (Table 12.2), although it has levelled out since 1967, and reflects the demand of apprentices for higher qualifications.

Table 12.4
NUMBER OF APPRENTICES ENROLLED FOR INSTRUCTION
SOUTH AUSTRALIA 1964-1969 (a)

	Metropolitan Area	Country Technical Colleges (b)	Technical Correspondence School	Total
1964	5,553	619	656	6,828
1965	5,983	672	721	7,376
1966	6,551	723	735	8,009
1967	6,398	753	768	7,919
1968	6,093	802	786	7,681
1969	5,893	871	705	7,469

Source: Reports of the Minister of Education.

(a) As at December.

(b) Mount Gambier, Port Augusta, Port Pirie and Whyalla.

12.14 Day-release for study now applies in some selected trades. However, drastic changes in the methods of industrial training have taken place in England and other highly industrialised European countries. The apprenticeship system had its origins in the days of craft production when skills depended more on manual dexterity than on theoretical foundations, and recruits to skilled trades were minimally educated. It is likely that apprenticeship as it exists at present in South Australia will become a relatively less important avenue of industrial training than it has been in the past. Basic levels of education are rising, and the theoretical basis of many trade skills is more exacting.

12.15. In July 1968 the Commonwealth Government appointed a mission to investigate the methods of training skilled workers in European countries, particularly in relation to the engineering and electrical trades. The mission presented a comprehensive report (the Tregillis Report)⁴ which drew attention to the necessity for an urgent critical examination of all aspects of training in Australia. We endorse the need for such an examination.

12.16 We think it important that opportunities to further their general education should be available to apprentices and technicians

⁴ *The Training of Skilled Workers in Europe*, Government Printer, Tasmania, 1970.

in addition to their vocational training. Such general education would not necessarily be a follow-up of subjects studied in school, but would take as its starting point areas of interest to the young worker and be pursued in a manner appropriate to his nearly adult status in the community. His needs as a citizen and as a human being extend beyond the skills required by his employer, and we believe that education beyond the school level should take account of these modern needs also. For this reason we think that the introduction of courses of general interest should be given serious consideration when alterations to the indentured apprenticeship system and to the education of technicians are being considered.

Adult Education

12.17 In addition to the vocational courses offered by the South Australian Institute of Technology, the technical colleges and other institutions, adult education of a more general nature is available on an increasing scale in South Australia. The main agencies concerned in its provision are the Department of Adult Education of the University of Adelaide, the Workers' Educational Association and the Adult Education section of the Education Department.

12.18 DEPARTMENT OF ADULT EDUCATION OF THE UNIVERSITY OF ADELAIDE. The University of Adelaide has had an interest in adult education from the beginning of the century, when it started to offer extension classes. Although the extension movement had declined by 1914, owing to inadequate finance and the haphazard nature of its organisation, it was the forerunner of the Department of Adult Education of the University, which established provision for adult education on a firmer basis in 1956. The Department now provides courses designed specially for those who have a background in tertiary education, although its work is not confined entirely to this group. Some classes are conducted jointly with the Workers' Educational Association. Extension courses for graduate and specialist audiences, residential schools and conferences at Graham's Castle, Goolwa, and in Adelaide, lectures both in the country and in the metropolitan area, and the servicing of discussion groups are some of the activities of the Department. It is in a better position than is a government agency to organise public discussion of highly contentious issues. The work of the Department is financed by fees and a direct grant from university funds.

12.19 The extent of the work done is not easily shown by statistics, as classes vary from a single lecture to intensive courses lasting four weeks or more, and there is a tendency in some of the more demanding classes for enrolments to decline as the course proceeds. Table 12.5 gives details of enrolments for the period 1966-1969. The major

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provision of the Department of Adult Education is confined to the metropolitan area.

Table 12.5

NUMBER OF ENROLMENTS IN ADULT EDUCATION

UNIVERSITY OF ADELAIDE 1966-1969

	1966		1967		1968		1969	
	No. of Courses	Total Enrolment	No. of Courses	Total Enrolment	No. of Courses	Total Enrolment	No. of Courses	Total Enrolment
<i>Major Courses (a)</i>								
Joint University and W.E.A. (b)	47	2,135	42	1,972	38	1,560	41	1,491
Extension Courses	8	1,154	9	670	14	850	6	291
Schools in Adelaide	12	589	8	601	12	828	11	757
Schools at Goolwa (b)	11	398	10	423	9	370	6	256
Special Schools (b)	4	260	3	190	4	158	5	383
Country Seminars	21	888	10	314	1	38	—	—
Discussion Group Visits	—	—	8	92	6	78	6	74
 Total, including Joint Classes	 103	 5,424	 90	 4,262	 84	 3,882	 75	 3,252
 Total, excluding Joint Classes	 53	 3,374	 40	 1,648	 41	 2,059	 34	 1,761
<i>Minor Courses</i>								
One-Day Schools	10	630	10	361	—	—	1	32
Single Lectures	35(c)	4,225	17	622	20	1,336	51(c)	10,890
Others	10	598	5	183	12	509	13	802

Source: Annual Reports of the Adult Education Department, University of Adelaide.

(a) Major courses are defined as courses extending over at least 10 meetings or intensive courses of equivalent time, and conferences and schools extending over at least two days.

(b) Some or all classes held in conjunction with the Workers' Educational Association.

(c) Including lectures organised in association with the Commonwealth Literary Fund.

12.20 The establishment of a radio station by the University of Adelaide, made possible by a gift from an anonymous donor, is a projected expansion which could have considerable influence on the work of the Department of Adult Education which will control the station.

12.21 **WORKERS' EDUCATIONAL ASSOCIATION OF SOUTH AUSTRALIA.** The Workers' Educational Association, established in 1914, carries out its programme in close co-operation with the Department of Adult Education of the University of Adelaide. It obtains its finance from

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fees for the classes held, membership contributions and a State Government grant, which in 1969 was \$8,000, amounting to 10 per cent of the total expenditure for that year. The main objects of the Workers' Educational Association are:

(a) To promote adult education, especially the higher education of men and women, provided that the Association shall not inculcate the doctrine of any particular political party or religious organisation.

(b) To provide facilities for study by co-operating with the Department of Adult Education of the University of Adelaide and by any other appropriate means, either independently or in association with other bodies.*

12.22 The programmes provided by the Association independently of the University can be grouped under four main headings — class work, residential schools, postal courses and student clubs. The class-work programme, which is conducted at its Adult Education Centre, includes leisure-time courses, vocational courses and remedial general education. In 1966 there were 50 classes in 29 different courses enrolling 2,700 students; there was an increase to 170 classes in 115 different courses and 7,302 students in 1969. The Workers' Educational Association owns the residential college, Graham's Castle, at Goolwa, which has accommodation for 44 students. This college is made available to the Department of Adult Education of the University of Adelaide and to outside organisations. Fifty groups involv-

Table 12.6

NUMBER OF ENROLMENTS IN ADULT EDUCATION (a)

WORKERS' EDUCATIONAL ASSOCIATION OF SOUTH AUSTRALIA 1966-1969

	1966		1967		1968		1969	
	No. of Courses	Total Enrolment	No. of Courses	Total Enrolment	No. of Courses	Total Enrolment	No. of Courses	Total Enrolment
<i>Major Courses (b)</i>								
Class Work	22	1,876	34	2,730	42	2,852	56	3,838
Residential Schools	4	89	6	142	9	361	4	157
Postal Courses	—	1,562	—	836 (c)	—	610	—	610
	—	3,527	—	3,708	—	3,823	—	3,953
<i>Minor Courses</i>								
Class Work	7	824	12	887	30	1,767	59	3,464

Source: Annual Reports of the Workers' Educational Association.

(a) Excludes classes held jointly with the Adult Education Department of the University of Adelaide.

(b) See footnote (a) to Table 12.5.

(c) In 1967 a change was made in the definition of "student" so that figures for 1966 are not comparable with those of later years.

* Submission of the Workers' Educational Association.

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ing 1,899 persons used this facility in 1968. Postal courses, originally prepared in conjunction with trade unions, are now available to the general public. There are at present 17 different courses of six to twelve lessons' duration. Self-governing student clubs are provided with advice, organisational assistance and premises. In 1968 there were nine of these clubs enrolling 1,535 members, of whom 1,200 were members of the film club. Table 12.6 shows the number of people who undertook major and minor courses in the period 1966-1969. The Table does not include statistics of classes held jointly with the Department of Adult Education of the University of Adelaide, as these figures are included in Table 12.5. These statistics, like those given in Table 12.5, relate to course enrolments, and do not necessarily present a clear picture of the provision, as the courses provided vary both in length and in difficulty. Class-work enrolments in major courses have more than doubled since 1966.

12.23 ADULT EDUCATION CENTRES OF THE EDUCATION DEPARTMENT. In 1957 the agencies responsible for adult education outside the metropolitan area were consolidated into 15 Adult Education Centres. The number of centres has decreased with further consolidation, but the number of towns serviced, the variety of subjects offered and the number of individual subject enrolments have shown considerable growth, a fact underlining the increasing demand by the public for the services provided by these centres. The only two centres in the metropolitan area were established in 1968 and 1969 at Norwood and Flinders Street respectively. In addition, the technical high schools have played a significant part in providing adult courses, academic, vocational and leisure-time, in the metropolitan area, and they have shared in the considerable expansion which has occurred since 1960. At that time the then School of Mines and Industries ceased providing tuition in Public

Table 12.7

PROVISION FOR ADULT EDUCATION IN COUNTRY ADULT EDUCATION CENTRES AND COUNTRY TECHNICAL COLLEGES								
SOUTH AUSTRALIA 1954-1969								
	1954	1959	1964	1965	1966	1967	1968	1969
No. of Centres	17	15	14	13	13	13	13	13
No. of Towns Serviced	73	109	131	163	177	179	181	182
No. of Classes	573	855	1,121	1,285	1,307	1,365	1,504	1,979
No. of Apprentices Receiving Instruction	N.A.	N.A.	619	672	723	753	802	871
No. of Apprentices Studying at Post-Trade- Certificate Level	N.A.	N.A.	24	11	39	28	60	86
Total Individual Enrolments	N.A.	N.A.	13,610	16,385	16,482	16,053	16,829	18,321

Source: Annual Reports of the Minister of Education, and Division of Technical Education, Education Department.

Examinations Board subjects because adequate provision in technical high schools and country adult education centres had been available for a number of years. Statistics in Table 12.7 relate to the work done in country adult education centres and the technical colleges at Port Augusta, Whyalla, Port Pirie and Mount Gambier. These four technical colleges fulfil the dual function of an adult education centre and a technical college, part of their responsibility being the provision of adult education courses for the surrounding areas. Table 12.8 gives figures for the two metropolitan adult education centres, combined with the provision for adult education in the metropolitan technical high schools.

Table 12.8

PROVISION FOR ADULT EDUCATION IN METROPOLITAN TECHNICAL HIGH SCHOOLS AND ADULT EDUCATION CENTRES								
SOUTH AUSTRALIA 1954-1969								
	1954	1959	1964	1965	1966	1967	1968	1969
No. of Centres	4	14	20	23	22	22	20	21
No. of Classes	35	139	401	418	438	581	703	782
Total Individual Enrolments	N.A.	N.A.	7,967	10,238	11,422	13,700	18,082	22,013

Source: Annual Reports of the Minister of Education, and Division of Technical Education, Education Department.

12.24 The Technical Correspondence School provides a wide range of vocational subjects, a variety of secondary school subjects, some tertiary subjects and subjects designed for general adult education. Provision which is classified as secondary or tertiary is not discussed in this chapter, but for completeness the total provision at the School is given in Table 12.9. The School also provides apprenticeship teaching both in the country and in the metropolitan area for six groups of allied trades. In some country areas the students are supported by supervised classes for study at the local adult education centre. There has been a noticeable decrease in external university enrolments and also in enrolments in external teachers college courses which are being absorbed by the Department of External Studies of the teachers colleges (paragraph 16.65). The greatest increase has occurred in vocational subjects where enrolments have risen by 45 per cent since 1966. Most other categories have shown little variation over the period, the total number of individual enrolments being almost the same as in 1965.

12.25 The courses offered by the centres or colleges are directly related to the educational needs of the community, and can be broadly divided into the following categories: those designed to assist general education, those preparing students for Public Examinations Board examinations, those having vocational or technological importance

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and those which are recreational. New courses will be favourably considered if the following three conditions are met:

- (a) At least ten students enrol.
- (b) A competent instructor is available.
- (c) Suitable accommodation can be found.

In addition, the centres foster in a practical way many local clubs and associations, such as physical education groups and dramatic societies. Their facilities and services are available to assist in organising local performances by the Elizabethan Theatre Trust, by the Arts Council and by similar bodies.

Table 12.9

NUMBER OF ENROLMENTS WITH THE TECHNICAL CORRESPONDENCE SCHOOL

SOUTH AUSTRALIA 1964-1969

	1964	1965	1966	1967	1968	1969
<i>Subject Enrolments (a)</i>						
Adult Trade	266	221	123	153	122	174
Diploma/Certificate (b)	368	226	566	422	431	453
Commercial	284	317	458	592	527	464
Vocational (c)	326	435	863	1,120	1,193	1,255
Other General Adult	288	235	504	585	695	685
Public Examinations Board (d)	3,004	2,971	2,276	2,497	2,486	2,381
University	224	187	126	97	76	45
Teachers Classification (e)	366	548	641	449	356	289
Migrant	33	33	74	71	70	39
Total	5,159	5,173	5,631	5,986	5,956	5,785
<i>Individual Enrolments</i>						
Apprentice	656	721	735	768	786	705
Other	4,027	4,331	4,472	5,050	4,475	4,258
Total	4,683	5,052	5,207	5,818	5,261	4,963

Source: Division of Technical Education, Education Department.

- (a) Excludes apprentice enrolments.
- (b) South Australian Institute of Technology courses.
- (c) Includes most trade-certificate students.
- (d) Excludes commercial students.
- (e) Excludes Public Examinations Board students.

12.26 Community involvement in the work of the centres is high. Each centre has a council of a varying number of members selected from representative local groups, whose duty it is to authorise expenditure, to promote new classes and to work with the principal in formulating the policy of the centre. Furthermore, new courses arise from the demand of members of the community, and the element of compulsion is absent. Further developments are to be seen in the establishment of junior classes in art, craft, commerce and languages, where secondary children can gain tuition, provided that such studies are not available to them during school hours. Apprentices in coun-

try districts who study by correspondence are offered supervised study classes to help them with their assignments.

12.27 The two centres in Adelaide have their own buildings. These have been made available by the Primary and Secondary Divisions of the Education Department in areas where they are no longer needed as day schools. Adult education officers in technical high schools have a dual responsibility, to the school principal, through whom all their correspondence passes, and to the Technical Division of the Department, of which they are a part. Two new buildings are being planned, one at Renmark and one at Murray Bridge, and the Education Department proposes to erect new buildings at Port Lincoln and Kadina by 1974. At that stage most country centres will be housed in their own buildings. The two metropolitan centres, Flinders Street and Norwood, have facilities such that day-time attendance is possible, but this is not available freely in metropolitan technical high schools, as the rooms are fully used by the secondary students. Discussions are being held on a proposal to establish a number of metropolitan adult education centres, removing them administratively from the technical high schools. The principal of the centre would be responsible for the organisation, staffing and day-to-day operation of the classes, which would still be held in the nearby technical high schools. This would prevent unnecessary duplication of the courses and allow for greater support for the teaching staff. A full-time principal would have more opportunity of discovering, and of providing for, the needs of his district than at present. In England, a community college functioning in this manner has been established in Cambridgeshire.

12.28 Liaison arrangements between the three main agencies involved in adult education are provided by the Consultative Committee of Adult Education, which was established by the Minister of Education in 1966. The Consultative Committee comprises two representatives each of the University of Adelaide, the Workers' Educational Association and the Education Department, and it meets at least twice each year. The purpose of the Committee is to exchange information between the institutions on proposed courses in order to prevent duplication, and to examine matters of mutual interest. The Minister of Education is provided with a copy of the minutes. It serves a useful purpose in providing a link between the agencies concerned.

Summary of Education Department Involvement

12.29 The Education Department is by far the most important agency operating in the field of further education. Its total provision for further education is brought together in Table 12.10. The total scale of this provision, involving more than 64,000 students in 1969, indicates the importance both of departmental provision and of the area itself. The annual rate of growth of student numbers between 1964 and 1969 was 8.7 per cent. Migrant classes, not previously men-

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tioned in our survey of the field, have attracted a steady enrolment of about 5,000 a year.

Table 12.10

NUMBER OF ENROLMENTS IN FURTHER-EDUCATION COURSES PROVIDED BY THE EDUCATION DEPARTMENT

SOUTH AUSTRALIA 1964-1969						
	1964	1965	1966	1967	1968	1969
Metropolitan Technical Colleges (Table 12.2)	8,190	8,672	9,555	9,734	9,625	13,113
Country Adult Education Centres and Technical Colleges (Table 12.7)	13,610	16,385	16,482	16,053	16,829	18,321
Metropolitan Technical High and Adult Education Centres (Table 12.8)	7,967	10,238	11,422	13,700	18,082	22,013
Technical Correspondence School (Table 12.9)	4,683	5,052	5,207	5,818	5,261	4,963
Migrant Classes	5,951	5,621	5,492	5,157	6,009	5,415
School of Art Non-Diploma	475	456	699	687	632	1,050
Commonwealth Training Scheme	19	22	15	11	2	3
Total	40,895	46,446	48,872	51,160	56,440	64,878

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12.30 Any person over the compulsory school-leaving age who is not enrolled at a secondary school or at a tertiary institution is a potential student in the field of further education. Any growth in the numbers of such people implies a corresponding growth in the numbers who might seek further education, even if participation in further education remains constant. Such figures therefore can be used as a guide to the number of places which may be required in further education. We have estimated that between 1970 and 1981 there will be an increase of approximately 2 per cent per annum in this group, and that the group aged 15 to 30 who are not receiving formal education elsewhere and from whom participants in further education are most likely to be drawn will increase at a similar rate.

12.31 As more and more young people persist to the senior grades of secondary schooling, the demand for training for post-secondary non-tertiary qualifications is likely to rise. Some indication of this trend may be gauged from the movement in the number of those who leave school each year but who do not enter tertiary institutions. In Table 12.11 children who leave secondary school before grade XI have been omitted, as these are less likely to seek entry to trade or technician courses. The number who leave from grade XI is measured (approximately) by the difference in the numbers in grade XI and those in grade XII of the succeeding year. The number who leave from grade XII and do not enter tertiary institutions is estimated at 46 per cent of the number in that grade (see paragraph 11.28). These figures

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show an increase of 56 per cent over the period 1970-1980, the average annual rate of growth being about 4.5 per cent. It is of interest to note that this rate of growth is significantly less than the rate of growth of the projected numbers in grade XII from which entrants to the tertiary sector come. Numbers in grade XII are projected to grow at over 8 per cent per annum (see paragraph 11.32). Unless an increasing proportion of leavers from grade XII enter trade or technician courses, numbers in these courses appear likely to expand less rapidly than those in tertiary courses.

Table 12.11

PROJECTED NUMBER OF PERSONS LEAVING SCHOOL FROM GRADES XI AND XII
EACH YEAR AND NOT ENTERING A TERTIARY INSTITUTION

SOUTH AUSTRALIA 1970-1980

	Persons '000	Increase per cent
1970	9.7	—
1971	10.2	5.2
1972	11.0	7.8
1973	11.6	5.5
1974	12.3	6.0
1975	13.0	5.7
1976	13.7	5.4
1977	14.3	5.2
1978	14.8	3.5
1979	15.0	1.3
1980	15.1	0.7

12.32 As shown in Table 12.10, there is at present an increasing desire on the part of adults to pursue further education. In 1966 there were nearly 49,000 individual enrolments in Education Department facilities for further education, which was 6.8 per cent of the population aged 15 and over who were not enrolled in secondary or tertiary institutions. By 1969 the number had increased to 64,000, and the participation to 8.4 per cent. A continuation of this trend would require expansion to take place at a rate greater than that implied by the increase in the size of the relevant population.

12.33 Several factors have led to an increase in the demand for further education, factors which are assuming, and will continue to assume, increasing importance. Technological developments have decreased the number and variety of jobs available to unskilled people, and have increased the need for children leaving secondary school to further their education in order to gain the special knowledge and experience necessary for their work. Employers are seeking a higher standard of general education of those whom they may wish to engage, and are prepared to release a number of their employees for further study to gain more adequate qualifications. These forces at work in society are increasing the pressure on facilities for

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further education, and there are other factors which have had, and will continue to have, a significant effect on the manner in which this increased demand will need to be met.

12.34 The first of these is the increased retention in secondary schools, which will both raise the age of those entering further education straight from school and increase the confidence of students in their ability to undertake further education successfully. Types of courses and the demand for them will be affected accordingly.

12.35 Increased leisure brought about by technological change is also likely to raise the demand for further education, and perhaps to extend it into new fields. A better-educated population may desire not only to take classes in what are traditionally regarded as leisure-time pursuits but to raise the level of its general education through academic study, not necessarily in tertiary institutions.

12.36 The increasing tempo of technological change is likely to make initial training for employment obsolete after a few years and to eliminate whole categories of occupations. This means that there will be an increasing demand both for retraining and for refresher courses, much of which will take place at the level of further education. The increasing rate at which older women are returning to work will also increase the demand for both initial and refresher training, some of it in the post-secondary non-tertiary field.

12.37 The expansion proposed by the Technical Education Division of the Education Department to 1981 illustrates the extent to which it is expected that growth will take place in the largest agency providing further education. Table 12.12 projects a twofold increase in the number of places to be provided between 1969 and 1981. The very rapid increase in the number of places for technician-type courses is due to the transfer of these courses from the South Australian Institute of Technology to the Education Department (see paragraph 12.11). There is also a considerable increase occurring in the number of technologists trained at graduate level. This in turn will increase the demand for people with middle-level training to support the technologists. The figures given for individual enrolments in technician courses in the technical colleges must be considered in conjunction with enrolments for similar courses in the South Australian Institute of Technology, which are set out in Table 12.3. The estimates of the Education Department shown in Table 12.12 are based on figures published by the South Australian State Planning Office, giving forecasts of growth in local government areas for the years 1965-1991, together with information from the Commonwealth Bureau of Census and Statistics and the Industrial Development Branch of the South Australian Government. They include places for students now receiving tuition in certificate courses in the South Australian

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Institute of Technology. The projected increase from 72,500 places in 1970 to 144,600 in 1981, an increase of 6.5 per cent per annum, will depend to some extent on an increase in the number of apprentices, and will certainly require a major expansion programme for technical colleges.

Table 12.12

PROJECTED NUMBER OF PLACES IN FURTHER EDUCATION TO BE PROVIDED BY THE
EDUCATION DEPARTMENT
SOUTH AUSTRALIA 1969-1981

	Trade Courses (a)	Technician Courses	Adult Education Courses	Total
	'000	'000	'000	'000
1969 (b)	15.3	0.1	49.5	64.9
1970	16.5	2.0	54.0	72.5
1971	19.4	4.0	59.0	82.4
1972	21.1	5.5	65.0	91.6
1973	22.8	7.1	71.0	100.9
1974	24.5	8.6	77.5	110.6
1975	26.2	10.1	84.0	120.3
1976	26.9	10.6	86.5	124.0
1977	27.6	11.2	89.5	128.3
1978	28.3	11.7	92.5	132.5
1979	29.0	12.2	95.0	136.2
1980	29.7	12.7	98.0	140.4
1981	30.4	13.2	101.0	144.6

Source: Division of Technical Education, Education Department.

(a) Includes apprenticeship courses.

(b) Actual.

12.38 It is likely that the demands made on the University of Adelaide Department of Adult Education and on the Workers' Educational Association will increase, but the major expansion in further education will take place in the Division of Technical Education of the Education Department. The Committee has not made its own projections of the future requirements for further education, but, in the light of the known influences at work in this area, we think that the Department's proposed expansion as set out in Table 12.12 is reasonable and we support planning on this basis. The Department estimates that eight new technical colleges will need to be constructed and that major extensions will be required to six existing colleges by 1981, a programme estimated to cost approximately \$24 million, at present costs.⁶ In our view, further education is an area in which substantial development should take place over the next decade.

TEACHER TRAINING

12.39 Further education provides courses and subjects at such varying levels and in such variety that no one method of recruit-

⁶ A. F. Sando, *A Study of the Future Needs of Technical Education in the Adelaide Metropolitan Area*, Education Department, 1969.

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ment and training is suitable for all its teachers. At technical colleges most will be full-time teachers. Those teaching trade courses will generally be recruited from industry; those teaching technician courses will in general have had a tertiary education. In adult education centres most teachers are part-time, many of them being teachers of secondary students during the day. There are thus considerable differences in background and experience among teachers engaged in the different areas of further education. All will be required to adapt their teaching methods to students who are economically independent, who have other calls on their time and who have attitudes and needs different from those of young people still at school. Attendance at adult classes is in most cases voluntary, and it may be closely related to the teachers' skill.

12.40 **TRADE TEACHERS.** Most trade teachers in South Australia have good trade qualifications and considerable experience in their industrial field, while some have had previous experience in teaching evening classes part time. The professional training of these teachers some years ago was given on an informal basis by the headmaster, and many teachers gained extra academic qualifications in their own time. At present all new teachers are given a one-week pre-service orientation and training course which is normally followed by a part-time course throughout the first year. The headmaster has authority to release these teachers for up to four hours each week to attend teachers college courses, if the staffing situation permits, but not every teacher obtains release in his first year of teaching. New requirements for the Diploma in Teaching (Technical) were issued in December 1970. A lack of suitable trade subjects had prevented trade teachers from undertaking diploma studies, but now applicants may submit for approval study programmes in their own or in closely allied fields. The less prescriptive nature of the new requirements increases the possibility that trade teachers will seek to obtain a teaching diploma.

12.41 Substantial differences exist in different countries in the requirements demanded from trade teachers. In the United Kingdom the Department of Employment and Productivity has established a training school in England and one in Scotland and smaller units attached to five other Government Training Centres. Introductory courses at these schools last two weeks. The Industry Training Boards also train instructors in courses lasting between one and three weeks, while a number of technical colleges run short full-time or part-time courses. In Norway a trade teacher requires at least two years' experience as a skilled tradesman in industry, followed by a full-time teacher-training course for six months, while in Denmark teachers undergo a 14-week residential course followed by four weeks of supervised teaching practice. The teachers have a one-week refresher course each year. Recommendations made jointly by

U.N.E.S.C.O. and I.L.O. in 1962 stated that the teacher of trade courses should have:

- (a) A sound practical and theoretical knowledge of the trade.
- (b) A reasonable period of practical experience in industry.
- (c) An initial training course, including teaching practice, to develop teaching ability and improve technical qualifications and general education.
- (d) Regular refresher courses and periodic releases.

12.42 The students taught by such teachers are, for the most part, apprentices who are legally obliged to attend classes and who vary both in their backgrounds and in the attitudes that they have developed to schooling of whatever type. Heavy demands are made on the teaching skills of their instructors. We think that the training of trade teachers is for these reasons particularly important, and we commend the steps the Education Department is now taking in an area which has received little attention to its special needs in the past. We think it unreasonable to expect that a tradesman, however skilled, can move from the shop floor into teaching without a preparation greater than can be given in a one-week course. We are aware that the full-time training of such teachers is expensive, as they will tend to be men with family responsibilities. However, if they were recruited late in the year before that in which they will be required to teach, two months' full-time induction would be possible, and this could be supplemented by later part-time study where necessary. The courses provided would have to be specially structured to meet their needs and they would have to be given by people with some industrial experience. We consider that there is an urgent need for the Education Department, the South Australian Institute of Teachers and the teachers colleges to confer on the problems associated with training trade teachers. Whether the teacher-training course should be full-time or part-time or a combination of the two, whether the course should be taken before the teacher commences teaching duties or taken *pari passu* with his teaching, and what should be required in the course of teacher training are all problems requiring close investigation.

12.43 **TECHNICIAN-COURSE LECTURERS.** Five technician courses — automotive, electrical, electronic, mechanical and commerce — are available at present in technical colleges and, as the number of such courses increases (see paragraph 12.10), the number of lecturers required will grow rapidly. Some lecturers hold a university degree or a diploma from the South Australian Institute of Technology, qualifications which include some industrial experience among their requirements. While we think there would be advantages in some induction to teaching for these lecturers, their position is essentially the same as that of university and other tertiary lecturers. To the

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extent to which a case exists for training tertiary teachers in the skills of teaching and assessment, it applies equally to the group under consideration. The people concerned are themselves more highly educated than are trade teachers, and their students are likewise better prepared and probably more highly motivated.

12.44 **TEACHERS IN ADULT EDUCATION.** Where teachers in adult education have teacher training and experience, seminars in the special problems and methods of work with adults could be helpful to those teaching part time in the area, while a more exacting single-subject course on adult methods and organisation should be available at a teachers college to those working full time. Those part-time teachers without formal training are, in our view, not likely to be interested in prolonged study of teaching methods, and we think that for them a short induction course, which might have to be given in night classes, would be appropriate. It should be pointed out that an inadequate teacher of adult classes is unlikely to attract or hold students.

12.45 Accordingly, we **RECOMMEND** that:

(a) Trade teachers should undertake full-time study, which we suggest should be of two months' duration, before commencing duties, followed by more extensive part-time study where necessary, and annual in-service refresher courses.

(b) The Department of Further Education, whose establishment we recommend in paragraph 12.51, should undertake a complete review of training required for trade teachers and for teachers of adult classes; and special courses, organised by people experienced in these fields, should be provided at a teachers college.

ADMINISTRATION OF FURTHER EDUCATION

12.46 Technical and adult education is at present administered in the Division of Technical Education by the Director of Technical Education, who is directly responsible to the Director-General of Education through the Deputy Director-General. He is supported by a superintendent, a number of assistant superintendents operating in specialist fields, and an inspectorial staff. The Audio-Visual Education Centre, which we have recommended in paragraph 9.65 should be amalgamated with the Libraries Branch and placed under a Director of Special Services, is a part of the Division of Technical Education.

12.47 In New South Wales the administration of technical education is conducted by a government department independent of the department which administers primary and secondary education. The permanent head of the Department of Technical Education is responsible directly to the Minister of Education, and receives a

separate budgetary provision. In all other States the technical education division is a part of the Education Department.

12.48 The arguments which may be advanced for a separation of further education from the Education Department are as follows:

- (a) Further education has in the past constituted a kind of wasteland between the schools and tertiary education. Both its present importance and the likely magnitude of its expansion suggest the need for a department solely concerned with it. Such a department could establish a separate identity for the area, have its needs independently considered by direct access to the Minister and argue its own claim to funds without the need to accommodate directly the competing needs of the schools.
- (b) Perspectives beyond those at present conceived of in South Australia are likely to be opened up in the future. As in some other countries, the gates shut to some through an initially low level of formal education may be opened by the development of open universities, educational television channels, the provision of challenging courses of general education at levels somewhere between schools and universities, and continuous escalation of courses for adults. Such developments are likely to result in a closer drawing together, at least at planning level, of tertiary and further education which would be more easily accomplished if further education were the responsibility of a separate department.
- (c) The main concern of the Education Department is with full-time students, a high proportion of whom are under compulsion to attend school. Further-education students are adults who, for the most part, are wage-earners studying part time. Those training under apprenticeship arrangements are obliged to attend classes; other students do so voluntarily. Both the voluntary basis of attendance and the age and economic independence of many students require different approaches to teaching and a different structure of authority from those regarded as appropriate for school-going pupils.
- (d) The increasing tendency for housewives to return to work may require the organisation of part-time general and vocational education available during the day and open to people whose educational background makes them ineligible for tertiary study.
- (e) Many participants in further education, especially among those undertaking trade and technical training, are people whose school experience has been neither outstandingly successful nor, in many cases, particularly happy. A separate department for further education may emphasise a break in continuity and induce a change in approach that could help the student to make a new start, leaving old attitudes behind him.
- (f) Education at school level is basically general education, ideally related to the all-round development of the pupil rather than to his

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intended employment. Its diffuse objectives are rightly framed without reference to particular sectional interests within the community. For the important sector of further education concerned with vocational preparation the situation is different. The requirements of employers, while they should not be the only consideration, will rightly play an important part in formulating course patterns at this level. For non-vocational courses in further education student demand, supplemented by imaginative leadership, is the guide, a pattern which again differs from course planning at school level.

(g) Teachers for adult work require a preparation which is radically different from that appropriate for teachers of school-going children. The difference may be more readily appreciated and catered for if these teachers are employed by an authority separate from that responsible for running the schools. If they are to be registered, as has been recommended for school-teachers, the basis of their registration would need to be different, and the structure of the present diplomas available through teachers colleges may be inappropriate.

12.49 There are arguments which may be advanced for the present arrangement. The most important of these relate, not to technical or vocational preparation, but to the classes conducted in technical high schools by the Adult Education section of the Division of Technical Education, and to costs. They may be listed as follows:

(a) The setting-up of a separate department of further education would involve additional administrative costs which only clear advantages could justify. In addition to the employment of extra staff at senior level, there would be the possibility of duplication of administrative effort and facilities in uneconomical ways. Further education is at present able to use the accounting, training, recruitment and other facilities of the Education Department. The evening use of the buildings and facilities of technical high schools justifies the provision of facilities which would otherwise be idle during out-of-school hours. It is desirable to promote an even greater use by the community than at present of facilities provided for school-going children. Their duplication for night classes would be unjustifiable.

(b) The teachers of adult classes are largely drawn from staff employed in the schools during the day. It is preferable that they be employed and paid in both capacities by the one authority, and it is sometimes possible to arrange that teachers employed in the evening do a less than normal amount of teaching during the day, so giving consideration to their total workload.

(c) Some subjects offered through adult classes, e.g., those leading to public examinations, are identical with those taught in schools, and some are in fact taken in evening classes by day-students attending schools which do not offer the subject. It therefore seems appropriate that day classes and evening classes should be under a single authority.

(d) There are dangers that a separate department of further educa-

tion, divorced from education at other levels, would be isolated from the mainstream of educational thinking and planning.

12.50 It will be noted that most of the arguments against separation apply less strongly to the important sector of further education concerned with trade and technician education in the technical colleges. On balance, we think that the arguments in favour of separation are stronger, especially if some organisational device could overcome the problems associated with shared facilities, and therefore we are proposing the creation of a Department of Further Education. The scale of resources required for the conducting of classes in adult education is much less than that required for trade and technical education, and the sharing of school accommodation for adult education with the Education Department would have advantages for both departments. It would permit the provision of a better standard of equipment in the schools which are being shared, as more students would use it. A library service shared by both departments would present no difficulty. Much of the work of the present research branch is irrelevant to the needs of further education, and the Department of Further Education would need to establish its own research section, thus permitting the present research branch to concentrate on the needs of primary and secondary education. The scale of building requirements in further education is small compared with that of the Education Department. Until the Department of Further Education becomes large enough to warrant a separate building division, arrangements should be made to share the services of the architects branch which, in paragraph 17.78, we recommend should be established, but the Director of Further Education should have direct access to the Public Buildings Department. We have recommended in paragraph 11.74 that further education should be associated with tertiary education through the membership of the Director of Further Education on the Tertiary Education Committee.

12.51 Accordingly, we RECOMMEND that:

(a) The Division of Technical Education at present within the Education Department should be established as a separate Department of Further Education under a Director of Further Education, responsible to the Minister of Education.

(b) During the transition period suitable arrangements should be made for the sharing between the Education Department and the Department of Further Education of such facilities as are considered desirable.

CHAPTER 13

Special Education

NATURE OF SPECIAL EDUCATION

13.1 Special education in its widest sense includes programmes for all children who require teaching that differs in some marked degree from that received by the majority. It demands a supply of teachers who have elected to work in this field and who have undergone an appropriate course of training, and it often requires some form of special provision, whether it be in equipment, building or transport. It is important to distinguish between this kind of education and that given by the teacher in the normal discharge of his responsibilities to those children in his class whose progress is atypical. In every school there are some pupils who need and who receive more help than the majority but it would not be considered that they were receiving special education in the sense in which we are using the term. In this chapter the discussion will in the main be limited to those children whose admission to special educational facilities is recommended by the Psychology Branch of the Education Department and whose education is currently supervised by that Branch. Special educational facilities may exist in institutions separate from the normal school or in opportunity classes within them.

13.2 Many children have some form of definable handicap which may affect their learning and behaviour. It may be physical, mental, emotional or environmental or any combination of these. It may be a general deficiency or a highly specific learning disability affecting a single subject, for example, spelling. It may be a severe or a mild condition or may range between these extremes. Any attempt, therefore, to distinguish the specific limits of special education gives rise to difficulties. In those areas where mild conditions obtain there is no general agreement about what does or does not constitute a handicap requiring special attention, and considerable differences of opinion arise about the position of the line of demarcation between those requiring normal and those requiring special education. The position of this line varies in different countries and at different times within the same country. As the available facilities vary so does the dividing line, and, as the expectation of higher levels of education for every child becomes greater, there is a tendency to include in special education more children whose progress at school does not measure up to expectations. It is necessary, therefore, to treat statistics from different countries, and even those from within the same country at different points of time, with considerable caution.

13.3 In a broad sense one may distinguish between children having physical and mental handicaps on the one hand and those whose

handicaps are the result of social factors on the other. The first group will include those children who are mentally retarded, those with varying degrees of deafness and blindness, those suffering from cerebral palsy, those who are severely crippled and those with any combination of these handicaps. The second group will include those whose previous educational programme has varied considerably from that provided in South Australia, such as immigrant children, and children whose home background, whether because of its material poverty or because of its cultural pattern, has not prepared the child to cope successfully with formal schooling. We shall be concerned with the second group in the next chapter. In general, their particular problem will be the responsibility of normal schools although some may spend part of the day in remedial classes within them. Children with severe emotional disturbance are marginal to each of our broad categories. The origin of their disability is likely to be found in their social experience, but, as with physically and mentally handicapped children, they will be included in the group requiring special provision according to the severity of their handicap, and according to whether their education within normal classes is possible.

Incidence of Definable Handicaps

13.4 Statistics purporting to show the incidence of various handicaps differ from country to country and from time to time within a country for the reasons already given, and also because some investigators base their figures on medical criteria while others relate them more closely to the classroom situation. Hence, in reading the Tables which follow, it should be kept in mind that the figures indicate rough magnitudes only, and so are not always consistent with one another. This inconsistency is apparent in the first two Tables. Table 13.1 shows the estimated proportion of school-age children

Table 13.1

ESTIMATED INCIDENCE OF HANDICAPS OF CHILDREN 5-17 YEARS OF AGE REQUIRING SPECIAL EDUCATION

UNITED STATES OF AMERICA 1957-58

	Estimated Incidence per cent
Blind and Partially Seeing	0.1
Deaf and Hard of Hearing	0.6
Crippled	1.0
Speech Impaired	3.5
Mentally Retarded	2.3
Special Health Problems	1.0
Emotionally Disturbed or Socially Maladjusted	2.0
	10.5

Source: R. P. Mackie, H. M. Williams and P. P. Hunter. U.S. Office of Education, *Bulletin*, No. EE-350-48-58, Washington, D.C., Government Printing Office, 1963.

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and youth in need of special education by nature of handicap in the United States of America 1957-58. The authors state that the figures are as conservative as possible and that they have been drawn from a variety of reliable sources.

13.5 The estimate in Table 13.2 was prepared in connection with educational planning in the Australian Capital Territory. It is based on material published by the World Health Organisation, modified by educational psychologists in Australia working in this field.

Table 13.2
ESTIMATED INCIDENCE OF PHYSICAL AND MENTAL HANDICAPS

	Estimated Incidence per cent
<i>Physical Handicaps</i>	
Blind or Severe Sight Problems	0.3
Other Difficult Sight Problems	1.0
Profoundly or Moderately Deaf	1.6
Severe Damage to Brain or Limbs	0.1
<i>Mental Handicaps</i>	
Between 55 and 80 I.Q.	6.0
Below 55 I.Q.	1.0
	10.0

Source: R. A. Foskett, "Canberra Quarter of a Million — The Impact on Education", *Education News*, Volume 12, No. 3, p. 6.

13.6 These two Tables, although each gives a total incidence of handicap of about 10 per cent, vary considerably in their estimates of the incidence of specific factors. The incidence of profound or moderate deafness, for example, is shown as 0.6 per cent in Table 13.1 and as 1.6 per cent in Table 13.2. These estimates cannot be used as a basis on which to determine the required provision in any specific handicap, but only to focus attention on the likely size of the problem confronting any educational system. No factual statistics of the incidence of handicaps in Australia exist, so that any estimate must rest on overseas figures. We believe that research in this area is a matter of urgency. An assumption that 10 per cent of school children in South Australia do suffer some physical or mental handicap implies that in 1969, when there were 262,700 children attending government and non-government schools, 26,000 fell into this category. It would not follow that all these children would need a special programme specifically designed for them or that they should all be in special schools or special classes. Those with minimal handicaps can function in an ordinary school, and many of the others would make satisfactory progress provided they received some special consideration while being retained in a normal class. For example, the moderately deaf can be provided with hearing aids, and those whose sight is not greatly impaired can be supplied with glasses, and each pupil can be placed in such a position in the classroom as will satisfy his disability.

Technological developments in hearing aids, glasses, supports for damaged limbs, etc., have made it more possible for many children with physical disabilities to take their place without strain in the normal classroom. No country attempts to provide special schools or classes for 10 per cent of its pupils. Such a procedure would unnecessarily isolate large numbers of children. The Netherlands is often quoted as having the widest coverage for handicapped children. The services provided are stated to encompass 5 per cent of children between the ages of seven and fifteen years. Provision in England varies between local authorities and ranges from 1 to 2 per cent of this age group. In the United States of America special programmes for these children vary widely among the different school systems, with an overall provision of approximately 2.5 per cent. In 1969 in South Australia 1.2 per cent of the total school population was in occupation centres, opportunity classes, speech and hearing classes, spastic centres, or special classes in non-government schools.

PRESENT PROVISION

13.7 The placement of a child in a special education facility of the South Australian Education Department is, in the first instance, approved by the psychologists of the Department (see paragraph 13.36), and the children are kept in the continuing care of the Psychology Branch while they remain in that facility. The criteria used by the psychologists in making a decision on placement are threefold — the attainment of the child in relation to children of his own age, the cognitive ability of the child and the general emotional and social adjustment made by the child to his environment. In December 1969 there were 2,659 such children (see Table 13.3), an increase of 197 children or 8 per cent over the corresponding figure for December 1968. There is an additional number of children in remove classes in technical high schools and in remedial classes who may be classed as slow learners and who follow a modified curriculum. These children, although receiving advice and help from the Psychology Branch, are not subject to placement by the Branch, and are not discussed in this chapter. It is likely, however, that most of the children in remedial classes have social adjustment problems with or without some mental retardation, and we think that the Psychology Branch should play a more active part in helping the teacher in planning the educational programme of these children. The lack of an adequate establishment in the Branch in the past has been the reason why such a procedure has not been fully adopted, and an expansion in the provision should lead to the inclusion of this responsibility in the normal duties of the Branch.

13.8 A number of non-government organisations provide facilities and organised courses of instruction for various groups of handicapped children, and the main organisations supplying this service have places for over 250 children of school-going age. The South

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Australian Kindergarten Union has been operating a special enrolment scheme for a number of years, a scheme which has much to commend it. A child who is suspected of being mentally retarded or of having a speech defect or other handicap is referred to the Union by a clinic, a doctor or a social agency. A decision to admit a child is made by a special committee of the Union consisting of a pre-school adviser, a psychologist, a social worker and a speech therapist. Accepted

Table 13.3

TOTAL NUMBER OF CHILDREN ATTENDING SPECIAL EDUCATION FACILITIES SUPERVISED BY THE EDUCATION DEPARTMENT (a)

SOUTH AUSTRALIA, DECEMBER 1969

	No. of Classes	Enrolment	Handicap
<i>Under Psychology Branch</i>			
Opportunity Classes	47	796	Slow learning, with or without additional emotional, physical or central nervous system impairment.
Special Senior Classes	30	413	As for opportunity classes, but for children 13½ years of age and over.
Special Small Classes	3	17	Minimal cerebral dysfunction. Early primary level.
Occupation Centres, including Minda Home	97	1,046	Mentally retarded; severe cerebral dysfunction.
Woodville Spastic Centre	5	37	Physical, with associated functional conditions.
Somerton Home for Crippled Children	5	60	Physical, with associated functional conditions.
Social Welfare Department Schools	—	229	
Adelaide Children's Hospital	—	61	
Total	—	2,659	
<i>Under Other Education Department Branches</i>			
Deaf and Hard of Hearing Centres	6	125	Severe hearing loss.
Townsend House School for Deaf	10	63	Very severe hearing loss.
Deaf/Blind Centre and Townsend House School for Blind	13	48	Major handicaps of sight and hearing.
Total	—	236	
All Enrolments	—	2,895	

Source: Report of the Chief Psychologist, Education Department, 1969.

(a) Excludes those attending remedial and remove classes.

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children are enrolled in kindergartens, one or two being the maximum for any centre. The Crippled Children's Association of South Australia maintains Ashford House School and Activity Centre for children with cerebral palsy. Ten of these children, mainly from the country, live at Marshfield House, an annex to the Somerton Home for Crippled Children. The Oral School provides help for children of pre-school or infant-school age who suffer from severe hearing losses. The majority of these children later transfer to the speech and hearing centres of the Education Department. The Mentally Retarded Children's Society of South Australia has established sheltered workshops for adolescents and hostels for adults who are no longer able to live in their own homes but who can function either in the community or in sheltered workshops. Some pre-school children attend Suneden School for the mentally retarded, and St. Patrick's School for Handicapped Children is maintained by the Catholic Church. The enrolment at these institutions in 1970 is set out in Table 13.4.

Table 13.4

ENROLMENT OF HANDICAPPED CHILDREN IN NON-GOVERNMENT INSTITUTIONS

SOUTH AUSTRALIA, JULY 1970

	School Age	Pre-School Age
S.A. Kindergarten Union	—	150
Ashford House School and Activity Centre	89	—
S.A. Oral School	48	32
Mentally Retarded Children's Society Special Training Centres	50	—
Suneden School	32	3
St. Patrick's School for Handicapped Children	33	—
Total	252	185

13.9 The availability of places in special schools and classes in this State has not kept pace with the growing demand for these services. In December 1968, there were 658 children who had been approved for admission to the Education Department's special education facilities but for whom places could not be found. This number had grown to 958 one year later, an increase of 45 per cent. The position in 1969 is shown in Table 13.5. The Table takes account of

Table 13.5

NUMBER OF CHILDREN AWAITING PLACEMENT IN SPECIAL EDUCATION FACILITIES (a)

SOUTH AUSTRALIA, DECEMBER 1969

Opportunity Class	591
Senior Special Class	283
Special Small Class	11
Occupation Centre	73
Total	958

Source: Education Department.

(a) Excludes those seeking admission to remove and remedial classes.

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those who have been actually seen by the guidance officers of the Psychology Branch and not of the number who are at present waiting to be seen. However, it includes a number of children living in areas remote from special schools or classes who would be unable to enrol although approved for enrolment.

FUTURE NEEDS

13.10 It is difficult to estimate for an extended period the need for special education facilities outside the normal school setting. It is probable that placement will increase as the establishment of the Psychology Branch is increased, permitting more children to be seen by the Branch. As shown in paragraph 13.11, the present known demand for places in special schools and classes is 1.56 per cent of the school population. We accept this figure as a minimum estimate of the desirable provision at this point of time. Changes in schools and in the school system may well allow a higher proportion of handicapped children to be accommodated in ordinary schools in the future; for example, the abolition of the Progress Certificate was followed by a considerable decrease in the number of requests to the Branch from primary schools for special placement of children, as teachers considered that the children could satisfactorily remain with their classes when the pressure of a large-scale examination was removed. It is possible that a similar trend may be evident in secondary schools with the abolition of the Intermediate Certificate. It may be found that, given smaller classes, more ancillary staff and teachers with the required training, a provision less than this estimate of 1.56 per cent would be sufficient. On the other hand, adequate staffing in the Psychology Branch may result in the detection of more pupils needing special assistance. We believe that continuous experimentation on the best methods of placement of handicapped children should be conducted.

13.11 The present actual provision of places in special education together with the present known demand gives a basis from which to calculate the expected needs during the next 12 years. According to Tables 13.3 and 13.4 there were 2,895 places for children of school-going age in special classes or special schools operated by the Education Department in 1969, and 252 places in privately operated schools. In addition there were 958 children awaiting placement in 1969 (see Table 13.5). In total, these represent 1.56 per cent of the school population. Our projections indicate that pupil numbers will increase by 26 per cent between 1969 and 1981. To provide for 1.56 per cent of the school population would require 5,160 places by 1981. If it is assumed that the number in non-government schools will remain practically unchanged over the period (see paragraph 4.23), the increase will need to take place mainly in government schools, where 2,000 additional places will be required. The average expansion for the Education Department to reach this figure will be 170 places

each year, and the expansion should be greater in the early part of the 1970's in order that the unfulfilled demand may be reduced. These figures do not take into account any increased demand which may arise following an expansion in psychological services and greater support in the conveyance of students to the centres (see paragraph 13.33).

13.12 The pupil/teacher ratio currently accepted for classes of handicapped children varies considerably according to the type of handicap and the method of instruction used. The ratio for severely deaf children will obviously be different from that required in the case of children who are mildly mentally retarded, but it will be much lower for all classes of handicapped than for normal children. The provision in 1969 led to an overall pupil/teacher ratio of 14:1, and the Education Department's planning envisages a reduction of this ratio to 11:1 by 1974. If the expansion proposed in paragraph 13.11 takes place, the number of teachers who would require training for special education in the period to 1981 would be over 880. This figure is included in our estimates of teacher requirements set out in Table 6.46. The calculation is based on the assumptions set out in paragraphs 6.99-6.103 and includes teachers necessary to reduce pupil/teacher ratios, to allow for absences and release scholarships and to replace losses on the same basis as for normal schools. Since a number of these teachers move back to normal schools each year to obtain promotion or for other reasons, the number of teachers requiring to be trained would need to be higher than this figure.

Table 13.6

PUPIL/TEACHER RATIOS CURRENTLY ACCEPTED AS SUITABLE FOR VARIOUS TYPES OF REMEDIAL FACILITIES OR HANDICAPS

Opportunity and Special Senior Classes	15:1 to 20:1
Special Small Classes	6:1
Occupation Centres	10:1
Crippled Children	8:1
Severely Deaf	6:1
Severely Blind	6:1
Deaf-Blind, Multiple Handicapped and Autistic	1:1 (a) to 4:1

(a) The ratio 1:1 would be used for short periods only.

SEGREGATION OR INTEGRATION

13.13 The policy to be adopted in establishing facilities for the education of handicapped children can be, on the one hand, that of almost complete withdrawal of the children from ordinary schools and classes or, on the other, that of placing these facilities, where it is at all possible, in the schools themselves. Those who favour segregation advocate the placement of handicapped children in special schools, often residential, standing in their own grounds. There are several reasons in support of this procedure. The buildings and grounds can be planned so that they are adaptable to the physical needs of

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children, a factor which is important when making provision for crippled and other physically handicapped children. The special equipment required can be used to the fullest advantage when large groups are sharing in its use. The staff can be more effective when a number of them are at the one school, and so are able to discuss problems and plan procedures together. The children are not subject to pity and ill-treatment from their fellows as they might be if accommodated in normal schools. These separate schools have made a valuable contribution to the education of handicapped children, and their supporters believe they should continue to do so.

13.14 Several arguments have been advanced against increasing the number of schools in institutions except for those children who obviously could not function as part of, or in the grounds of, a normal school. There is a possibility that such schools may grow into closed units separated from the forces influencing educational thought, and they may be subject to factors of a non-educational kind. If a room has to be specially designed for crippled children, it is possible to place it in the building or the grounds of an existing normal school and so permit the handicapped children and their teachers to share to some extent in the corporate life of the school. If the handicap is so severe that a special class is necessary, two or more such classes can be provided within one normal school, so that the staff dealing with handicapped children may have opportunities not only to discuss their problems within their own group but also to refresh themselves by contact with teachers taking normal classes. It can also be argued that, if one purpose of education is to fit a child to live a full life in a normal community, he should so live in it while he is being educated. Even if he needs a special programme, all possible steps should be taken to prevent him from becoming isolated from the mainstream of education. We shall be further handicapping him if we do not provide opportunities for him to experience his own inadequacies while he is being educated, and if we force him to be confronted with them at the moment of his entry into the adult world.

13.15 The integrational approach to the problem is to keep the children in their own homes, living in the community and joining with the normal school and its programme whenever possible. There are obviously some situations in which special schools, both day and residential, must be supplied, for example for those children suffering from severe cerebral palsy, but these segregated schools should, according to this view, be kept to a minimum. There is no doubt that, as the educational system moves away from a rigid graded curriculum, each element of which is to be encompassed in a fixed interval of time, to a programme which is child-centred and which follows a flexible curriculum providing learning experiences geared to the needs of the individual child, not only will there be a smaller proportion of children requiring education in special centres but also many of those

who do require special attention will be most satisfactorily helped if they are taught in a normal school. Their special work then becomes a part of the whole school programme. We support the view that segregation should be avoided as far as is reasonably possible, and we note that in South Australia many classes, remedial, opportunity and others, are held in the grounds of, and as part of, a normal primary or secondary school. We also support the proposal of the Education Department to establish, where it is possible, more than one special class at the one school. Care should be taken, however, that the numbers of handicapped children in any normal school should not grow to such an extent that the children come to be regarded as a segregated group within the school, but are such that the children can be adequately integrated in the school situation.

13.16 Several submissions pointed out that, if integration is preferable to segregation wherever possible, it may be advisable to provide a supply of teachers trained in the problems of handicapped children on the normal staff of every large school. In the primary section, children should not be withdrawn until the best course of action is clear. Special help could be given to these children for short periods, maybe daily, the remainder of their time being in the normal class. This would require in every school of sufficient size some experienced teachers with specialist qualifications and aptitudes for working with small groups. Such a scheme would necessitate the training of more teachers for handicapped children, and the final result might well be a smaller number of special classes. We do not feel competent to make a recommendation on this matter, but suggest that the Psychology Branch might carry out pilot projects in a number of selected schools. There is a body of opinion which maintains that

Special class placement does not necessarily enhance the achievement of the retarded child, and often has the opposite effect. Dividing children into categories has the effect of labelling the child and making him think he fits the label as one who in some respect is deficient. Obviously placement in a special class may be conducive to this effect.¹

We believe that all teachers of infant and primary classes should in their courses of training acquire some familiarity with the field of education of handicapped children. The need for special classes is related not only to the average size of a normal class but also to the training received by teachers.

SUPPLY AND TRAINING OF TEACHERS

13.17 Three methods have been in operation to obtain the necessary supply of teachers in special classes and schools. In the first place, some teachers have been appointed to special classes direct

¹ Report of the Provisional Committee on the Aims and Objectives of Education in the Schools of Ontario. Ontario Department of Education, 1968, p. 106.

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from college after studying the elective in applied psychology at Western Teachers College. This procedure brings into the classroom teachers who have had little experience and who sometimes lack maturity, background and technique. Although some of them succeed, their problems are accentuated if they are placed in schools in which there are no other teachers dealing with handicapped children. There may be a few exceptional exit students, particularly if they entered the college at a mature age, who by their disposition would perform satisfactorily in opportunity classes but we do not think this is generally so. We consider that, except for the mature-age student showing exceptional ability, this method should be discontinued.

13.18 A second source of supply has been experienced teachers who have applied to undertake special class work. They attend one of the short in-service courses available, often while they are engaged in teaching. The experience they have gained in their work with normal classes is of considerable value, although their professional study in the field of psychology and the specific problems arising from the disabilities of their pupils require a firmer basis than that obtainable in an in-service course of this nature. We think that the professional training of these teachers should be upgraded and should be carried out before the teachers enter the special classes or schools.

13.19 The Education Department has recruited as teachers of the mentally retarded a third group from among mature men and women, mostly women, who may or may not have had teacher training but who wish to undertake this work. Some may attend the in-service course provided by the Psychology Branch, although this is not strictly relevant to the work in occupation centres. Their educational qualifications and previous background are variable. Although in times of severe shortage of teachers, when the necessity to staff the schools was paramount, it may have been argued that no other course was open, we regard as undesirable the dilution of the teaching force by the employment as teachers of people with inadequate qualifications. In the recruitment of mature-age teachers adequate educational qualifications should be required, and satisfactory professional courses in teacher education and in the specific problems of working with handicapped children should be provided.

13.20 The provision of courses designed to prepare teachers for classroom or administrative duties in special education is shared by a number of institutions. Western Teachers College offers an elective at third or fourth year in applied psychology for students who are interested in the psychology and education of exceptional children and in the special classes of the Education Department. This course is being phased out and will disappear at the end of 1970. At the same time a major in psychology has been established and will be developed over the next three years. The College also proposes to

offer in 1971 an Advanced Diploma in Teaching in the study of exceptional children. The Education Department supplies an in-service course of 28 sessions, each of 2½ hours' duration, entitled *Education of the Handicapped Child* for teachers working in normal or special schools. Associated with this course are two five-day residential sessions for students stationed in the country. The course is limited to approximately 30 teachers, and its successful completion is credited as one classification unit. The Psychology Branch provides a course for teachers of backward and difficult children. This is a full-time two-week course followed by a course of reading and assignments for two years. In addition, the Psychology Branch organises a number of one-day workshops for teachers of special classes. Flinders University provides a second-year course on the psychology and teaching of handicapped children; this course is compulsory for all Bachelor of Education students. Lectures on handicapped children are also given to fourth-year students for the Diploma of Education. Specialised work at the Master of Education level is projected from 1972. In addition, a postgraduate diploma in clinical and educational psychology is being established.

13.21 After a teacher has completed his normal teacher training programme there remains a need for further training in the specific problems of teaching handicapped children, as particular handicaps demand the application of specific techniques. Teachers of the severely deaf, the totally blind or the child with multiple handicaps will require training in the special methods used to educate these children. As the number of teachers required for classes in these disabilities is small it would be uneconomic to provide training centres in South Australia. Instead, it is present policy, which we believe should be continued, to train these teachers either interstate or overseas. In occupation centres, where the children suffer from severe mental retardation or cerebral dysfunction, formal education is limited, and the emphasis is on training the children in self-care, language, social development and health problems. In opportunity classes formal education assumes a more active role, and slow learners must be guided while overcoming behavioural problems. Both these groups of teachers should have undertaken the normal teacher training course, including an elective appropriate to the special problems arising in their work. These electives should be available to teachers who have completed their normal training course and later wish to enter special education. Advanced diplomas, specialising in the needs of each of these groups of children, should be available so that some of the special education teachers may be qualified for promotion to senior positions. Teachers of children with multiple handicaps will require training in more than one field. Many handicapped children with special learning difficulties are to be found in every school, and all teachers should be able to recognise the problem and apply simple techniques while seeking guidance from the Psychology Branch. All courses of training at teachers colleges should contain a compulsory

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section, not to the depth required by the special class teacher, on the problems that arise in dealing with handicapped children, so that teachers may be able to meet this situation with confidence. This provision will become more important in the future if, as we think possible, more handicapped children are accommodated in normal classes.

13.22 We therefore believe that the minimum qualifications for teachers to be appointed to special schools or classes should be as follows:

(a) **TEACHERS OF THE BLIND OR DEAF.** Normal teacher training course. Some experience of teaching in normal schools. One or more years of special training which may have to be undertaken interstate or overseas.

(b) **TEACHERS IN OCCUPATION CENTRES.** Normal teacher training course including an appropriate elective. An advanced diploma with specialisation in the needs of children in such centres for a limited number of these teachers would provide a qualification for senior posts.

(c) **TEACHERS OF OPPORTUNITY CLASSES.** Normal teacher training course including an appropriate elective. At least some experience of teaching in normal schools, where they should have shown special interest in slow learners or in children with behaviour problems. An advanced diploma with specialisation in the needs of children in such classes would provide a qualification for senior posts.

13.23 A situation in which all teachers in these classes have had the appropriate course of training is a desirable goal but it cannot be attained immediately. As shown in paragraph 13.25, approximately one-third of the assistants are unclassified, and some would need to be released to complete the study required for classification alone. Some credit should be given to these teachers for the experience they have gained while taking classes, the actual amount to be related to the competence of each teacher. Teachers in normal schools wishing to teach handicapped children will be able to undertake for the first time in 1971 a full-time one-term course of training at Western Teachers College which will enable them to obtain appropriate qualifications before they begin teaching in the schools. It will be necessary to offer such release-time courses as an interim measure for some years, at least until the teachers colleges have included the appropriate electives in their normal teacher training programmes and their exit students have studied these electives.

13.24 Accordingly, we **RECOMMEND** that:

(a) All teachers engaged in special education should have undergone a full course of teacher training including electives appropriate to the nature of the classes they teach.

- (b) Teachers of the blind or deaf should hold appropriate certificates.*
- (c) Advanced or specialist diplomas in the teaching of handicapped children should be available at teachers colleges and universities, and should be a prerequisite for senior appointment in this field.*
- (d) Provision should be made for selected teachers to take higher degrees in special education to enable them to fill positions as lecturers in teachers colleges or as consultants.*
- (e) Both primary and secondary diplomas in teaching should include a compulsory section on the education of handicapped children.*

Salaries and Promotion

13.25 The Teachers Salaries Board Award provides an allowance of \$139 per annum to primary assistants in special schools and classes. The same allowance is paid to head teachers of rural schools teaching special classes, as their base salary is that of an assistant. Because the salaries of other heads include a loading for responsibility, the allowance is not paid to them, nor is any allowance paid to a secondary teacher undertaking this work. As we recommend that some teachers in these schools should have appropriate special certificates in addition to their normal teacher training, an additional allowance for the holding of the advanced certificate should be provided. This would encourage teachers to undertake the necessary studies, and give the Branch a wider choice when selecting staff for promotion.

13.26 The total staff in special education was 221 in April 1970. The positions above that of assistant are set out in Table 13.7. Plans are in hand to re-classify a number of these positions and provide for at least one position for a Class I head. We agree with the upgrading of these positions, as it will give an opportunity to qualified teachers already working in the field to obtain promotion without leaving special class work. We consider that the heads of these schools should be classified largely on the basis of the number of teachers engaged in the school, rather than on the number of pupils, because the pupil/teacher ratio is purposely kept small. Of the 221 teachers employed in special schools in 1970, 30 per cent, or nearly one in three, were unclassified, that is, they held fewer than the four required classification units. This situation reflects the difficulty of obtaining teachers for this work, and the reliance that has been placed in the past on recruiting some from outside the service who have not had an opportunity of gaining basic qualifications. It may be found necessary to increase the allowance of \$139 per annum now being paid to most of these teachers to attract sufficient staff. Even with the upgrading in promotional positions it may still be necessary for a number of the teachers to move back into the normal school to obtain promotion. Provided that fully qualified teachers can be obtained as replacements, such transfers may have beneficial effects. This would prevent teachers from becoming stale in their work, and the presence of a

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number of these teachers in the normal classroom would help in the early recognition of handicaps and in the implementation of remedial measures. However, those who wish to remain and who have the ability and qualifications should be given promotional opportunities within their own field.

13.27 Accordingly, we RECOMMEND that:

Promotion prospects within special education should be such as would allow trained people engaged in it to gain promotion without returning to normal classroom teaching, and to receive compensation for the extra training in addition to normal teacher training required.

Table 13.7.

NUMBER OF TEACHERS IN CHARGE OF SCHOOLS IN SPECIAL EDUCATION
SOUTH AUSTRALIA, APRIL 1970

Head Class I	—
Head Class II	1
Head Class III	—
Head Class IV	2
Head Class V	14
Teacher-in-Charge	5
Total	22

Source: *Official List of Schools*, 1970, Education Department.

Ancillary Staff

13.28 In Chapter 9 we drew attention to the need to supply trained ancillary staff in schools and so allow teachers to devote a greater part of their time to their professional duties, thus raising the quality of teaching. Such help in special schools and classes should have a high priority, and the scale of provision should be more generous than that envisaged for the normal school programme since these classes require more work of a non-professional character to function adequately than do normal classes. Although the pupil/teacher ratio is low each child demands considerable individual attention, and the amount and variety of materials and aids required are also large to compensate for the special difficulties of these children and their limited powers of concentration. Each child works at a different level and requires his own work programme. The use of a great variety of audio-visual material provides an approach likely to arouse genuine interest. To obtain sufficient material and to set up and maintain equipment are tasks which could be carried out by a person other than the teacher. As the number and quantity of non-professional services of the teacher to each individual are so important, the provision of teacher aides, when teachers have been trained in their effective use, will raise the level of performance of the children and help to give a greater equality of opportunity in their educational programme.

13.29 Accordingly, we RECOMMEND that:

Teacher aides should be appointed to special schools and classes on a scale providing one aide for every two special teachers.

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Education Act

13.30 Section 47 of the Education Act sets out requirements for the education of children who are unable to benefit from a normal school programme and it places the responsibility on the parents in these words:²

(1) It shall be the duty of every parent of a blind, deaf, mute or mentally defective child, from the time such child attains the age of six years until it attains the age of sixteen years, to provide efficient and suitable education for such child.

(2) If the parent having the actual custody of any such child is unable to provide such education he shall give notice in writing to the Minister of such inability, and shall, from such date as is specified by the Minister, send the child to such (if any) institution as the Minister directs, and shall pay such sum or sums towards the cost of the maintenance of the child as is or are agreed between such parent and the Minister.

We have received submissions drawing attention to the unsatisfactory nature of this section of the Act, and, indeed, it is not the present practice to place the responsibility for the education of these children on the parent. The South Australian Education Department has taken this responsibility, although it is not obligatory, and has established special classes and schools, and has provided teachers. The Committee agrees that this section of the Education Act should be amended so that the Government would be required to make available educational facilities suitable for these children as it now does for all children who are under compulsion to attend school.

13.31 There are some children who should be exempted from school on medical or psychological grounds. There are some families confronted with special difficulties such as the unavailability of a special class near home. The decision regarding the exemption of the handicapped child should be made after a full investigation, and with adequate safeguards designed to protect the welfare of the child. The Act should provide for exemption where suitable cause can be shown.

13.32 Accordingly, we RECOMMEND that:

Section 47 of the Education Act should be amended so that the provisions of the Act relating to compulsory attendance apply to handicapped children as they now do to all other children, with appropriate powers of exemption.

Transport

13.33 An adequate transport scheme is necessary to make it possible for children who are unable to use public transport to reach their

² Education Act 1915-1966, Section 47(1) and (2).

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special school or special class. A child needing secondary education in the country is, under certain conditions, transported by bus to the nearest secondary school without cost to the parents, and a similar situation exists for primary children attending area schools. Some private organisations, e.g., the Crippled Children's Association, the Spastic Welfare Association and Suneden School, provide a bus for the handicapped children under their care. A number of handicapped children in departmental schools are conveyed to school by taxi, the parents paying one-third of the cost. We consider that the cost of conveying to school handicapped children unable to use public transport should be borne by the community, unless the distances involved or other circumstances make transport to the school impracticable.

13.34 Accordingly, we RECOMMEND that:

The cost of conveying between home and school handicapped children who are approved by the Psychology Branch as unable to use public transport should be met in full by the Education Department.

Role of Parents

13.35 The parents of handicapped children are faced with problems of greater magnitude and complexity than the more fortunate parents of other children. Many of them need advice and reassurance, whether from the teacher, the medical practitioner or the clinical staff, to help them to understand more clearly the nature of their problems, to give them support in time of stress and to make them aware of the possible procedures they can adopt to help the child. At Townsend House, Minda Home and the Oral School at Gilberton there are facilities for parents to stay for a few days to have discussions with the teachers and to see the class at work. It may be possible to extend this scheme by providing several cottage homes near other schools for the severely handicapped, particularly for parents who live in the country. With an increase in the number of social workers attached to the Psychology Branch it would also be possible for one to visit the parents in the home, and discuss in the family situation matters which arise between the parents and the child, a procedure which has been referred to as "kitchen sink" therapy.

Psychology Branch

13.36 At the present time the Psychology Branch fulfils three separate functions. The Branch provides a consultative service to all schools, teachers and children; it administers special schools and classes; and it is responsible for the training of a number of teachers who work in these special classes. The Branch is thus heavily involved in special education. The placement of a child in a special class requires its recommendation, and the Branch provides appropriate advice on the establishment, conduct and development of all classes providing special education for those children who are not able to

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make normal progress or adjustment in an ordinary class. A small group of speech therapists is available to teachers who have children with speech problems in both special and ordinary classrooms. Social workers attached to the Branch help families who have children in special education facilities, working in close co-operation with the Social Welfare Department when necessary.

13.37 The Branch is responsible for the administration of special schools and special classes, except those provided for deaf children. Some years ago the Minister of Education set up an Advisory Panel for Deaf and Hard of Hearing Children, consisting of representatives of the Education Department, Townsend House and the Oral School and an otologist. This panel is notified of all children suffering from a hearing loss and decides on the policy and placement of these children. Administration is carried out by the Supervisor of Deaf Education, who is responsible to the Director of Primary Education. The panel has ensured adequate provision for the education of the deaf in this State. It appears to be anomalous, however, that provision for this handicap is not more closely linked with the Division of Special Services.

13.38 In large organisations it is generally considered inadvisable for a unit to combine the dual roles of providing an advisory service and of administering that service. In the Education Department the Audio-Visual Education Centre and the Libraries Branch confine their activities to their advisory function. The inspectors and subject consultants are not implicated in the administration of the schools they visit. The Psychology Branch, however, combines these two, at times conflicting, roles. As a consultant service, it deals with parents, both concerning the placement of a child in a special class and again in relation to the progress of a child in such a class. The psychological background of the guidance officers enables them to handle delicate situations with efficiency, particularly if they are not hampered by considerations of administration. The relations between the guidance officers and the teachers in special schools and classes can become more difficult and less effective if the teacher considers that his promotion and his placement are going to be determined by the person who is also providing guidance and support. Nor does the Psychology Branch administer all classes where handicapped children are to be found. The work of the Branch in normal schools will grow in importance as the integration of children with handicaps into normal classes proceeds wherever possible. The creation of an administrative unit as part of an advisory department may lead to a concentration of effort on one part only of the total service, either on that of advising or on that of providing administration.

13.39 The functions of the Psychology Branch are much broader in South Australia than they are in some other Australian States where there is a distinct organisational separation between special education and the general psychological services available to schools.

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There are advantages in separating the consultant function from the responsibility for administering special facilities, and these may become more evident as the number of classes in special education increases and the complexity of administration becomes greater. We think that the Director of Special Services should keep this matter under close consideration. The separation of the two functions may well become desirable as the number of students and classes increases.

13.40 The Branch has also assumed a responsibility in providing courses for the training of a number of teachers who work in special schools and classes. This has arisen because, in the past, satisfactory training courses have not been provided either in teachers colleges or in universities, a situation which is showing signs of change. The recommendations which we have made on the training of these teachers, if put into operation, together with the increasing interest shown by teachers colleges and universities in this matter, will relieve the Branch of this responsibility, a development which we support. This does not imply that the Branch should not assist with the in-service training of teachers of handicapped children. Its guidance officers have a responsibility to give information and guidance to these specialist teachers on the latest developments based on research in this field, a responsibility which they should continue to discharge through participation in in-service education.

Commonwealth Assistance

13.41 The Commonwealth Handicapped Children (Assistance) Act 1970 is designed to give financial assistance to institutions providing general education and training to handicapped children. The grants, administered by the Director-General of Social Services, may be applied towards capital costs, such as land and the alteration or erection of buildings, and the cost of fixtures within these buildings, if they are to be used for the training of children suffering from a physical or mental disability. Grants are also available towards the cost of equipment approved for use by the children during their training. In both cases the grants may total two-thirds of the cost involved in the purchase, or twice the amount of the funds which the eligible organisation has available for expenditure towards the cost, whichever is the less. The organisations eligible to receive such assistance are mainly religious, charitable or benevolent bodies, and the Act specifically excludes any organisation conducted or controlled by the Government of the Commonwealth or of any State. The sharing of the costs of provision for the education of handicapped children between the public and the private sectors varies considerably between States, and there are only three States which provide free education for handicapped children — South Australia, Western Australia and Tasmania. As the proportion of handicapped children trained by public funds in these three States is considerably greater than in the remaining States, these States are placed at a financial disadvantage.

CHAPTER 14

Equality of Opportunity in Education

14.1 The Committee stated (see paragraph 3.9) that it accepted the view that

One purpose of the schools is to give every child an opportunity of obtaining an education that will enable him to develop any abilities which will give him personal satisfaction without danger to others, to occupy any position and to undertake any vocation that his ability and interest make possible.

14.2 The State system has attempted, by international standards reasonably successfully, to achieve equal educational provision for each child. The curriculum offerings are for the most part common to all schools; the equipment and facilities provided free by the State are on the same basis for all schools; the economic or social status of a particular school does not influence the State's approach to providing staff for the school; and at any particular time the quality of a new building is as good at one place as at another. The offerings of the school are available to all comers and, provided the child deals adequately with his studies, he can pass through the primary and secondary systems without payment of fees, and with considerable assistance towards the cost of school requisites.

14.3 The State has also permitted the existence of non-government schools, nearly all of which are associated with particular religious denominations. In these schools considerable variation exists in the resources available to the pupil since their main source of income is the fees the parents can afford, although in recent years these schools have received financial assistance from the State and Commonwealth Governments. The Committee saw some private schools with low pupil/teacher ratios and excellent facilities, and others where the class size was excessive, e.g., a single teacher in charge of 75 grade I pupils, or where facilities were very limited. We have expressed our views on the need to ensure minimum standards in these schools in Chapter 7.

14.4 However, in the State system many inequalities exist within the provision of apparently equal opportunities. There are the obvious ones that strike the eye as one visits schools, such as the small grounds and old buildings of many in the inner suburbs and the more spacious grounds and functional buildings of the new schools. There are many less obvious ones. There are differences in the amount of money raised by the schools to provide additional equipment and facilities, differences in attractiveness to teachers of schools in different localities, differences in availability of educational resources in the form of libraries, art galleries, museums, musical and dramatic performances or sporting facilities, to name some of the major ones. Opportunities may differ, therefore, simply because of the

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locality in which the child lives, the interest of local parents in the school or the ability of his parents to contribute to the life and activities of the school.

14.5 Even in the same locality children enter school with many different interests and abilities. They differ one from another right from the day of entry until they leave — in readiness for schooling, in their motives for learning, in their acceptance of school and in their speed of learning. They come with different expectations, with different abilities, with different genetic endowments and from environments which range from stimulating to inhibiting. Although the schools may have common goals for them all, the degree of attainment when they leave will not be common. The quick learners and the interested learners whose families support them will still have done better on what the school has to offer than the slower learners whose interests the school has had to cultivate and foster, perhaps against parental lack of interest or peer-group opposition.

14.6 What does equality of opportunity mean in this situation? We took the view earlier that one of the features of our society is a growing concern for the handicapped and for those otherwise placed at a disadvantage in coping with an increasingly complex world. Given this position and the fact of differences between individuals, many of which place particular individuals at a serious disadvantage in using opportunities, *however publicly available they are*, we believe that, if equality of opportunity is to have real meaning for each child, positive action within the limits of the resources available is needed to compensate for the disadvantages which arise in the school, or in the home as an educational institution. This has already been accepted in some aspects of education, and additional resources have been given to help certain groups. It is public policy to provide, for example, additional resources in the form of better staffing and special equipment for many of the physically and mentally handicapped. To some extent special provisions have been made to overcome some of the handicaps caused by living in areas where the full range of schools and courses is not available. There are, however, other kinds of handicaps needing action. Some examples will suffice here.

(a) For children from some homes (and not only those from homes whose native language is not English) special facilities are needed to make up for deficiencies in language.

(b) For children from some homes the lack of mental stimulation in the home environment is such as to require special help to prepare them to use their opportunities at school. There are schools in particular localities where more liberal staffing and a more liberal scale of facilities are required because parents cannot or will not help to provide facilities which are commonplace elsewhere, although their children need such facilities because of their educational, social or other handicaps.

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(c) Knowledge of vocational opportunities, and the incentive to use the open roads of access to many of them, are much less common to some groups of children than to others. They need much more information, much more direct and positive counselling and much more encouragement than do children who have grown up in more informative environments.

14.7 We firmly believe that, if each individual child is to develop to his limit, one of the important purposes of the schools must be to bring about actual equality of opportunity where it does not now exist. There are potential conflicts of interest in such action. Financial resources available to the State are not unlimited, and priorities need to be established. The complexity of some of these issues should not be under-estimated. Given a certain sum of money, should it be spent on making more opportunities available to those now able to use them, thereby probably making more of their potential and, hopefully, benefiting society through the operation of their more highly developed skills? Or should it be spent on remedying the deficiencies of those now less able to use the opportunities, thereby bringing more of the population up to some designated level of proficiency but not developing the higher skills of others? For example, do we establish more postgraduate scholarships, or more pre-school centres or more liberal staffing of schools? We do not have to face in Australia the choices that are imposed on many of the newly developing countries, such as Papua-New Guinea. We do not have the lack of resources which requires many of them to restrict, for example, upper primary education to a small fraction of the possible school population, and secondary and tertiary education to smaller fractions still. None the less, South Australia has already made choices, and will have to make further choices, in the allocation of resources. The choice made in South Australia has been to accept that, if social demand is for a complete secondary education, no child will be debarred from attempting it. It is not until tertiary education is reached that ability to pass a qualifying examination ceases to give "right of entry", and that admission is determined rather by the number of places provided than by the demand for such places. Tension arises when choices need to be made between goals, each of considerable merit, if resources available are not sufficient to allow all to be achieved and a priority must be established. On what grounds can a choice be made if one is required? Different groups will benefit according to the choice made. Do we decide to give a little each way, or allot all available resources to one or the other? If our criterion is personal benefit to the largest number and we choose the development of pre-schools and the improvement of conditions for the years of compulsory schooling, we have no greater certainty that this will be for the ultimate advantage of the majority than we would have if we chose to concentrate those same resources on the better education of an élite, since the increased contribution to society they would make by their better education might in the long run give a

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greater advantage to the community as a whole than any other kind of expenditure.

14.8 Some of the writings in the field of cultural disadvantage tend to imply that virtually all differences in educational performance are due to differences in environmental influences. We do not accept this view, but adopt the view, expressed by Gordon,¹ that "the largest group now working in the field tends to interpret the data as reflective of a complex interaction between hereditary and environmental forces in the determination of the quality of intellect". Because a variable has a genetic component it does not imply that environmental influences cannot affect growth. Height contains a genetic component, but improved living conditions can lead to an increase in average height, as was found in Great Britain during the Second World War and in post-war Japan. New Zealand recently reported substantial increases in the scores of present-day pupils on intelligence tests compared with those obtained a few years ago.² Given suitable conditions, there is little doubt that the educational achievement of every child could be raised. Adequate attention to the provision of good learning conditions for each child could in fact widen the spread of attainment between children while enabling every child to reach a higher level than is at present attained. In a complex society such as ours the minimum level of educational achievement needed for economic and social competence is such that virtually all citizens need to reach minimum standards which are continually rising. In communities where virtually all receive secondary education and a high proportion attend tertiary institutions, people who leave school early are likely to find difficulty in obtaining employment, at high cost both to the community and to themselves. Our standard of living, whether expressed in terms of material goods or of quality of life, will be influenced both by the creative abilities of our most highly educated and artistically gifted citizens and by the level of the minimum standard of education attained by all.

14.9 The limitations of the school system alone for solving the problems of disadvantaged pupils must be recognised. A working party of the Schools Council of Great Britain, after a study of socially disadvantaged children in secondary schools, wrote as follows:

The most decisive factor is not the material home background, not the neighbourhood, not the kind of school the child attends — important as these are. It is the attitude of the parents to education, their interest and support of the child, in co-operation with the school, which matter most.

Compensatory education will always be a poor second to good housing and the elimination of poverty, and (above all) to the security and affection in the home.*

¹Edmund W. Gordon (ed.), "Education for Socially Disadvantaged Children", *Review of Educational Research*, Vol. 40, No. 1, 1970, p. 2.

²Warwick B. Elley, "Changes in Mental Ability in New Zealand School Children", *New Zealand Journal of Educational Studies*, Vol. 4, No. 2, 1969, pp. 140-155.

**Cross'd with Adversity*, Schools Council Working Paper No. 27, London, Methuen, 1970, p. 87.

14.10 The importance of attitudes is not confined to the parents. The attitude of teachers to parents of disadvantaged children often reinforces any unfavourable attitudes of parents through a failure of adequate communication. The Schools Council Working Paper expresses this view thus:

Those teachers who lump all the parents of disadvantaged children into the same category and see them as idle, shiftless, disruptive, amoral and irresponsible, will have no difficulty in finding "evidence" to support such a view from their contacts with them. Faced by someone holding such beliefs and displaying such attitudes, the parents will tend to meet hostility with hostility and are only too likely to display those traits which are expected of them.⁴

14.11 We recognise the reality of these difficulties, and we feel that they represent one of the most important challenges for educationists to display their professional competence by acting on what is already known, and, through research and innovation, finding improved solutions. We believe that the public expects the school system to make an important contribution and that teachers will gain professional prestige in the eyes of the public if they succeed in improving the opportunities of all children to benefit by education.

THE PRESENT POSITION

14.12 The information which follows is not intended as an exhaustive survey of areas where inequalities of opportunity appear to exist, nor is it argued that the differences which appear in the Tables are due solely to inequalities of educational opportunity (see paragraph 14.8). It is, however, suggestive of areas which require attention by the school system if society wishes virtually all pupils to reach minimum standards of educational competence and wishes the talent existing in all levels of society to have an opportunity for optimal educational development.

Pre-School Education

14.13 In Chapter 10 it was shown that pre-school centres tend to be located in the more affluent areas which can provide the necessary finance, while the need for pre-school activities as a preparation for the primary school is greatest in lower socio-economic areas (see paragraph 10.37). Even where kindergarten facilities exist in less affluent areas, the groups who attend may not be those in greatest need. A small study carried out in Victoria, in which the children entering nine primary schools were approximately equally divided between middle-class and lower-class parentage, found that 75 per cent of the middle-class group compared with 37 per cent of the lower-class group had attended kindergarten. Of the children with non-

⁴ *Ibid.*, pp. 92-93.

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English-speaking parents, only 23 per cent had attended kindergarten. We have been informed of similar conditions operating in South Australia.

Reading Competence

14.14 The importance of competence in reading is never disputed, for a weakness in reading handicaps the pupil in virtually every school subject and in adult life as well. A study of pupils entering secondary schools in the metropolitan area in 1965⁵ showed that one-third failed to achieve the reading skill of the average child entering grade VII, i.e., the preceding grade. Such pupils are unlikely to be able to cope with any type of secondary schooling which assumes reading skills of an average grade VIII level. Standards reached in primary school will, in the absence of adequate remedial reading provision in the secondary school, play a large part in determining the child's educational future.

14.15 There are considerable variations between primary schools in the competence in reading skills shown by their pupils as a group. Tests given to grade VII primary children in 1967 provide the latest material available which illustrates this point. The tests were confined to children in Class I schools in the metropolitan area and covered 21 of such schools. In each of the four aspects of reading skill measured, all scores were ranked, and the proportions of children in each school who fell in the highest and in the lowest 25 per cent of all scores were calculated. Table 14.1 shows the 21 schools ranked on the basis of the proportion of children in them whose scores placed them among the lowest quarter of all children on the vocabulary test. The vocabulary test scores were related to scores on the other three tests, although imperfectly. If pupils from all schools had performed equally well we should expect that 25 per cent of children in each school would have fallen in each group. In fact, the range of variation between schools was extremely wide. In the school ranked first roughly half the children tested were in the top quarter of scores on all tests, while at the other extreme about half were in the bottom quarter. On particular tests, some schools had only 3 to 5 per cent of pupils whose scores placed them in the top quarter, as against the 62 per cent of pupils in the top-scoring school who were placed in the top quarter of all pupils in speed of reading. The socio-economic ranking of the area in which each school was located is also shown. The four lowest-scoring schools were all in the lowest-ranking socio-economic group of areas, and the school with the highest score in the highest-ranking group. Except at the extremes, however, no consistent relationship between the two rankings was found.

⁵E. D. Lasscock, "Changes in the Ranges of Ability and Attainment of Students Entering Departmental Secondary Schools", *Education Gazette*, South Australia, 1st October 1965.

Table 14.1
READING SKILLS OF GRADE VII PUPILS IN 21 CLASS I PRIMARY SCHOOLS
ADELAIDE METROPOLITAN AREA 1967

School Ranking on Vocab. Test	Socio-Economic Ranking of Area (a)	No. of Pupils	Vocabulary			Speed of Reading			Comprehension			Spelling		
			Proportion in Bottom Quarter	Proportion in Top Quarter	per cent	Proportion in Bottom Quarter	Proportion in Top Quarter	per cent	Proportion in Bottom Quarter	Proportion in Top Quarter	per cent	Proportion in Bottom Quarter	Proportion in Top Quarter	per cent
1	5	95	7.4	55.8	5.3	62.1	44.2	7.4	44.2	44.2	7.4	44.2	44.2	44.2
2	2	107	11.2	37.4	12.1	38.3	12.3	16.9	16.9	16.9	17.1	33.3	33.3	33.3
3	3	106	13.2	37.7	11.3	39.6	16.0	11.4	22.6	22.6	11.4	45.7	45.7	45.7
4	3	105	13.3	29.5	21.0	32.4	19.0	14.3	14.3	14.3	21.2	25.0	25.0	25.0
5	1	131	14.5	29.0	26.0	21.3	19.1	15.3	13.0	13.0	15.3	25.2	25.2	25.2
6	3	133	15.0	32.3	24.6	30.8	13.5	15.8	15.8	15.8	27.1	25.6	25.6	25.6
7	3	100	16.0	42.0	16.0	36.0	15.0	14.0	14.0	14.0	11.0	40.0	40.0	40.0
8	4	73	16.4	32.9	18.3	40.8	12.7	20.3	20.3	20.3	35.2	22.5	22.5	22.5
9	2	152	22.4	27.9	26.8	25.5	23.7	11.2	11.2	11.2	31.6	18.4	18.4	18.4
10	2	141	22.7	23.4	23.4	24.8	24.1	38.3	38.3	38.3	30.5	19.4	19.4	19.4
11	1	146	24.0	29.9	21.2	29.9	24.0	10.2	10.2	10.2	33.1	10.6	10.6	10.6
12	2	134	24.3	35.4	25.4	27.6	20.9	13.4	13.4	13.4	27.6	17.9	17.9	17.9
13	3	71	25.4	31.0	25.4	26.8	21.1	16.9	16.9	16.9	30.4	18.8	18.8	18.8
14	2	84	26.2	28.6	28.6	22.6	21.5	7.1	7.1	7.1	21.5	26.2	26.2	26.2
15	2	132	28.0	29.5	28.2	30.5	27.8	18.1	18.1	18.1	27.2	36.0	36.0	36.0
16	2	172	30.2	26.2	35.5	16.9	34.9	7.5	7.5	7.5	36.6	18.6	18.6	18.6
17	(b)	61	32.5	14.4	40.0	21.8	27.3	8.7	8.7	8.7	47.0	10.7	10.7	10.7
18	1	101	32.7	11.9	38.0	7.0	28.0	3.6	3.6	3.6	31.0	18.0	18.0	18.0
19	1	63	39.7	14.3	30.1	27.0	22.2	4.8	4.8	4.8	34.9	20.6	20.6	20.6
20	1	171	46.2	9.9	59.5	5.2	49.4	4.1	4.1	4.1	53.5	12.8	12.8	12.8
21	1	78	47.4	14.1	33.3	19.2	48.7	6.4	6.4	6.4	56.4	6.4	6.4	6.4
All Schools		2,356	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0

Source: Education Department.

(a) The area with the lowest socio-economic ranking is numbered 1, the highest 5 (see Appendix D).

(b) Beyond metropolitan electoral districts.

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Retention Rates

14.16 Marked differences in retention rates between groups show up shortly after the compulsory schooling age is passed. To examine these differences more fully, the Committee used the ranking, previously referred to, of metropolitan State electoral districts according to the proportion of the male work force in each employed in categories 0 and 1 as shown in the 1966 census figures. These two categories cover professional, technical and related workers and administrative, executive and managerial ones. The ranking of the electorates and the five groupings used by the Committee to classify schools are listed in Appendix D. Secondary school zones were superimposed over electoral boundaries and, where a zone overlapped electoral boundaries, its pupils were divided between the electorates according to the proportion of the zone falling in each. The lowest socio-economic group presented fewer difficulties in this regard, as the electorates included in it formed a more consolidated geographical block. For this reason, in the figures presented, the comparison between schools in the lowest socio-economic areas and the rest of the metropolitan area gives a more reliable picture than the full comparisons between the five socio-economic levels. Though the mapping and calculations were done with care, it cannot be claimed that the whole exercise gives more than an impressionistic picture. A further complication is introduced by the transfer of pupils between schools and by retardation. This presents more serious problems at fifth-year level because fifth-year courses are not available in all secondary schools in the State, resulting in a greater degree of transfer in fifth year. For this reason, retention rates into fourth year or grade XI give a more reliable picture of retention by area than those into fifth year or grade XII. Tables 14.2 and 14.3 should be read with these reservations in mind; nevertheless they reveal striking differences in retention rates at fourth-year level which are more marked at fifth-year level.

Table 14.2

GRADE XI ENROLMENTS IN 1968 AS A PROPORTION OF GRADE VIII ENROLMENTS
IN 1965 BY SOCIO-ECONOMIC LEVEL

ADELAIDE METROPOLITAN AREA

Ranking of Area	Males per cent	Females per cent	Total per cent
Lowest	54.69	39.62	47.51
Fourth	53.85	47.02	51.67
Third	59.58	53.63	56.97
Second	67.38	53.06	60.40
Highest	72.65	72.53	72.60
All, excluding Lowest	61.67	54.51	58.44

14.17 In the highest socio-economic area a higher proportion of pupils attend fee-paying schools whose retention rates as a group

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are higher than those of schools in the government system (see Table 5.7), making differences between areas greater than the record of government schools alone would suggest. In addition, there are few technical high schools in the highest socio-economic area, while most government secondary schools in the lowest socio-economic area are of this type. The lower retention rates of technical high schools as compared with high schools in the metropolitan area were illustrated in Table 8.5. Very low retention of the 1965 entry into technical high schools in the lowest socio-economic area was recorded by two boys' technical high schools falling within the area, which retained only 48.5 per cent and 31.3 per cent respectively of their 1965 entry into grade XI in 1968. Two girls' technical high schools in this area retained into fourth year only 31.7 per cent and 25.4 per cent respectively of their first-year entry in 1965. These schools represent the lowest extreme in the metropolitan area.

Table 14.3

GRADE XII ENROLMENTS IN 1969 AS A PROPORTION OF GRADE VIII ENROLMENTS
IN 1965 BY SOCIO-ECONOMIC LEVEL

ADELAIDE METROPOLITAN AREA

Ranking of Area	Males per cent	Females per cent	Total per cent
Lowest	18.07	16.39	17.27
Fourth	22.06	21.06	21.99
Third	28.66	20.81	25.84
Second	33.75	21.54	27.80
Highest	42.79	45.26	43.84
All, excluding Lowest	30.12	25.34	27.97

14.18 An examination of the retention rates in Tables 5.3-5.8 shows, in the last two years of secondary schooling, rates which favour high schools compared with technical high schools, boys compared with girls, metropolitan pupils compared with country pupils, non-government non-Catholic schools compared with Catholic schools, and both of these compared with government schools. Social factors certainly contribute to these differences.

Commonwealth Scholarships

14.19 The Commonwealth Government offers scholarships without a means test to approximately 10,000 pupils in all Australian States for the last two years of secondary schooling. The percentage of scholarships won by pupils in different types of schools in South Australia is given in Table 14.4 and is similar to Australian figures.* Table 14.5 gives the figures for government schools with the lowest and highest socio-economic ranking within the State system.

* See statement by the Minister for Education and Science, *Commonwealth Parliamentary Debates*, 13th August 1969.

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14.20 By fifth-year level, the differential retention rates have operated to produce, in each type of school, groups of pupils who are relatively homogeneous in academic ability, with the result that the percentage of university and advanced education scholarships obtained by pupils from the different types of school is fairly similar, as shown in Table 14.6.

Table 14.4

COMMONWEALTH SECONDARY SCHOLARSHIPS BY TYPE OF SCHOOL SOUTH AUSTRALIA 1967-1969 (a)

	Government			Catholic			Non-Government Non-Catholic		
	Pupils in Scholar- Grade X	ships	Pro- portion per cent	Pupils in Scholar- Grade X	ships	Pro- portion per cent	Pupils in Scholar- Grade X	ships	Pro- portion per cent
1967	15,518	673	4.34	1,612	80	4.87	1,570	220	14.01
1968	16,053	667	4.15	1,650	123	7.45	1,539	224	14.55
1969	16,419	650	3.96	1,603	114	7.11	1,504	213	14.16

Source: Commonwealth Department of Education and Science and Commonwealth Bureau of Statistics.

(a) The awards apply to the year after that in which they are won.

Table 14.5

COMMONWEALTH SECONDARY SCHOLARSHIPS GAINED IN METROPOLITAN GOVERNMENT SCHOOLS BY SOCIO-ECONOMIC AREA SOUTH AUSTRALIA 1967-1968

	Proportion of Grade X Gaining Scholarships per cent	Proportion of Grade VIII Pupils Two Years Earlier Gaining Scholarships per cent
<i>Lowest</i>		
1967	3.03	2.29
1968	3.13	2.33
<i>Highest</i>		
1967	5.68	5.48
1968	6.61	5.92

Table 14.6

PROPORTION OF GRADE XII PUPILS GAINING COMMONWEALTH SCHOLARSHIPS BY TYPE OF SCHOOL

SOUTH AUSTRALIA 1969

	Government per cent	Catholic per cent	Non-Government Non-Catholic per cent
University Scholarships	19.3	16.3	21.8
Advanced Education Scholarships	4.3	4.8	3.4

14.21 Within the socio-economic zones also the effects of the differential retention rates operate to produce at grade XII level rela-

tively homogeneous groups. The proportion winning Commonwealth university scholarships in the government schools was 21 per cent for the lowest socio-economic zone and 18 per cent for the highest, and approximately equal groups were awarded advanced education scholarships.

School Income

14.22 Although the Education Department endeavours to provide the basic needs, the facilities available to schools in different areas differ substantially. Schools in older areas often occupy older buildings and have smaller playgrounds. Newer schools may lack equipment which the Department provides on a subsidy basis. The subsidy scheme, which is intended to encourage local initiative, results in substantially different amounts per pupil being made available for expenditure by the school. Tables 9.2 and 9.3, compiled from data gathered by the Committee, show the average school income per pupil and the range, from sources other than government funds but including subsidy, for different types of schools. The recommendations we have made in paragraph 9.30 would end major inequalities in equipment between schools by the outright provision of basic equipment from State funds.

School Type and Location

14.23 The opportunities available within a school vary according to its type and location. We have referred to differences in retention rates and income. In addition, the range of subjects offered varies between high and technical high schools, as discussed in paragraphs 8.30–8.33, and subject combinations available within the range will in all cases be affected by pupil numbers and the degree of flexibility provided for in time-tabling. Schools in less densely populated areas have the advantage of smaller classes, at both primary and secondary levels. At secondary level, however, pupils outside the larger towns, in general, have no alternative to the more academic course, and the range of subjects available within that course will of necessity be narrower. We believe that the recommendations regarding a single major type of secondary school and the consolidation of smaller schools which we have made in Chapter 8 (see paragraphs 8.46 and 8.70) will contribute to overcoming the problem of the range of choice open to all secondary students. Higher retention rates in rural areas and a wider range of choice may require State-provided hostel accommodation. However, time-tabling which seeks to provide for pupil choice is also important, and there is considerable variation between schools in the range of subject combinations which they make possible.

Aboriginal Children

14.24 While it recognised the efforts being made, the Select Com-

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mittee of the Legislative Council on the Welfare of Aboriginal Children reported in 1969 as follows:

From evidence and statistical information placed before the Committee, the conclusion is clear, that the education of Aborigines in South Australia is seriously deficient.[†]

The educational levels reached by Aboriginal children compared with those of the community as a whole may be inferred from Table 14.7. These differences are much greater than can be accounted for by differential birth rates which result in the number of Aboriginal children of primary school age increasing at a faster rate than that of children of this age in the population as a whole. Of 79 Aboriginal pupils leaving school in 1969, only one left from grade XII level, so becoming eligible for tertiary study. Sixty-seven per cent of those leaving left from grade IX level or below. All Aboriginal children in the State do not attend school. It is estimated^{*} that at least 100 school-age children living on sheep and cattle stations are in this position, and for some 76 children below 17 years of age on the reserve at Indulkana no school is available. Many Aboriginal children outside the cities do not enter school until they are seven years old.

Table 14.7

ABORIGINAL STUDENTS AT PRIMARY, SECONDARY AND TERTIARY LEVELS

SOUTH AUSTRALIA 1968-1969

Primary		Secondary		Tertiary	
		As Proportion of Primary		As Proportion of Primary	
		per cent		per cent	
<i>Aboriginal Students</i>					
1968	1,820	271	14.9	4	0.2
1969	1,896	391	20.6	4	0.2
<i>All Students</i>					
1968	178,165	80,287	45.1	16,441	9.2
1969	179,070	83,481	46.6	17,021	9.5

Source: Commonwealth Bureau of Census and Statistics, Education Department, and Department of Aboriginal Affairs.

14.25 The education of Aborigines is a very complex matter. The problems of providing education for full-bloods living in semi-tribal areas, for Aborigines living in reserves, for those in fringe communities and for city-dwellers' children who attend metropolitan schools are quite different. Moreover, the role of the Education Department has to be correlated with those of other social agencies. The South Australian Education Department has an organised programme in Aboriginal education. A liaison officer holding the position of Assistant Superintendent, Primary Education, co-ordinates and supervises this

[†] Report of the Select Committee of the Legislative Council on the Welfare of Aboriginal Children, Adelaide, Government Printer, 1969, paragraph 6.

^{*} By the Department of Aboriginal Affairs.

programme and maintains liaison with other Divisions of the Education Department, with the Department of Aboriginal Affairs, with the Health Department and others. Aboriginal aides are employed in some schools, and in 1971 it is proposed that a special training programme for such aides will begin in Adelaide. The Department has seconded an officer to assist a project concerned with pre-school education financed by the Van Leer Foundation.

14.26 Despite the efforts being made, which extend beyond those mentioned above and include financial assistance, little is known about the school programmes and teaching methods which are appropriate to the needs of semi-tribalised Aborigines, or about ways of overcoming the extreme educational disadvantages of part-Aboriginal children. The educational problems of the latter group, who form the greater part of the population of Aboriginal descent in South Australia, have much in common with those of culturally deprived white children. However, for children of Aboriginal descent additional problems stem from the absence of a successful group within the society with whom they can identify. For both groups, housing and employment problems and parental attitudes are inextricably bound up with the educational problems of the children, requiring joint action on several fronts.

Immigrant Children

14.27 It is obvious that children who come to schools direct from countries where English is not the mother tongue, or who reach school from homes where English is not spoken regularly, have a special problem in mastering English, the language of instruction in the schools. For a variety of reasons immigrants are not located in equal proportions in all areas, so that some schools have disproportionate numbers of migrant pupils. One school, of which the Committee was aware, had some 70 per cent of children of migrant origin and about 50 per cent of these were of Southern European origin.

14.28 A departmental survey of primary schools in South Australia in 1970 revealed that teachers considered that 22 per cent of immigrant children who came from non-English-speaking countries and who were born outside Australia had a grasp of the English language insufficient to enable them to profit in the normal class. Forty-eight special classes for these children have been established, all but six being in the metropolitan area. Two language laboratories will be installed at one school in 1971 to enable some of these children to have an intensive training programme. The children move into normal classes at the appropriate time. Recently the Commonwealth Government announced a programme of financial assistance to the States for this work.

14.29 It should not be assumed that migrant pupils whose parents speak English have no difficulties in adjusting to the South Australian

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school system. Pupils who have attended primary schools in England have to cope not only with a change in textbooks but with changes in classroom organisation, and their parents sometimes resent having to pay for materials which would be free in England. Unless such problems are handled with understanding by the school, attitudes can develop which interfere with the progress of the pupils.

Entry to Tertiary Institutions

14.30 The Committee conducted a survey of all students entering tertiary institutions in South Australia in 1970 (see Appendix F). The survey did not provide a full picture of entrants because returns from the University of Adelaide were incomplete. The 3,393 students who completed returns included teachers college students studying at both universities. Table 14.8 shows, for students whose fathers were members of the work force, the proportion falling in each of the census occupational categories compared with the distribution between occupations of the male work force in South Australia at the time of the 1966 census. The fathers of 37 per cent of all students having working fathers, and of 53 per cent of Flinders University entrants excluding teachers college students, were in the two categories of professional, technical and related workers and those employed in administrative, executive and managerial capacities. In 1966, 15 per cent of the male work force were in these groups. Only 28 per cent of all students having working fathers, and 17 per cent of Flinders University entrants other than teachers college students, had fathers employed as craftsmen, production-process workers and labourers. These groups included 45 per cent of all employed males in 1966. Intending teachers, whether preparing through university courses or teachers college courses, had social backgrounds very like those of students entering the South Australian Institute of Technology. The survey illustrates the well-known fact that children of some social groups are more likely than others to receive a tertiary education.

PROVISION FOR GREATER EQUALITY OF OPPORTUNITY

Pre-School Level

14.31 Even before birth social factors may be operating which are likely to affect the ability of the child, and appropriate social action may have an effect on the child's ability to benefit from education. Inadequate diet can leave permanent effects. Injuries at birth from inadequate medical attention can add to the number of pupils needing special education. Children are often born into homes where parents did not want them or are unable to care for them adequately. These factors are mentioned, not because they fall within the compass of this Report but to illustrate how the school is only one of the resources available to the community which wishes to promote equality of opportunity.

Table 14.8
OCCUPATION OF FATHERS OF STUDENTS ENTERING TERTIARY INSTITUTIONS
SOUTH AUSTRALIA 1970 (a)

Occupation of Father (Census Categories)	Proportion of Male Work Force in Category (1966 Census) per cent	Teachers Colleges				S.A. Institute of Technology				Kindergarten Teachers College per cent	All Students per cent
		University (c)		Total		Diploma		Other			
		per cent	per cent	per cent	per cent	per cent	per cent	per cent	per cent		
Professional, Technical and Related Workers	7.4	28.8		17.7	16.0	16.5	18.3	13.6	16.1	12.9	17.9
Administrative, Executive and Managerial	7.5	24.2		18.3	17.2	17.6	20.0	18.3	19.0	32.3	19.2
Clerical Workers	7.9	8.9		9.5	7.5	8.1	7.4	10.2	8.8	9.7	8.5
Sales Workers	5.4	6.9		6.6	5.6	5.9	7.4	5.8	6.6	3.2	6.3
Farmers, Fishermen, Hunters and Trappers	13.3	6.2		11.8	14.1	13.3	7.9	6.3	7.1	16.1	10.1
Miners, Quarrymen Workers in Transport and Communication	0.4	1.0		0.2	0.3	0.3	0.2	—	0.8	—	0.2
Craftsmen, Production and Process Workers and Labourers	7.2	2.2		3.5	4.3	4.0	3.6	5.0	4.2	—	3.8
Service, Sport and Recreation	45.5	17.1		27.8	28.8	28.6	28.5	33.7	30.9	19.4	27.8
Armed Services	3.6	1.5		2.7	3.5	3.2	4.7	3.0	3.7	3.2	3.2
Occupation Inadequately Described	1.1	1.2		0.2	0.2	0.2	0.5	0.2	0.3	—	0.4
	0.7	2.0		1.7	2.5	2.3	1.5	3.9	2.5	3.2	2.4
Total	100.0	100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

(a) Excluding students, other than teachers college students, entering the University of Adelaide.

(b) Excluding teachers college students. About one-third of the students included in this column were students entering the first year of Medicine and Dentistry who transfer to the University of Adelaide at the completion of the first year. The occupational distribution of the fathers of these students is in fact very similar to that of the other entrants to Flinders University, excluding teachers college students.

(c) Includes entrants to both universities who were being paid allowances by the Education Department.

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14.32 The education of the child before he enters primary school will depend largely on the quality of education that the home can offer. In Chapter 10 we outlined the existing system of pre-school centres and recommended a programme for their expansion with attention devoted to priority areas. Even if these proposals are accepted and implemented, it is estimated that by the mid-1970's only 30 per cent of the relevant age group will be attending a pre-school centre (see paragraph 10.81) and many of the centres will not be in areas of need. For this reason, reliance on pre-school centres alone is insufficient, and attempts must be made to help parents by other means. The importance of the early years in the child's cognitive and emotional development and as a preparation to benefit from the school system has been emphasised by research in recent years.

14.33 Attempts at massive intervention programmes, such as the Head Start programmes in the United States of America, have provided variable results. One member of the Committee was able to study some of the programmes in the United States and to have discussions with workers in the field. Some of the difficulties seem to have arisen from inadequate planning and the absence of properly evaluated pilot schemes before embarking on large-scale programmes. It is also becoming clear that the involvement of the local community, including the parents, in any programme is essential for success. With the present state of knowledge it would be foolish to start any massive programme of trying to help the children most in need. What is needed is a number of pilot projects which are carefully planned and evaluated, followed by expansion of those programmes which are shown to be valuable.

14.34 The following are suggestions for possible programmes. The list should not be thought of as exhaustive.

(a) Attach one or more suitably trained pre-school teachers to clinics of the Mothers and Babies Health Association in priority areas to advise parents, demonstrate activities and show suitable films, to explain the value and use of simple articles found around the house for helping in the child's educational development, and to encourage parent-child interaction of the kind likely to benefit the child. Group discussion could be used to develop more favourable attitudes to education. A lending library of suitable toys and books could be added.

(b) The possibility of creating a mobile kindergarten which can visit houses and work with small groups of parents and children is worth exploring. Helping young parents may benefit not only the existing pre-school children but later children of these parents.

(c) Pre-school programmes could be established on an experimental basis at a number of full-day child-minding centres used by working mothers.

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(d) In the United States of America a television programme, *Sesame Street*, has been specially devised for helping in this area. The programme, which has been obtained by the Australian Broadcasting Commission, may prove to be of limited use in Australia because its target group was essentially the black ghetto population. Nevertheless the idea and techniques are important, and we hope that the Commonwealth will join forces with the States to finance the Australian Broadcasting Commission, perhaps in conjunction with the commercial stations, to produce a suitable programme for use in Australia. The possibility of special programmes directed to the larger migrant groups, e.g., Italians and Greeks, should be explored.

14.35 The machinery for initiating and evaluating such projects does not exist. If funds are available, staff from the universities and teachers colleges would probably be willing to undertake the direction of such projects in the pilot stages. The appropriate body for initiating and controlling the projects would be the Pre-School Committee recommended in Chapter 10, but it will need a special allocation of funds for this purpose. The Commonwealth Government has also established a committee⁹ which could be approached for funds to aid such projects.

14.36 Accordingly, we RECOMMEND that:

The Pre-School Committee, whose establishment we recommend in paragraph 10.70, should receive an annual research grant of the order of \$50,000 to allocate to selected projects specifically aimed at providing information on various ways of improving equality of opportunity at the pre-school stage.

School Level

14.37 Once the pupil is at school the competence and attitudes of teachers, particularly as expressed in programmes which allow children to progress at different rates and by a variety of methods, are important in enabling all children, including the most able, to achieve more highly. Such programmes give "built-in" remedial attention, since they ensure that each child is individually prepared for the next step in learning before he takes it. The recognition that learning is a social process, with all that this implies for teaching methods and relationships within the classroom, would allow more children to be actively engaged in the work of learning. The extent to which parents can be involved in the community life of the school affects the children's attitudes and achievements. For all these reasons the extent and quality of the pre-service and further education of teachers are of central importance. Teachers are people who have been successful at school. Intellectual awareness of the reasons for varying achievements in children will not of

⁹ Australian Advisory Committee on Research and Development in Education.

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itself bring about changed teacher attitudes. Case studies and experiences which force teachers to become aware of, and more deeply involved in, the problem are required. The opportunity of seeing experimental programmes achieving success among children in less privileged areas would also be valuable. Some teachers find work in schools in deprived areas or with a high proportion of migrant children challenging and exciting. Every effort should be made to enable such enterprising teachers to work in these schools.

14.38 Educational diagnosis is, or ought to be, a constant activity of teachers. If diagnosis is to be followed up effectively, special provision must be made: either class sizes must be reduced, or special teachers or aides appointed for remedial purposes. In either case much more time must be spent in analysing the normal course of development of the skills and abilities involved, in recognising the cause of deficiencies revealed by diagnosis and in developing programmes and teaching procedures most likely to effect remedies. Remedial classes exist in 16 normal primary schools. In them, assistance is given during part of the day to children who are seriously below their grade norms in basic skills. However, the number of places in classes of this kind is insufficient for the number of children requiring special attention. In any case, greater attention to individual problems within the normal class is a preferable solution. This will often require the employment of additional teaching and supporting staff. Special preparation will be required for such teachers. We do not suggest that this will produce a uniform level of excellence, but it should help to prevent outright failures in understanding and to avoid the inability to undertake more advanced studies which are due to inadequate mastery of more elementary work. Headmasters have a very important task to perform in watching the progress of the child through the grades and in noting for investigation any marked change in performance.

14.39 There are schools serving particular districts, both urban and rural, which have in them an unusual number of children facing learning difficulties and social problems. Evidence gained from tests of reading levels, from the number of children in free-book lists and from the level of juvenile delinquency in the area offers some means of identifying these schools. In some it is not possible for parents to provide more than the minimum for their children, and the school can expect little help, financial or other, from these parents to supplement the basic school facilities or to provide the supplementary experiences outside school which reinforce what is done in school. Such schools, we believe, need more liberal treatment than others, both in staffing and in facilities.

14.40 Many of the children attending them also need more personal help if they are to make the most of the educational fare offered by the school. For some, the defect will be in language or some other

specific area; for many, it will be a general deficiency because of the absence in the home and in the local environment of the variety of experiences which adequately stimulate mental activity. It is this variety which makes the young child more sensitive to the differences and similarities in people and things and which provides him both with the variety of concepts and with the depth and breadth of particular concepts which make the experience of schooling more valuable to him. We do not suggest that schools to which children go first at the age of five or six can overcome all such deficiencies, and they should not be expected to do so. However, they can perhaps do more than they now do, although this will require more liberal staffing than at present exists.

14.41 Where a school population, particularly at the secondary-school level, is so small that it is too costly to provide all the subjects and all the subject groupings that a large school does as a matter of course, equality of opportunity as between schools may be an unreal claim. The small country high schools in South Australia are already more liberally staffed to help to overcome some of the disadvantages of smallness, and there may be few hardships now existing. Living remote from a large town, or from a large city, may limit the experiences available to a pupil; there are undoubtedly some compensating features, but the effect of the limitation on vocational opportunity, on choice of leisure-time activities and on the breadth and depth of interpersonal and cultural experiences needs to be consciously attacked.

14.42 The Research Branch of the Education Department also has an important role to play in developing and evaluating curriculum materials likely to help teachers to provide better opportunities for children who are having difficulties, and in conducting research on appropriate methods of working with such children.

14.43 A greater acceptance of individual progression rather than class progress will also help to equalise opportunity. The rate of progress of some children may be slower but the sense of personal failure which follows inability to cope if they are forced to try to progress at the class average will largely disappear. With encouragement to progress at their own rates, pupils can reach those minimum levels of competence needed for today's complex society. Streaming and the track system widely used in secondary schools need careful examination to ensure that they do not limit opportunities and continue to handicap those who are most in need of help. They frequently reinforce the sense of failure of the slower pupils and create expectations in both pupils and teachers which are self-fulfilling. Schools with a limited curriculum can also serve to limit opportunities. The curriculum of girls' technical high schools can, we believe, be criticised on these grounds, as can the provision of an option which allows students to undertake a range of commercial subjects in grade IX.

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We have recommended in Chapter 8 that all secondary schools should provide a full range of courses, limited only by the number of students enrolled (paragraph 8.46).

14.44 Beyond the school-leaving age, we think, schools could be more adventurous in trying to find out what pupils are interested in studying and in offering courses to meet these demands. There are many students in grades XI and XII who will not be entering tertiary institutions, and these students, at least, can surely be offered greater freedom of choice. The Education Department has already made important moves in this direction, but it might with advantage extend the choice available at this level into courses which are vocationally oriented.

14.45 Entry for Public Examinations Board examinations is a necessary part of school courses geared to these examinations. We therefore think that no financial penalty should be involved in choosing such courses. For this reason, and because we accept the view that secondary education at all levels should be available without the payment of fees, we believe that the State should meet the full cost of conducting the examinations. In 1970, expenditure of the Public Examinations Board is estimated to be \$230,000, while fees charged for Leaving and Matriculation examinations are expected to contribute \$116,000.

14.46 Accordingly, we RECOMMEND that:

(a) More attention should be given, both in teacher education and in schools, to the practical implementation of teaching programmes which allow each pupil to progress at his own rate within teaching groups of varying levels of achievement.

(b) Schools identified as having a higher than average proportion of children facing learning or social difficulties, or both, should be more liberally staffed to allow of smaller teaching groups, and should be provided with aides and equipment on a more generous scale than other schools.

(c) Special courses to prepare teachers for work in remedial classes and as consultants to teachers in normal classes should be made available at training institutions.

(d) The State should meet the full cost of examining secondary students through the Public Examinations Board.

Commonwealth Secondary Scholarships

14.47 Some comments on the Commonwealth Secondary Scholarships scheme as a method of increasing equality of opportunity are required. The scholarships are valuable, being worth \$200 per annum plus expenses up to a further \$200 per annum for the last two years

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of secondary education which can be claimed in full only by parents paying school fees. Earlier in this chapter (Table 14.4) information on awards by type of school was given. If the purpose of these scholarships is to keep at school able children who would otherwise leave for financial reasons, and so to make a contribution to equalising opportunity, then on the whole they fail to achieve their purpose. Most of those who receive the scholarships would have remained at school. Wiseman's study¹⁰ of two South Australian high schools showed that retention beyond third year was closely related to background as measured by fathers' occupations. He concluded:

From the proportions from each group who stayed at school it can be said that these students included the "typical" child with a professional or managerial father, but usually only the "exceptional" child from any other background.

The study suggests that many children capable of further study are leaving school too early. One of the purposes of awards at this level should be to ensure that such children are able to continue in school. The awarding of scholarships on performance 'without relation to background does not allow this purpose to be achieved.

14.48 The Committee believes that the money spent on these scholarships could make a greater contribution to equalising opportunity if awards were made on a different basis. The incentive value of the scholarship could be retained by offering a small sum irrespective of means and by offering a sliding scale of allowances based on a means test up to the maximum. The number of scholarships could be greatly enlarged and pupils who would benefit by further schooling but who leave now for financial reasons could be encouraged to stay on to the end of the secondary school.

14.49 Accordingly, we RECOMMEND that:

(a) *The State Government should approach the Commonwealth Government seeking a change in the basis of Commonwealth Secondary Scholarships which would allow the total amount allocated for this purpose to be spread over more students by the imposition of a means test so that students capable of further education who might otherwise leave are able to remain at school beyond grade X.*

(b) *If Commonwealth policy regarding secondary scholarships remains unchanged, the State Government should supplement Commonwealth provision by awards of its own, based on a means test.*

Aboriginal, Immigrant and Socially Disadvantaged Children

14.50 Aboriginal and immigrant children may be considered along with other children who are educationally disadvantaged largely because of conditions extending beyond the school. We do not wish

¹⁰ R. Wiseman, "Social Class Differences in School Performance and Progress", *South Australian Education*, April 1970.

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to convey the impression that, in failing to make specific recommendations concerning Aboriginal education, we have not accepted the urgency of the social responsibility involved in the matter. We are very anxious that these children, who are on every count the most seriously disadvantaged group, should be seen to be so, and that appropriate steps should be taken. However, we think it important that action taken should be sufficiently well based to secure the desired results. Research and evaluation must accompany experimental programmes in order to establish the types of programmes likely to be most successful with particular groups. Such a conclusion should not be seen as an alternative to action, but as a basis for widespread action of an experimental nature, since it cannot yet be said that any clear-cut solutions have been worked out. The method most likely to lead to progress is to establish pilot projects in areas where problems are most marked, and to expand these as information of value is obtained. University and teachers college staffs should be invited to participate. Such a project is that of the Van Leer Foundation in pre-school education of Aborigines which the Education Department is already supporting. The same approach is, we suggest, appropriate to the special problem of non-English-speaking immigrants, and to special projects in compensatory education in schools where particular learning problems are widely evident.

14.51 Accordingly, we RECOMMEND that:

The Education Department should establish a small committee selected from appropriate staff in the Department and by co-option from beyond it to undertake pilot projects for the education of Aboriginal children and other socially disadvantaged children; and the necessary funds should be provided to develop and evaluate these projects.

Post-Secondary Level

14.52 In Chapter 12 we recommended the establishment of a Department of Further Education. We believe that this department has a significant role to play in equalising opportunities. In the community there are many adults who, for a variety of reasons, left school before they had reached anywhere near their potential attainment. Many of them have gone on developing their education through private reading and part-time study. The Department of Further Education would be in a position to react to community needs, to offer courses to meet these needs and to certify competence in particular areas. It must not be overlooked that the educational level of mothers is steadily rising as girls stay longer at school. The Department of Further Education should be able to offer programmes specially designed for young mothers. If the Department of Further Education is to make its maximum contribution to equalising opportunity, it is important that the tertiary education institutions accept

in tertiary courses, with credits in some cases, students who have shown in courses of further education the qualities needed for success in tertiary studies.

14.53 Tertiary education institutions differ in the academic performance of their entrants and also in the sex and social backgrounds of the pupils they attract. Steps taken to equalise opportunities in the school system will, of course, help to correct inequalities at the entry level. However, an important factor causing differential selection is undoubtedly parental income. Fees charged by universities and colleges of advanced education are considerable, but represent only a fraction of the total cost of maintaining a student at a tertiary institution. The two main sources of assistance to tertiary students in South Australia are Commonwealth scholarships and teaching scholarships. The former cover fees without a means test and provide a living allowance subject to a means test. The latter provide free tuition and a living allowance without a means test. In 1969, approximately 70 per cent of university students in South Australia were helped in some way to cover fees and living costs, although in many cases the assistance was quite small; of these about two-thirds were helped by Commonwealth scholarships or teaching scholarships. Apart from these two main sources of assistance, students are helped by cadetships and bursaries. There is also a fees-concession scheme, financed by the State Government for students at the universities and at the South Australian Institute of Technology, which provides grants and loans for the payment of fees, on the basis of a means test.

14.54 The present arrangements affect adversely those students who are unable to obtain financial help either towards the payment of fees or for living expenses. Thus the financial situation of the parents as well as the academic ability of the student determines whether or not he will attend a tertiary institution. We do not think that the outright abolition of fees and the universal provision of living allowances is a practicable solution, for it would be far too costly; and, by providing subsidies to those who do not need them, it would result in expenditure unnecessarily high to achieve the required result. Rather, we think that the long-run objective should be to replace the existing scholarship schemes with the payment of allowances, subject to a means test, to cover fees and provide for minimum living costs to the number of tertiary students who would be admitted within the quotas of the tertiary institutions. We raise this question again in Chapter 16, since the policy followed in assistance to tertiary students in general has important implications for the recruitment and bonding of teachers (see paragraphs 16.123-16.133).

14.55 Accordingly, we **RECOMMEND** that:

(a) *The State Government should approach the Commonwealth Government seeking a change in the basis of Commonwealth Uni-*

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versity and Advanced Education scholarships to allow all students accepted into the quotas of tertiary institutions to be eligible for assistance, subject to a means test, in the payment of fees and of living expenses.

(b) If Commonwealth policy regarding university and tertiary scholarships remains unchanged, the State Government should supplement Commonwealth provision by awards of its own, based on a means test.

CHAPTER 15

Resources and their Allocation

15.1 Chapters 4 to 14 have been concerned with analysing various aspects of the educational system of South Australia and with recommending improvements. In this chapter we look at the educational system as a whole. We shall pose two important questions and give some indication of how these may be answered. They are:

- (a) Can South Australia finance the programme of educational expansion suggested in the preceding chapters?
- (b) Has South Australia been making effective use of the resources that it has been devoting to education?

PAST EXPENDITURE ON EDUCATION

15.2 Table 15.1 sets out expenditure on education by public authorities in South Australia in 1969-70. The expenditure has been classified according to whether it is recurrent or capital, State or Commonwealth, in the public or private sector or for scholarships, and whether it is on primary, secondary, further or tertiary education. The total expenditure by public authorities of \$111.6 m. for 1969-70 does not represent all expenditure on education in South Australia because it excludes expenditure on fees and donations paid by persons to private schools, colleges and universities and also the capital expenditure of private schools and colleges. In 1968-69 for Australia as a whole private expenditure amounted to about 18 per cent of public expenditure. However, South Australia's proportion of private-school pupils (the main source of private expenditure on education) amounts to rather less than two-thirds of the Australian proportion. Accordingly a rough estimate would put private expenditure on education in South Australia at about \$13 m. This would exclude expenditure on books, uniforms and maintenance.

15.3 Four-fifths of the total expenditure on education by public authorities in 1969-70 was on recurrent account, one-fifth on capital account. Seven per cent of the total was paid to holders of scholarships and 3 per cent was paid as grants to private schools and the Kindergarten Union of South Australia. Of the remainder, 37 per cent was devoted to primary education, 32 per cent to secondary education, 27 per cent to tertiary education and 4 per cent to further education. The bulk of educational expenditure, five-sixths of the total, was financed by the State Government, the Commonwealth contributing the remainder.

Table 15.1
PUBLIC EXPENDITURE ON EDUCATION
SOUTH AUSTRALIA 1969-70

	Recurrent (a)			Capital			Total		
	State \$m.	Common- wealth \$m.	Total \$m.	State \$m.	Common- wealth \$m.	Total \$m.	State \$m.	Common- wealth \$m.	Total \$m.
Primary Education (b)	30.8	—	30.8	6.1	—	6.1	36.9	—	36.9
Secondary Education (b)	25.6	0.3	25.9	5.3	0.9	6.2	30.9	1.2	32.1
Further Education (b)	4.0	0.2	4.2	0.3	0.2	0.5	4.3	0.4	4.7
Tertiary Education									
University	7.2	5.5	12.7	1.4	1.5	2.9	8.6	7.0	15.6
Coll. of Adv. Education	2.0	1.4	3.4	1.2	1.1	2.3	3.2	2.5	5.7
Teachers College (b)	3.0	0.1	3.1	1.1	1.6	2.7	4.1	1.7	5.8
Sub-Total	12.2	7.0	19.2	3.7	4.2	7.9	15.9	11.2	27.1
Total Public Sector	72.6	7.5	80.1	15.4	5.3	20.7	88.0	12.8	100.8
Grants to Private Sector									
Private Schools	0.9	0.8	1.7	—	0.7	0.7	0.9	1.5	2.4
Kindergarten Union	0.7	—	0.7	—	(c)	(c)	0.7	—	0.7
Total Private Sector	1.6	0.8	2.4	—	0.8	0.8	1.6	1.5	3.1
Scholarships									
Secondary	—	0.7	0.7	—	—	—	—	0.7	0.7
Tertiary:									
University	—	2.4	2.4	—	—	—	—	2.4	2.4
Coll. of Adv. Education	—	0.2	0.2	—	—	—	—	0.2	0.2
Teachers College	4.3	—	4.3	—	—	—	4.3	—	4.3
Total Scholarships	4.3	3.3	7.6	—	—	—	4.3	3.3	7.6
Total	78.5	11.6	90.1	15.4	6.1	21.5	93.9	17.7	111.6

Source: State Treasury and Commonwealth Department of Education and Science.

(a) Excluding interest, sinking fund and other debit charges.

(b) Including allocation of overheads of the Education Department; an allocation has also been made to the S.A. School of Art which is included in colleges of advanced education.

(c) Less than \$50,000.

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15.4 Table 15.2 records the movement in public expenditure on education over the past 15 years. The proportion of total expenditure devoted to capital works rose steeply until the late 1950's and remained high for some years. It now stands at about one-fifth of the total.

Table 15.2

PUBLIC EXPENDITURE ON EDUCATION

SOUTH AUSTRALIA 1954-55 TO 1969-70

	Recurrent \$'000	Capital \$'000	Total \$'000
1954-55	13,564	2,236	15,800
1959-60	26,643	8,795	35,438
1964-65	49,141	15,195	64,336
1969-70	90,101	21,487	111,588

Source: State Treasury

15.5 Over the period 1954-55 to 1969-70 total expenditure on education rose by almost 14 per cent per annum; over the past five years the rate has been about 11.5 per cent per annum. These increases are expressed in money terms and do not reflect increases in real educational activity to the extent that cost levels have been rising. There are no indexes of educational costs published in Australia, but it is possible to calculate the indexes implicit in the Commonwealth Statistician's estimates of real public recurrent and capital expenditure.¹ On this basis growth in real educational expenditure over the period 1954-55 to 1969-70 can be placed at about 9 per cent per annum, and at about 7 per cent per annum for the past five years. This can be compared with a rate of growth of the Australian gross national product at constant prices of between 4.5 per cent and 5 per cent over the whole period.

15.6 Table 15.3 classifies public expenditure in the public sector according to the sector of education. The four sectors have expanded at very different rates over the period and this is illustrated in Table 15.4. The hierarchy of rates of growth corresponds to the hierarchy of sectors — the higher the rank of the sector, the higher the rate of growth. All rates over the past five years were lower than those for the whole period. The differential rates of growth according to sector are related to, but by no means wholly determined by, the different rates of growth of student numbers in the various sectors; for example over the whole period secondary school enrolments multiplied fourfold, whereas primary enrolments increased by only about 50 per cent.

15.7 The differential rates of growth have resulted in major changes in the distribution of expenditure between sectors of educa-

¹ See Commonwealth Statistician: *Australian National Accounts, National Income and Expenditure, 1968-69*, pp. 30-31.

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tion. The relative distribution of expenditure is shown in Table 15.5. The proportion of expenditure on primary education has dropped dramatically over the period, while the proportions on secondary and tertiary education have risen, although relative expenditure at the secondary level has been fairly stable for 10 years. Expenditure on further education still remains a small proportion of the total. It could safely be predicted that tertiary education will continue to absorb an increasing proportion of resources. It is interesting to note that primary, secondary and tertiary education are approaching a situation where they will be roughly equal in cost.

Table 15.3

PUBLIC EXPENDITURE ON EDUCATION BY SECTOR OF EDUCATION				
SOUTH AUSTRALIA 1954-55 TO 1969-70				
	Primary Education \$'000	Secondary Education \$'000	Further Education \$'000	Tertiary Education \$'000
1954-55				
<i>Recurrent</i>	7,160	3,132	484	1,910
<i>Capital</i>	1,736	449	—	51
Total	8,896	3,581	484	1,961
1959-60				
<i>Recurrent</i>	12,422	6,674	920	4,450
<i>Capital</i>	4,215	3,544	60	976
Total	16,637	10,218	980	5,426
1964-65				
<i>Recurrent</i>	18,830	13,765	1,891	10,434
<i>Capital</i>	6,812	3,778	658	3,698
Total	25,642	17,543	2,549	14,132
1969-70				
<i>Recurrent</i>	30,784	25,907	4,165	19,233
<i>Capital</i>	6,078	6,208	489	7,938
Total	36,862	32,115	4,654	27,271

Table 15.4

ANNUAL RATE OF GROWTH OF PUBLIC EXPENDITURE ON EDUCATION BY SECTOR OF EDUCATION					
SOUTH AUSTRALIA 1954-55 TO 1969-70					
	Primary Education per cent	Secondary Education per cent	Further Education per cent	Tertiary Education per cent	All Sectors per cent
1954-55 to 1969-70	9.9	15.8	16.3	19.2	13.6
1964-65 to 1969-70	7.6	12.9	12.9	14.0	10.9

15.8 The figures for pre-school kindergartens are not included in Tables 15.3 to 15.5. The Kindergarten Union of South Australia

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receives government grants and these have increased from \$175,000 to \$290,000, \$427,000 and \$717,000 for the four years 1954-55, 1959-60, 1964-65 and 1969-70 respectively. These grants have not kept pace with increases in total expenditure, and have fallen from 1.1 per cent of total expenditure in 1954-55 to 0.6 per cent in 1969-70. This is an area in which there might well be considerable expansion during the coming decade.

Table 15.5

RELATIVE DISTRIBUTION OF PUBLIC EXPENDITURE ON EDUCATION BY SECTOR OF EDUCATION

SOUTH AUSTRALIA 1954-55 TO 1969-70

	Primary Education per cent	Secondary Education per cent	Further Education per cent	Tertiary Education per cent
1954-55	59.6	24.0	3.2	13.2
1959-60	50.0	30.7	3.0	16.3
1964-65	42.8	29.3	4.3	23.6
1969-70	36.6	31.8	4.6	27.0

15.9 Table 15.6 sets out the division of total public expenditure on education between State and Commonwealth sources of finance and between expenditure in the public and in the private sectors and on scholarships. The Commonwealth Government has become an increasingly important source of finance for public educational expenditure and now finances nearly one-sixth of this expenditure in South Australia. Most of its expenditure is devoted to the tertiary level, to the private sector and to scholarships. Expenditure in the private sector still absorbs a very small share of total public expenditure, but the share has risen significantly in recent years. The share of expenditure on scholarships has also been rising. In fact, more than half this expenditure is by the State Government on teachers college scholarships. It is also interesting to note that expenditure on these scholarships exceeds by a considerable margin the cost of running the teachers colleges — \$4.3m. as against \$3.1m. in 1969-70.

15.10 Table 15.7 contains data on expenditure on education for the six Australian States. Care should be taken in drawing conclusions from this Table relating to the level of educational services in one State compared with another, as the proportion of the population of school-going age, the proportion attending non-government schools, and the level of personal income per head vary from State to State. The size of the State and the geographical distribution of its population are also important. The Table can, however, be used as a rough indication of the amount of effort which the citizens of a State are devoting to education through State expenditure. In this sense the effort of South Australia appears to be above the average of the Australian States.

Table 15.6

PUBLIC EXPENDITURE ON EDUCATION
BY SOURCE OF FINANCE AND BY SECTOR OF EXPENDITURE

SOUTH AUSTRALIA 1954-55 TO 1969-70

	Total Expenditure	From State Govt.	From Common- wealth Govt.	Proportion of Total from Common- wealth Govt.		In Public Sector	In Private Sector	On Scholar- ships	Proportion of Total in Private Sector		Proportion of Total on Scholar- ships	
		\$'000	\$'000	\$'000	per cent	\$'000	\$'000	\$'000	per cent	per cent	per cent	per cent
1954-55	\$'000 15,800	15,174	626		4.0	14,922	231	647	1.5		4.1	
1959-60	35,438	33,312	2,126		6.0	33,261	556	1,621	1.6		4.6	
1964-65	64,336	56,938	7,398		11.5	59,866	992	3,478	1.5		5.4	
1969-70	111,583	93,820	17,763		15.9	100,797	3,143	7,643	2.8		6.8	

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15.11 Expenditures on education by State governments in Australia have been increasing more rapidly than total State expenditures, so that education has become an increasingly important element in

Table 15.7

EXPENDITURE ON EDUCATION BY STATE GOVERNMENTS

AUSTRALIA 1967-68

	N.S.W. (a)	Vic.	Qld.	S.A. (b)	W.A.	Tas.	All States
Expenditure (\$m.)	298.5	248.1	91.7	80.5	68.0	30.3	817.0
Expenditure per Head of Population (\$)	68.7	75.1	53.4	72.0	76.2	79.9	69.5
Expenditure as Proportion of Personal Income (per cent)	4.4	4.6	3.9	5.4	5.1	6.0	4.6

Source: Commonwealth Statistician.

(a) Excluding Australian Capital Territory.

(b) Excluding Northern Territory.

State budgets. Table 15.8 illustrates this for South Australia. Total State expenditure includes revenue and loan expenditure and is comparable as between years. It includes the expenditure of business undertakings. The relative importance of education in the State's finances has more than doubled in the past 15 years; more than one-fifth of total State expenditure is now devoted to education. If the expenditure of public authority business undertakings is excluded from consideration the proportion would rise to over one-quarter. Expenditure on education is the single most important item in the State budget. Since expenditure on education is likely to continue to outstrip other expenditure, education will not only become even more important in the State budget but its finance will present to the State Treasury an increasingly difficult problem.

Table 15.8

STATE EXPENDITURE ON EDUCATION AND TOTAL STATE EXPENDITURE

SOUTH AUSTRALIA 1954-55 TO 1969-70

	Expenditure on Education \$'000	All State Expenditure \$'000	Proportion of Expenditure on Education per cent
1954-55	15,174	155,831	9.7
1959-60	33,312	209,348	15.9
1964-65	56,938	291,522	19.5
1969-70	93,820	424,026	22.1

Source: State Treasury.

FUTURE EXPENDITURE

15.12 We have shown in the preceding chapters that considerable expansion in the demand for education in all fields is to be expected

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in the next decade. We believe that this expansion in demand should be provided for; and that it is of the greatest importance to improve the quality of education, particularly by providing relatively more teachers in primary and secondary schools. We are not able to cost these proposals in detail, nor are we required to do so by our terms of reference. However, we believe that we should indicate the magnitudes involved and that we should set out the financial implications of carrying out such a programme.

15.13 In this and the following three paragraphs, we make a rough estimate of expenditure required in 1981, at present cost levels, to finance the progressive implementation over the next decade of the programme that we have suggested. We first consider recurrent expenditure. We have projected public current expenditure on pre-school, further and tertiary education in proportion to the projected movements in the number of students in those sectors respectively, and expenditure on primary and secondary education in proportion to the projected movements in the number of teachers in the two sectors respectively. These latter movements allow for improvements in the numbers of teachers relative to pupils of 28 per cent and 33 per cent in the primary and secondary sectors respectively. The relevant movements in students and teachers are set out in Table 15.9.

Table 15.9
INDICATORS OF EDUCATIONAL EXPANSION
SOUTH AUSTRALIA 1970-1981

	1970	1981	Ratio of 1981 to 1970
Pre-School:			
Students (a)	7,480	19,800	2.65
Primary:			
Students (b)	157,300	198,500	1.26
Teachers (b)	5,740	9,256	1.61
Secondary:			
Students (c)	71,800	93,200	1.30
Teachers (c)	4,193	7,228	1.72
Further:			
Students (d)	72,500	144,600	2.00
Tertiary			
Students (e)	18,100	36,000	2.00

(a) The figure for 1970 is a preliminary one. It is assumed that enrolments will rise to 7,800 in 1971, and at the rate of 1,200 thereafter.

(b) See paragraph 6.104.

(c) See paragraph 6.105.

(d) See paragraph 12.37.

(e) See paragraph 11.33.

15.14 In addition to our proposals relating to numbers of students and teachers we have proposed certain changes in the financial

arrangements of the Kindergarten Union of South Australia, a considerable expansion in ancillary staff in the schools, increases in funds for maintenance, equipment and general services and for scholarships, and certain administrative and organisational changes which will involve expenditure. We believe that our specific proposals relating to schools, together with a reasonable allowance for improvement in the sectors of further and tertiary education, can be financed by increasing real recurrent expenditure beyond that projected in the preceding paragraph by about 2.5 per cent per annum over the 11-year period to 1981,² and so we have applied an overall increase of one-third to recurrent expenditure for 1981 as projected in the preceding paragraph. The result of these calculations is that recurrent expenditure in 1981, at present cost levels, is projected to rise by 136 per cent to \$212m. compared with \$90m. in 1969-70.

15.15 Capital expenditure is related to the provision of additional places in educational institutions and the replacement of obsolete and sub-standard buildings. Table 15.9 indicates that over the period 1970-1981 an additional 165,000 places will be required. The cost of these places, at present cost levels, will be approximately \$178m.* We understand that 100,000 of the existing places in primary and 30,000 in secondary schools should be upgraded or replaced in the near future (see paragraph 9.32). The cost of such replacement would be about \$114m. Consequently total capital expenditure over the period would amount to about \$292m. The precise timing of the replacement programme would be, of course, a matter for decision in the light of priorities, but, if we were to assume that total capital expenditure rose steadily from the actual figure of \$21m. in 1969-70 to the figure of \$32m. in 1981, the total capital programme could be encompassed over the period.

15.16 It follows from the preceding paragraphs that total public expenditure on education necessary to achieve the programme that we have suggested would in 1981 be about \$244m. at present cost levels. This is a multiple of 2.19 over the period 1970-1981, which is a rate

*The most expensive proposal relates to ancillary staff (librarians, teacher aides, clerks, laboratory assistants, gardeners, etc.). Two ancillary staff members for every five teachers at an average salary equal to three-fifths of the average salary for teachers would be equivalent to an additional 25 per cent of teachers.

*The assumed costs per place, including some allowance for land, furniture and equipment, are as follows:

Pre-School	\$400
Primary	\$700
Secondary	\$1,450
Tertiary	\$5,000

The figure for pre-school places is based on current costs, those for primary and secondary places are based on the figures used in the National Survey of Educational Needs, December 1969, and that for tertiary places relates to recent costs in tertiary institutions. Expenditure required for additional places in further education was estimated at \$24m., being based on A. F. Sando, *A Study of the Future Needs of Technical Education in the Adelaide Metropolitan Area*, Education Department, 1969.

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of increase of 7.4 per cent per annum. This is close to the corresponding rate of increase over the past five years, but lower than the rate over the past 15 years (9 per cent) (see paragraph 15.5). We believe that this rate of increase will permit the implementation of our recommendations and suggestions.

15.17 What will be the implication of such a rate of increase on the proportion of South Australian resources that are devoted to education? It can be shown that the increase in real educational expenditure, estimated on the basis of the assumptions in the preceding paragraphs and on the assumption that wage and salary rates of educational employees rise parallel with those of all employees, would be likely to raise the proportion of our annual productive effort that would be devoted to education by about 60 per cent.⁴ If teachers' salaries were to be increased relative to those of the rest of the community, the proportion would, of course, be further raised. Australia as a whole devoted 4.2 per cent of gross national product to education in 1969-70. The above argument suggests that this figure would have to rise to about 6.7 per cent by 1981, if a programme of educational expansion similar to that suggested by the Committee was adopted throughout Australia. This represents a considerable increase. However, neither the increase nor the figure itself is unrealistic. The proportion of gross national product devoted to education in Australia increased by almost 60 per cent over a nine-year period between 1956-57 and 1965-66, from 2.52 to 3.96 per cent. Moreover, the United States of America was in 1968-69 spending 7.0 per cent of its gross national product on education (defined in broadly comparable terms)⁵ and Canada was already spending 7.0 per cent in 1966.⁶ Preliminary information for 1969 indicates that the Canadian figure had risen to 8.5 per cent in that year.⁷

⁴ Over the period 1970-1981 the work force may be expected to multiply by 1.29 (see Commonwealth of Australia, *Supplement to the Treasury Information Bulletin, Projections of the Labour Force, 1968-81*, August 1970, p. 20), and the value of national production will be multiplied by this as well as by improvements in productivity (production per member of the work force) and by increases in prices. Over the past decade, productivity in Australia has been rising by about 2.5 per cent per annum, which would multiply national production by 1.31 over an 11-year period. In paragraph 15.16, educational expenditure in real terms is projected to multiply by 2.19. About three-quarters of educational expenditure is on wages and salaries. If we assume that wage and salary rates of educational employees rise parallel with those of all employees, and that the prices of materials used for educational purposes move with the general price level, we can calculate the increase in the proportion of our resources that would be devoted to education as follows:

$$\frac{2.19 \times [1 + (0.75 \times 0.31)]}{1.29 \times 1.31} = 1.60$$

i.e., the proportion would increase by 60 per cent.

⁵ United States of America: *Digest of Educational Statistics*, 1969, pp. 15, 18.

⁶ Dominion Bureau of Statistics: *Survey of Education Finance*, 1966, p. 9.

⁷ Based on information from the Dominion Bureau of Statistics.

15.18 The realisation of the rate of expansion of educational expenditure postulated in paragraph 15.16 would have a considerable impact on the State's finances. In order to assess this impact it is necessary to move from real to money terms. Over the past 10 years the average rate of increase of costs in public expenditure has been about 4 per cent per annum. If it is assumed that this rate continues and that the State Government continues to finance the same proportion of public expenditure on education in South Australia as it did in 1969-70, public expenditure from State sources in terms of present costs will rise from \$94m. in 1969-70 to \$317m. by 1981. In the light of present Commonwealth-State financial arrangements, of the nature of the taxing powers of the State, and of the assumption of the same rate of growth of gross national product valued at current prices as has obtained over the past 10 years, namely 8 per cent per annum, overall State expenditure is likely to rise by perhaps 8.5 to 9 per cent per annum. Total State expenditure on all items in 1969-70 was \$424m.; on the above basis it might rise to \$1,060m. by 1981. Thus educational expenditure would have to rise from 22 per cent of total State expenditure to 30 per cent. In our judgment it is unlikely that the State Government could increase educational expenditure to this extent because it would reduce the funds available for non-educational activities to little more than would cope with population and cost changes. It follows that the State Government would have to increase the levels of its own taxation or would have to rely on additional finance from the Commonwealth Government. This can be illustrated on the assumption that the share of educational expenditure in total expenditure remains constant at its present level of 22 per cent. On this basis, some \$234m. would be available in 1981 from State sources for educational expenditure. There would then be a shortfall of \$83m. If this were to be met by increased State taxation, the rates would have to be increased by about 60 per cent; if it were to be met by increased Commonwealth assistance of a general kind, such assistance would have to be increased by rather more than 20 per cent; if it were to be met by increased Commonwealth aid earmarked for education it would increase the Commonwealth share of public expenditure on education in South Australia from 16 per cent in 1969-70 to nearly 40 per cent in 1981.⁸

15.19 The Committee does not see it as its task to argue that a certain proportion of the State's financial resources should be devoted

⁸ If costs in public expenditure on education rise more rapidly than costs in all public expenditure, the impact on the State's finances will be greater than that outlined in this paragraph. For example, suppose the State's costs in public expenditure on education rise at 5 per cent per annum then, other things being equal, if the share of expenditure on education in total State expenditure remains constant at its present level of 22 per cent, the shortfall in educational expenditure will be \$118m. The financing of this shortfall would require increases in the State tax rates of over 80 per cent, or an increase in general Commonwealth financial assistance of over 30 per cent, or an increase in the Commonwealth share of public expenditure on education in South Australia to nearly 45 per cent.

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to education. There is no optimum proportion at which the State should aim. Since education is almost totally in the hands of the public authorities, the amount that is spent on education is a political decision, made by governments in the light of the demands of their electorates, the competing claims for expenditure on other social services and the willingness of the community to pay taxation. We believe that the programme of change and expansion put forward in our Report is not an unrealistic one, but it will involve devoting a greater fraction of South Australia's resources to education than previously. This does not mean that expenditure on other requirements would have to be reduced in absolute terms, because, as productivity increases, more resources become available each year; but it does mean that a higher proportion of additional production would have to be devoted to education and that taxation would need to be levied to finance it. We think that our proposals are within the capabilities of the State, given some adjustment to Commonwealth-State financial arrangements; whether they can be implemented in the welter of the competing claims of both private and public expenditures is a question not of capacity but of will.

15.20 The preceding paragraph relates to the State's financial resources. However, there is a more fundamental aspect to the question of the State's capacity to sustain an educational programme of a particular magnitude, namely, whether the programme involves the use of too great a proportion of the State's highly educated manpower.⁹ In Table 16.3 it is shown that, over the period 1969-1981, the numbers recruited to the teachers colleges as a proportion of the numbers in grade XII in the preceding year are expected to decline from 33 per cent in 1969 to 22 per cent in 1981. In what sense can this figure of 22 per cent be said to be too high? It can only be too high relative to the demands of other professions; and, if it were too high, this would be reflected in increasing difficulty in recruiting new teachers and holding them in the profession. Since teaching will be taking a smaller share of grade XII students in the coming decade than it has in the immediate past, we are inclined to the view that the programme that we have suggested is not likely to be frustrated by the restraint imposed by the scarcity of educated manpower. It is important to note that, because of increasing retention at school, the pool from which teachers come, namely those who complete their secondary education, will, other things being equal, grow more rapidly than the total number of pupils that have to be taught at primary and secondary schools. This situation differs from that which obtained over the past 20 years when rapidly increasing numbers of pupils had to be taught by recruits who came from the small generations of a low-birth-rate era. Nevertheless, it must be recognised that the

⁹ According to Table 15.9, in 1981 there will be about 16,500 teachers in primary and secondary schools. In addition there will probably be another 6,000 teachers and lecturers in the other sectors. Thus the teaching force will number about 22,500 out of a work force of about 625,000, i.e., 3.5 per cent of the work force.

scarcity of highly educated staff may present problems, the solution of which may require economy in the use of highly educated staff by assisting it with ancillary staff and equipment that is less scarce (see paragraphs 9.2 and 9.3).

ALLOCATION OF RESOURCES

15.21 The above sections relate to the first question posed at the beginning of the chapter and have been concerned with the aggregate of resources devoted to education. We now turn to consider the second question, namely the effective use of that aggregate.

15.22 The assessment of the effectiveness of the use of resources implies criteria for measuring effectiveness. For example, when the efficiency of a factory is measured, the cost of production per unit of output may be used, or when the efficiency of a business operation is in question the profit earned per cent of capital employed, or when an individual operative is being checked, his production per man-hour. These examples all involve objective, measurable criteria. Such criteria could, in principle, be used in measuring the efficiency of an educational system; thus, the efficiency of a teacher could be measured by the number of pupils that he could handle, and the efficiency of a university by the cost per student graduated. Clearly, however, such simplistic criteria must be rejected for an educational system. The "product" of an educational system is not a simply quantifiable variable, like tons of steel or dollars of profit. The educational system is concerned with values and qualities which cannot be objectively assessed in any simple way. This is not to say that assessment is impossible or that there is no point in asking whether the resources being devoted to education are being used effectively; it is only that a level of complexity, far greater than that of the world of manufacturing or business, is involved.

15.23 The effectiveness of an educational system can be judged only in relation to its purposes. The purposes themselves are complex (see Chapter 3); and it is not surprising that they cannot be specified in precise quantifiable terms. Moreover, with limited resources, all purposes cannot be realised at once; the more resources devoted to A, the fewer available for pursuing B. Consequently, some weighting system must be adopted to reflect the importance of individual goals; and such a system cannot itself be quantified. In fact, given the purposes, it is simply not possible to set down at any particular time a configuration of educational activities which could be said to be an optimum one for that time, in the sense that it would result in a greater achievement of the purposes than any other configuration. Nevertheless, the impossibility of a grand assessment of the educational system as a whole should not inhibit more modest inquiries into the effectiveness of parts the system.

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15.24 Questions about the allocation of resources can be asked at two levels. First, given that there is an extra so many million dollars available to spend on education, how should this sum be distributed between the various activities of education to conform best with the purposes of the system? This question may also be asked retrospectively: was the last so many million dollars spent appropriately? Secondly, given a certain expenditure on a certain activity, could more be achieved with a different pattern of spending within that activity? We deal with these two types of question in turn.

15.25 Educational authorities should be continually asking and answering questions relating to the distribution of resources between activities. We do not doubt that the Education Department regards this as one of its duties as far as its own schools are concerned, but the Department's resources are limited, and, in any case, it is not responsible for the whole educational system. We believe that the following are necessary conditions for the establishment of a continuous process of assessment of resource allocation:

- (a) The various educational authorities must be staffed with senior officers with the appropriate expertise and with sufficient time.
- (b) The appropriate statistical material must be available.
- (c) There must be a continuing appraisal of educational goals.
- (d) There must be provision for co-ordination within and between the main educational sectors.

We believe that our proposals relating to the organisation of the Education Department (paragraphs 17.90–17.93), the establishment of an Advisory Council of Education with a full-time secretariat (paragraph 17.29) and the establishment of such bodies as the Tertiary Education Committee (paragraph 11.74), the Institute of Colleges (paragraph 11.60) and the Pre-School Education Committee (paragraph 10.70) will help in producing the above conditions.

15.26 The balance between primary, secondary and tertiary education provides an interesting illustration of the need for the kind of assessment referred to above. The movements in public expenditure on education according to sector over the period 1954-55 to 1969-70 are set out in Tables 15.3–15.5. In paragraphs 15.5–15.6 it was pointed out that expenditure had shifted from primary to secondary and tertiary, particularly to tertiary. This might suggest that primary education has become neglected. However, the analysis can be extended by expressing expenditure in terms of constant 1966-67 prices (see paragraph 15.5) per student in each sector. The results are set out in Table 15.10 for 1959-60 to 1969-70, data for 1954-55 not being complete. They indicate that real expenditure per student has been rising in all sectors, with the secondary sector, not the primary sector, somewhat trailing the field.

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15.27 We should like to make two further comments on the allocation of resources between activities. The view has been expressed by the Education Department that, while the Department is

Table 15.10

PUBLIC EXPENDITURE ON EDUCATION AT CONSTANT 1966-67 COSTS
PER STUDENT ENROLLED

SOUTH AUSTRALIA 1959-60 TO 1969-70

	Primary Education		Secondary Education		Tertiary Education	
	Amount \$	Increase per cent	Amount \$	Increase per cent	Amount \$	Increase per cent
1959-60	127	—	272	—	690	—
1964-65	144	13.4	287	5.5	894	29.6
1969-70	170	18.1	323	12.5	1,120	25.3

very anxious to have assistance for education from the Commonwealth Government, the practice of that Government's making grants to the Department earmarked for specific purposes, for example for science laboratories or school libraries, greatly inhibits the Department's freedom to determine its own priorities in relation to educational goals. This view is only one step removed from the view that no Commonwealth grants to the States should be earmarked, and that the State Government should be left free to allocate its resources as it pleases within the constraints imposed by its overall budgetary position. We wish to say that we have a great deal of sympathy with the view of the Education Department in this matter, on the grounds that, unless the authority responsible for the schools is the one determining priorities, misallocation of resources in relation to goals is likely to follow.

15.28 Our second comment relates to government grants to non-government schools. Whenever it is proposed to assist non-government schools, the question must be asked whether the funds involved might have been better spent in another way. This question may be considered from the points of view of the community, of the Commonwealth and State Governments combined or of the State Government alone. It is likely that the amount of State Government assistance per student which would enable the non-government schools to survive or even expand would be appreciably smaller than the average cost per student in the government schools. Consequently, from the point of view of the State Government it would certainly be economical to continue, and possibly to increase, the assistance to non-government schools. On the other hand, the Commonwealth Government is also assisting non-government schools directly by grants and indirectly by assisting parents through income tax concessions. It has been suggested that in at least one State the combined Commonwealth and State assistance is already approaching the average cost per student in the government schools.¹⁰ Thus, from the point of view of public authorities as a whole, the present level of assistance to non-

¹⁰ See P. J. Fensham, *op. cit.*

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government schools may not be economic. Since, in addition to government aid, non-government schools charge fees which impose a net burden on the after-tax income of parents, it follows that the community is likely to be devoting more resources per student in non-government schools than in government schools; and this might well conflict with the community's educational goals or with its views of what is equitable. The preceding argument is not intended to be conclusive, because it puts aside the question of the desirability of the existence of non-government schools, *per se*.

15.29 We now turn to the efficient use of resources within a particular activity. We believe that there are at least two conditions necessary to promote such efficiency:

(a) The responsibility for carrying out the activity should not be divided.

(b) The purpose of the activity should be clearly understood.

Our proposals concerned with the relations between the Education Department and the Public Service Board, with the relations between the Education Department and the Public Buildings Department (paragraphs 17.69 and 17.78) and with the responsibility of headmasters (paragraphs 17.45 and 17.48) are directed towards the first of the above conditions. The second of these is an administrative practice which should be fostered throughout all educational institutions.

15.30 The Committee has encountered in its inquiries a number of cases where resources employed in a particular activity could be used with greater effect. These vary in their significance, but we set them out below as illustrations of what we intend in the preceding paragraph. The Committee did not seek them out deliberately, and they constitute by no means an exhaustive list.

15.31 The following cases illustrate lack of clarity of purpose:

(a) COMMONWEALTH SECONDARY SCHOLARSHIPS SCHEME. The avowed purpose of this scheme was to enable promising boys and girls to complete their secondary education.¹¹ In fact most of the scholarships are awarded to students who will complete their secondary education in any event. In order to achieve its purpose the scheme would have to be radically transformed (see paragraphs 14.47–14.49).

(b) ALLOWANCES TO TEACHERS IN TRAINING. It is now a commonly accepted view that these allowances should be varied with the cost of living. If the purpose of the allowance is to secure an adequate supply of recruits to teaching, the allowances should move not with the cost of living but with the state of the market. The question of the appropriate value for scholarships is a separate issue.

(c) FREE TEXTBOOKS IN PRIMARY SCHOOLS. The purpose of this scheme was apparently to move towards freer education. If this is intended as part of a programme for equalising educational and social oppor-

¹¹ Commonwealth Parliamentary Debates, 19th May 1964, p. 2034.

tunity, it is a nice question whether greater equalisation could be secured with the same expenditure and the use of a means test. This argument is, of course, of wide applicability. A subsidiary purpose of the free textbooks scheme might have been to reduce costs of textbooks by permitting large runs in their production, but it should be noted that this may conflict with the educational goal of variety in the range of textbooks.

15.32 The following cases illustrate division of responsibility:

(a) **SCHOOL BUILDING PROGRAMME.** Responsibility for the building programme is shared between the Education Department and the Public Buildings Department. The former needs the buildings, knows their purposes and will use them; the latter designs and builds them and controls the expenditure on them (see paragraphs 17.70–17.76). The Committee is convinced that this kind of arrangement leads to a building programme that is much less effective than it should be.

(b) **EXPENDITURE ON MINOR ITEMS WITHIN SCHOOLS AND TEACHERS COLLEGES.** The procedures which limit the power of headmasters and principals of teachers colleges to spend funds on maintenance, minor equipment, building repairs and ancillary staff lead to waste, frustration and inefficiency (see paragraphs 17.39–17.42).

15.33 The following cases illustrate both lack of clarity of purpose and division of responsibility:

(a) **ANCILLARY STAFF.** A widespread complaint in schools is that professional staff are obliged to spend a great deal of time on clerical and other duties that could be undertaken by lower paid and more readily obtainable ancillary staff (see paragraph 9.4). This situation has persisted partly because there is a lack of clarity about the function of the professional teacher and partly because ancillary staff have been under the control of the Public Service Board while professional staff have been under the control of the Minister of Education (see paragraph 17.60).

(b) **SALE OF BOOKS IN HIGH SCHOOLS.** A common practice in large high schools is for a teacher to spend a great deal of his time managing the sale of textbooks. Profits from the sales accrue to school funds and are then at the disposal of the school council and the headmaster. In effect, the salary of the teacher is converted into school funds, usually at a rate of exchange of less than par!

(c) **DESIGN OF BUILDINGS.** The divided responsibility in controlling the building programme, combined with some lack of clarity of building function, leads to wasteful buildings. In one teachers college art and craft rooms are lavish, while science laboratories are not even at high-school standards; a luxuriously finished but unheated swimming pool of Olympic proportions has been provided, whereas a less elaborate, smaller but heated and therefore much more usable one, could have been constructed; and space standards appear to be unnecessarily generous particularly in the light of the urgent demand to replace the obsolete buildings of other colleges.

CHAPTER 16

The Preparation of Teachers

16.1 The first part of this chapter describes present arrangements for the education of teachers. Recommendations on particular matters other than those which seemed to us to involve important issues of general principle are made as present conditions are described. In accordance with our terms of reference, the teachers colleges are the main focus of attention, other institutions concerned in the education of teachers being discussed only so far as they are related to the organisation and government of teachers colleges. We reserve for separate discussion in the latter part of the chapter the central issues relating to the government and organisation of the teachers colleges and the conditions under which teachers are recruited.

THE INSTITUTIONS AND THEIR COURSES

16.2 The Education Act gives the Minister power to establish and maintain institutions for the education of teachers. The first institution established for this purpose in South Australia was the Adelaide Teachers College, which opened in 1876. In conjunction with the University of Adelaide it prepared teachers for all levels of schooling until the increased population and a rise in educational standards brought about corresponding changes in numbers both of teachers colleges and of students in training. There are now five teachers colleges in the State under the control of the Education Department, conducting a range of courses. They are:

- (a) Adelaide Teachers College — established 1876. Provides preparation for general secondary teachers and specialist teachers for secondary schools in music, commercial subjects, agriculture and physical education.
- (b) Wattle Park Teachers College — established 1957. Prepares infant and primary teachers.
- (c) Western Teachers College — established 1962. Prepares infant, primary, art and craft teachers.
- (d) Bedford Park Teachers College — established 1966. Prepares primary and secondary teachers.
- (e) Salisbury Teachers College — established 1968. Prepares infant, primary and secondary teachers.

The number of students in training has increased from 511 in 1954 to 4,480 in 1970.

16.3 Other than the Kindergarten Teachers College there are no non-government colleges providing full teacher education in South Australia. The Lutheran Teachers College gives a religious orientation to teaching for students whom it sponsors through university or State teachers colleges. In 1970 there were 121 private students attending departmental teachers colleges.

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16.4 The education of teachers may be broadly divided into areas of academic and specialist study common to teachers and those preparing for a number of other occupations, and areas specific to the education of teachers. The latter group is concerned with the theoretical studies basic to educational decision-making, including specific aspects of philosophy, sociology, history and psychology, and with the practice of teaching. The studies concerned with the theory and practice of teaching are usually referred to as the professional subjects.

16.5 Over the long period when the Adelaide Teachers College was the only teachers college it had been the practice for students taking courses of more than one year's duration to take their general education mainly, if not wholly, at the University of Adelaide, irrespective of the level of teaching for which they were preparing. The professional subjects alone were the province of the College, and the more theoretical of them were, until recently, accepted as subject units by the University, thus coming under the latter's general supervision though they were taught by College staff. The greater part of the academic responsibility for the education of teachers thus rested with the University rather than with the Education Department through its control of the Teachers College.

Table 16.1

FULL-TIME ENROLMENTS AT TEACHERS COLLEGES

SOUTH AUSTRALIA 1954-1970

	First-Year Students			Total Students		
	All Students	At University	per cent	All Students	At University	per cent
1954	232	151	65	511	374	73
1955	272	174	63	588	426	72
1956	405	272	67	752	550	73
1957	426	277	65	892	646	72
1958	513	254	50	1,072	721	67
1959	631	318	50	1,328	774	58
1960	766	378	49	1,619	917	57
1961	1,002	436	44	2,021	1,075	53
1962	1,150	475	41	2,419	1,226	51
1963	1,151	518	46	2,655	1,393	52
1964	1,281	589	46	2,984	1,604	54
1965	1,177	536	46	3,053	1,587	52
1966	1,415	608	43	3,353	1,678	50
1967	1,290	550	43	3,498	1,690	48
1968	1,344	543	40	3,689	1,654	45
1969	1,498	578	39	3,820	1,636	43
1970	1,759	571	32	4,480	1,699	38

Source: Education Department.

16.6 With the growth in number and intake of colleges since 1957 and the ending of sub-graduate courses at the University of Adelaide to which students not qualified to matriculate had been admitted, the situation has changed. Before 1957 about three-quarters of all students preparing to teach were taking some courses at the

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University. Since that time an increasing proportion of teachers in training have been taking their general as well as their professional studies within the colleges themselves. Adelaide Teachers College has now become a college for training secondary school teachers, and only about one-fifth of infant and primary teachers take any university subjects. A majority of student teachers is now being educated entirely within the colleges, and the proportion is likely to increase in the future. The percentage of all students entering teachers colleges who were taking university subjects fell to 43 in 1969. Table 16.1 illustrates both the dramatic increase in the number of students in training since 1954 and the declining proportion taking university subjects. The figures relate to the pre-service education of teachers only. The numbers attending university before 1962 are estimates only.

16.7 The increasing importance of the colleges in the education of teachers is a result both of changed entrance requirements for universities and of the need to train large numbers of teachers, entailing the acceptance of many who either lack the qualifications for university entry or have been unsuccessful there. In addition it appears that many girls are choosing teachers college courses in preference to the longer university courses. Along with these changes and the longer school experience of students entering training has gone the development within the colleges of courses of greater depth and length, culminating in 1965 in the introduction of their own diplomas which were reorganised in 1969 to give a common pattern in all fields.

16.8 All students training to teach in government schools are attached to a teachers college whether their education is undertaken entirely within the college or in association with other institutions. Universities and teachers colleges are, in terms of numbers of students studying there, the most important institutions engaged in teacher education. Adelaide and Bedford Park, the two teachers colleges to which secondary students in training at universities are attached, are each adjacent to a university campus. Other institutions engaged in the preparation of teachers are the South Australian School of Art, the South Australian Institute of Technology and Roseworthy Agricultural College. Students taking subjects at these institutions combine study there with courses taken within a teachers college. The new Salisbury Teachers College is the first completely self-contained teachers college in the State, none of its students attending any outside institution.

16.9 Table 16.2 summarises the main types of courses available to teacher trainees preparing to teach in primary and secondary schools, the institutions which provide them, the qualifications sought and the length of courses.

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Table 16.2

COURSES AVAILABLE TO TEACHER TRAINEES IN SOUTH AUSTRALIA, 1970

Category of Students	Length of Course	Where Offered	Qualifications Sought
Secondary General	4 years with possible extension for Honours	University of Adel., Flinders University, S.A.I.T. in association with Adelaide and Bedford Park Teachers Colleges	B.A., B.Sc., B.Ec., plus Diploma in Education, or Diploma in Teaching (Secondary), Dip.Tech. plus Dip.Ed.
Music (Secondary)	4 years with possible extension	University of Adel. in association with Adelaide T.C.	B.Mus. plus Diploma in Education
Secondary General	4 years	Adelaide T.C., Bedford Park T.C.	Diploma in Teaching (Secondary) and Advanced Diploma
	3 years with possible extension	Salisbury T.C.	Diploma in Teaching (Secondary) and Advanced Diploma
Secondary Commercial	3 years with possible extension	Adelaide T.C., University of Adel.	B.Ec. plus Dip.T. or Diploma in Teaching (Secondary) and Advanced Diploma in Teaching
Boys' Craft (Secondary)	3 years with possible extension	Western T.C. and Technical Colleges	Diploma in Teaching (Secondary) and Advanced Diploma
Home Economics (Secondary)	3 years with possible extension	Western T.C., S.A.I.T.	Diploma in Teaching (Secondary) and Advanced Diploma
Secondary Art and Craft	3 years with possible extension	School of Art, Western T.C.	Diploma in Teaching (Secondary) and Advanced Diploma
Physical Education (Secondary)	4 years with possible extension	Adelaide T.C.	Diploma in Teaching (Secondary) and Advanced Diploma
Primary	2 years with possible extension (a)	Wattle Park T.C., Western T.C.	Diploma in Teaching (Primary) and Advanced Diploma
Primary	3 years with possible extension	Bedford Park T.C., Salisbury T.C.	Diploma in Teaching (Primary) and Advanced Diploma
Primary	3 years plus internship	Flinders University in association with Bedford Park T.C.	B.Ed.
Infant	2 years with possible extension (a)	Wattle Park T.C., Western T.C.	Diploma in Teaching (Primary)
Infant	3 years with possible extension	Salisbury T.C.	Diploma in Teaching (Primary)

Source: College Principals.

(a) The length of these courses will rise to three years for entrants in 1971.

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16.10 Most students preparing to be teachers of secondary general subjects enter university courses with the object of gaining a bachelor's degree and a diploma in education. The course takes a minimum of four years. In 1969, 76 students, or 13 per cent of all students entering training who had been admitted to university study in 1966, were granted an extra year to gain an honours degree. In 1970 the 56 students granted a similar extension amounted to 11 per cent of the relevant intake in 1967. According to the university attended, students are attached to either Adelaide or Bedford Park Teachers College. The colleges provide courses in physical activities, music, art and communication arts for university students attached to them, and arrange teaching experience other than that required as a formal part of the postgraduate diploma in education. They are also responsible for the payment of allowances, review of student progress and some measure of pastoral care. At Adelaide Teachers College tutorials are provided in university subjects in addition to those provided by the University. At the University of Adelaide no undergraduate studies in education are now available and there are no common courses or interchange of staff in professional courses between the University and the College. At Flinders University students qualifying for secondary teaching through the university study one unit of education concurrently with study for their bachelor's degree. Some subjects taught at Bedford Park Teachers College are recognised as part-units in university education courses, and some professional courses are taught jointly by college and university lecturers. A further important link between the College and Flinders University is the fact that the Professor of Education is also the Principal of the College.

16.11 The education of some secondary general teachers entirely within the colleges is of recent origin, and, except at Salisbury Teachers College, most students following such courses have transferred to them after failing some subjects at university. Only 28 of the 454 students admitted to a first year of study in the areas of science, arts and economics at Adelaide and Bedford Park Teachers Colleges in 1970 were admitted to internal courses as a preparation for secondary teaching; the great majority entered courses at the universities. The Department expects that the number of applicants qualified to enter the universities to train for teaching in these areas will not in future be high enough to meet its requirements, and that increasing numbers of students will be admitted direct to internal college courses. We do not agree that this will necessarily be so, as will be discussed later (see paragraph 16.121). Sixty-seven students, 18 of whom were qualified to matriculate, entered internal secondary courses in arts and science at Salisbury Teachers College in 1970. The qualification sought by secondary teachers taking internal college courses is the Diploma in Teaching (Secondary), a three-year course. Except at Salisbury Teachers College, all students entering secondary general courses train for a minimum of four years, giving the more successful the

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opportunity to gain an Advanced Diploma in addition to the basic one. Advanced Diplomas were offered for the first time in 1970, and have been accepted as equivalent to the four-year secondary university qualification of a bachelor's degree plus a diploma in education for promotion purposes within the Education Department.

16.12 Most primary and infant teachers have received only two years' training, though the proportion taking longer courses has been increasing each year, and all students admitted in 1971 and thereafter will train for at least three years. Since the lowest academic award for these teachers, the Diploma in Teaching (Primary), requires three years' full-time study, only a minority who have been granted extended periods of study have been in a position to gain it in their pre-service education.

16.13 Only a small proportion of primary and infant trainees now take any university study. Flinders University offers the only undergraduate degree in education in South Australia. This degree, of Bachelor of Education, is designed for primary teachers and requires an internship of two terms in a school after the completion of three years' study. Of the 235 students who entered primary courses at Bedford Park Teachers College in 1970, 84 were admitted to courses leading to the B.Ed. From Wattle Park and Western Teachers Colleges students with good matriculation passes may choose to take some university units as part of their college course. The more able are granted extended courses, and a few graduate. In 1962, 35 per cent of first-year infant and primary trainees took some university subjects. The proportion fell to 24 per cent in 1968, 18 per cent in 1969, and 16 per cent in 1970.

Diplomas in Teaching

16.14 Diplomas in Teaching, newly revised in 1969, are the basic qualification now sought by all teacher trainees who are not taking full university courses. They are awarded by the Education Department, and are all three-year courses offered in the field of primary, secondary or technical education. They aim at providing the same balance of studies in each area. The Diploma in Teaching (Technical) provides for the first time a distinctive qualification for teachers in technical colleges. It does not replace previously existing diplomas as do the other two basic qualifications, but carries the pre-service education of teachers into a new field. It will combine study at the South Australian Institute of Technology or technical colleges with general and professional studies at Western Teachers College. Advanced diplomas will be available in each of the three areas, requiring an extra year of study.

16.15 The rationale of the new diplomas is set out in the preamble to *E.D. Circular 61*, September 1969:

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The ensuing Regulations for Diplomas in Teaching are based on a number of principles:

1. That the main aims of a programme of teacher preparation are:
 - (1) to provide a general, liberal education;
 - (2) to provide a deep insight and understanding in at least one area of knowledge;
 - (3) to provide professional knowledge and understanding in the theoretical bases of the disciplines of education;
 - (4) to provide understanding and competence in methods and techniques;
 - (5) to provide for the personal development of the teacher;
 - (6) to provide mastery of the subjects to be taught.
2. That all teachers should satisfy basic preparation requirements. All teachers require mastery of a core of educational theory, a general education and opportunity for personal development whether they be teachers of English or Mathematics, Arts or Crafts, or School Librarianship in a secondary school or the general teacher in the primary or infant school.
3. A basic Teaching Diploma (Dip.T.), whatever the field and whatever the subjects to be taught, should have essentially the same kind of balance with respect to the major elements of teacher education. It should be a nine-unit general teaching diploma which can be completed in three years of full-time study.
4. In the basic three-year Diploma there should be opportunity for some students to study one subject for three years. This may be in preparation for a specialist qualification, but the three units would be part of the liberal education and study in depth, referred to above. The Advanced Diploma in Teaching offers opportunity for specialisation in a field or area.
5. The professional aspects of teacher preparation, set out in points (3) and (4) above, are essential but the organisation of the relevant courses is left to each Teachers College.

16.16 Each diploma is composed of three schedules, a professional one, an academic one, and an expressional or applied one which includes such subjects as art, craft, physical education, drama and librarianship. To gain the diploma nine units must be passed which span the three schedules in prescribed proportions, allowing students preparing to teach in specialist areas to take three units from the expressional or applied schedule. In addition to the professional studies of schedule I, all students must carry two academic subjects to a second year, or one to a third. University, Institute of Technology and School of Art subjects may be accepted as diploma units.

16.17 A Board of Studies exists for each diploma, and a Committee to co-ordinate their work. The Co-ordinating Committee has eleven members, six of them officers of the teachers colleges. The Board of Studies for the Diploma in Teaching (Secondary), whose composition is set out below, gives the pattern for the three Boards of Studies:

The Director of Secondary Education (Chairman), or his nominee.

The Director of Teacher Education and Services, or his nominee.

The Principals of Teachers Colleges where secondary courses are provided.

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One member representing the staffs of Teachers Colleges where secondary courses are provided, to be nominated by the Principals of the Teachers Colleges.

Two teachers from appropriate schools, nominated by the South Australian Institute of Teachers and approved by the Director-General of Education.

Two inspectors of appropriate kinds, appointed by the Director-General of Education. (One Inspector should be an Inspector of Art or an Inspector of Craft.)

The Principal, South Australian School of Art.

The Secretary of the Boards of Studies, appointed by the Director-General of Education.

The Boards of Studies ratify schedules of subjects and courses of study submitted by principals of the teachers colleges and make recommendations to the Director-General.

16.18 Attention is drawn elsewhere in this Report (see Chapters 9, 10, 12 and 13) to the apparent need for courses not at present provided in teachers colleges. These needs mainly relate to the further education of teachers holding basic qualifications, both generally and in particular fields such as the preparation of special teachers for children handicapped in various ways, including those with specific learning difficulties for whom remedial teaching is required; and to teacher training in the fields of technical and adult education. The possibility of training pre-school teachers in government colleges, perhaps in co-operation with the Kindergarten Teachers College, is also raised.

STAFFING

16.19 The staff of teachers colleges is divided into two groups — the professional staff, which includes the principals, vice-principals, deans of women, lecturing staff and librarians, all of whom are employees of the Education Department, and ancillary staff, mostly clerical and custodial, who are employed by the Public Service Board.

Professional Staff

16.20 Studies undertaken in teachers colleges fall into three general areas:

- (a) Academic disciplines in arts and sciences.
- (b) Professional preparation, both theoretical and practical. This includes the study of philosophy, history, sociology and psychology, the areas from each discipline being selected with a view to providing the basis of a coherent theory of education on which practice can be based intelligently. It also includes practical teaching and metho-

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dology which ideally integrate relevant portions of the disciplines underlying a theory of education with practical techniques of teaching in the classroom.

(c) Expressional and practical activities in the fields of art and craft, physical education, drama and music undertaken both as a preparation for teaching and as a contribution to the personal development of the student.

Table 16.3

QUALIFICATIONS OF FULL-TIME LECTURING STAFF IN TEACHERS COLLEGES (a)
SOUTH AUSTRALIA 1969-1970

	All Staff 1969	New Staff 1970
<i>General University Qualifications</i>		
Doctor of Philosophy	5	1
Master	18	14
Bachelor (Honours)	39	17
Double Bachelor	7	2
Bachelor (Pass)	86	14
Sub-Graduate	15	1 (b)
Total	170	49
<i>Qualifications in Education</i>		
Doctor of Philosophy	2	—
Master of Education	1	3
Bachelor of Education	8	2
Double Diploma	34	9
Diploma in Education	46	7
Diploma in Teaching	29	6
None	50	22
Total	170	49

Source: College Handbooks and information supplied by College Principals.

(a) Excluding librarians and lecturers in art and craft, home economics, physical education, communication arts and librarianship.

(b) Seconded on a temporary basis.

16.21 Table 16.3 analyses the academic qualifications of professional staff employed in teachers colleges in 1969 and of those newly employed in 1970. Lecturers in art and craft, home economics, physical education, communication arts and librarianship have been excluded. In these areas university qualifications, though held by many staff, are less relevant indicators of specialist competence. It is difficult to present qualifications in ways which give a composite picture, and some distortion attends the method here used since reference to either section of the Table in isolation tends to underestimate qualifications. For example, a high proportion of the surprisingly large number of lecturers without qualifications in education have been employed on the basis of academic qualifications in the area of their subject speciality, usually combined with teaching experience. In recent years the colleges have sought academic staff

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with an upper second class honours degree or higher and with a knowledge of the theory and practice of education. However, until the 1969 award raised salaries to a point where they were, temporarily at least, competitive with those of other tertiary institutions, it did not in practice prove possible to confine recruiting to such people. Staff appointed in 1970 had higher academic qualifications in areas other than education than those previously employed. Fifty-nine per cent of those employed in the colleges in 1969 held a pass degree or sub-graduate qualification compared with 30 per cent of those appointed in 1970. We should expect this trend to continue. In future, higher qualifications are likely to be required among teachers college lecturers, and people holding such qualifications are also likely to be available in greater numbers to fill the positions offered.

16.22 We endorse the statement regarding qualities desirable in the professional staff of teachers colleges made in the Final Report of the Expert Committee on Teacher Education of U.N.E.S.C.O.¹

Ideally staff in teacher education institutions should constitute a highly selected group equivalent in calibre to university staff. They should be educated to a high cultural level, should have appropriate understanding or practical experience of the problems and conditions within school systems, should have pursued appropriate specialised studies of pedagogical subjects to an advanced level, and should be capable of carrying out original work in their own field.

16.23 Staff are expected to engage in research or undertake work towards higher academic qualifications. A high proportion, especially of younger staff, is engaged in study for a higher degree, a fact which plays its part in explaining the low level of research output from the colleges. Additional explanations may be sought in the lack of regular study leave, the comparatively long academic year, which is geared to that of schools, and the breadth of duties in which lecturing staff are involved. These include the supervision of practice-teaching, maintenance of contact with the work of the schools, pastoral care of a student group and service on curriculum committees and in in-service education. The shortage of clerical staff has in the past involved lecturing staff in administrative and clerical work which has undoubtedly taken time from professional duties, and the recent restructuring, especially of professional courses, has doubtless been time-consuming. However, the staff/student ratio of 1:12 planned for the colleges is such that it ought theoretically to make research activity, especially that relating to the evaluation of teaching techniques, possible on a greater scale than seems evident at present. Tertiary status implies such activity, and may involve building a tradition more clearly differentiated from that of the schools, with a different pattern of utilisation of staff including length of staff vacations. There is at present some ambiguity in the vacation entitlement of teachers college lecturers. The regulations do not differentiate between the colleges and the schools, and many staff and some

¹ U.N.E.S.C.O., Paris, 1968, Section 3:3:2.

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colleges have interpreted this as meaning that vacation provisions are identical. However, if the colleges are regarded as tertiary institutions and their staff paid comparable rates with those in other such institutions, this involves the explicit acceptance of comparable working conditions.

16.24 South Australia, in the recruitment of staff to its teachers colleges, has enjoyed advantages which are now ending. These advantages arose from the fact that no other State practised open advertisement. Appointments to college staff in other States have been made from within the teaching service of the particular State. The Report of the Martin Committee stressed the importance of the principle of open advertisement as "fundamental to the development of a vital programme of teacher education".² The success of open advertising is reflected in the fact that approximately a quarter of the staff of the colleges have been drawn from beyond the State. The extent to which the newer colleges have been able to draw on outside staff is shown by an analysis of the staff employed at Salisbury Teachers College in 1969. Of the 15 staff-members appointed, seven were South Australians, five of whom had had extended periods of study, research or professional observation overseas. Four came from other Australian States, two from New Zealand and one each from England and the United States of America. The South Australian Education Department has shown an enlightenment in this aspect of its policy beyond that of any other education department in Australia. The only aspect of preference to teachers from within its own system has been the appeals system which enabled serving teachers to challenge appointments to the staff of the colleges. This system has now been terminated for appointment to college lectureships. However, the initial advantage enjoyed by South Australia is ending as other States move towards open advertisement. Queensland, Victoria and Tasmania have already done so. Relative salary scales will play an important part in the more open market, and the possibility that present South Australian staff will be drawn to other States or to the developing colleges of advanced education must be faced unless salaries are competitive.

Salaries

16.25 The salaries of the professional staffs of teachers colleges are determined by the Teachers Salaries Board, and in the past have borne a fixed relationship to certain positions within the teaching service. In recent years there have been indications of a break in this nexus. The new award made in October 1969 gave a higher proportionate increase to college staffs than to most teachers and explicitly laid down a new basis for comparison. In his report to the Minister on the new award, the Chairman of the Salaries Board stated that the basis of comparison in determining teachers college rates had been

² *Op. cit.*, paragraph 4.82.

those paid by the South Australian Institute of Technology. A qualifications bar was introduced for the first time in the senior lecturers' range beyond which only holders of an honours degree or its equivalent may pass. The Chairman pointed to the difficulty of interstate comparisons of teachers college rates because "the comparative figures vary very considerably and do not disclose a consistent pattern at many levels. Indeed it would appear that a number of the salary structures are actually under review or likely to be reviewed shortly."

16.26 Interstate comparisons are difficult because the grades of lecturer vary, and, at the time of writing, applications for new awards for teachers college lecturers are being made in several States. Some awards, for example that operating in New South Wales, have not been varied since 1967, and any comparison between such awards and the South Australian position would have little validity. The 1970 increase in university salaries has been accepted as applying to lecturers in colleges of advanced education in several States. The relationship has gone beyond a similar proportionate increase to an acceptance of the same range for lecturers in the colleges and in the universities. Lecturers in the South Australian Institute of Technology have been granted parity with university lecturers. This will have implications for teachers college lecturers in their turn, since the Chairman of the Teachers Salaries Board, in making the 1969 award, left the way open for teachers college lecturers to apply for a new determination in the event of changes in salaries in the South Australian Institute of Technology. While the comparison of actual salary scales in a situation as unstable as the present one is of limited interest, some interstate comparisons made in 1969 are worthy of note.⁸ At that time, South Australia had a higher proportion of its teachers college lecturers in the top grade, in South Australia that of senior lecturer, than any other State. Twenty-two per cent of all South Australian lecturers, and 27 per cent of all full-time ones were senior lecturers. Proportions in the highest grade for lecturers in other States were: New South Wales 12 per cent, Victoria 13 per cent, Queensland 9 per cent, Western Australia 10 per cent. In New South Wales a qualifications bar, passable only by holders of a first class honours degree or better, occurred in the lowest lecturer range. The newly introduced qualifications bar in South Australia operates at the fifth rung of the senior lecturers' range and may be passed by holders of an honours degree of any class. South Australian colleges have, in addition, two vice-principals and a dean of women each, all appointments above the senior lecturers' range. Other States follow the practice of employing seconded teachers as teachers college lecturers at teachers' salary plus a small allowance. In Victoria, 55 per cent of all academic staff in teachers colleges were employed in this way in 1969. This practice is not regularly followed in South Australia.

⁸ Information supplied by Public Service Board.

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16.27 Teachers colleges are recruiting staff in several fields in competition with colleges of advanced education, and, to a lesser extent, with universities. The salary structure of the whole tertiary sector is to this extent interdependent, and any section of it which falls behind the rest in the financial prospects it offers to people with comparable qualifications will inevitably be forced to recruit staff of lesser quality. The Report of the Enquiry into Salaries of Lecturers and Senior Lecturers in Colleges of Advanced Education (the Sweeney Report), tabled in the Commonwealth Parliament in September 1969, recommended that where staff of colleges of advanced education had comparable qualifications, experience and quality with university lecturers they should be paid equal salaries. It stressed the importance of similar rates between colleges to encourage staff transfer. The Commonwealth Minister for Education and Science conceded that university rates should be accepted as the upper limit of salaries in the colleges where comparable qualifications applied, but, while he acknowledged the desirability of long-term compatibility between college rates in the various States, Commonwealth determination of college salaries was rejected. The relationship between salaries of teachers college lecturers and those of lecturers in universities and colleges of advanced education is likely to become even closer in the future since schools of education are already incorporated in some of the latter colleges. We later recommend that teachers colleges should be regarded as colleges of advanced education, and this implies that teachers college lecturers should be paid on the same basis as that operating in the other colleges. The case for ease of movement in staff between tertiary institutions is a strong one, which we support, but equal pay for lecturers in the various South Australian institutions would be facilitated if the qualifications bar in teachers college salaries occurred at a lower point in the scale, thus making possible the attraction of well-qualified people without necessarily raising the whole salary structure.

Staff/Student Ratios

16.28 Table 16.4 shows the staff/student ratios of the colleges in 1970, calculated on the basis of full-time equivalent students and counting the principal, vice-principal, dean of women and all lecturer-librarians together as three full-time staff. Not all students enrolled at teachers colleges take their entire course there. Those pursuing full-time university studies, for whom the college has administrative and pastoral responsibility and to whom it may offer some minor courses, are counted as one-fifth of a full-time student. Students taking some course work in a college and some in another tertiary institution are converted to full-time equivalents on the basis of lecture time spent in the college. Part-time students attending late afternoon lectures for one or two college subjects are each counted as one-quarter of a full-time student. One full-time lecturer is allowed for every 50 students taking external courses by correspondence. The ratios of the newer, developing colleges of Bedford Park and Salisbury are somewhat

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lower than those of the older ones, but the intention is that all colleges will move towards a common ratio.

Table 16.4

STAFF/STUDENT RATIOS IN TEACHERS COLLEGES

SOUTH AUSTRALIA, JUNE 1970

Adelaide	1 : 16.4
Bedford Park	1 : 11.8
Wattle Park	1 : 16.5
Western	1 : 14.3
Salisbury	1 : 12.2

Source: Education Department.

16.29 The Department has agreed to a staff/student ratio of 1:12 for teachers colleges, to be established by 1973, a target which appears reasonable over the period. The introduction of advanced diplomas, now taking place, will call for more intensive use of staff, and, as has been stated, the responsibilities of staff extend beyond teaching commitments. The attachment of students taking full university courses to the colleges would appear to have a largely historical justification except so far as courses provided in the colleges are recognised as part-units by the university. Under the arrangement we are later suggesting, students seeking university qualifications would be separated from the colleges, a step which we regard as desirable on its own merits. This would also result in their exclusion from calculations of staff/student ratios in the colleges.

Ancillary Staff

16.30 The ancillary staff of the colleges are appointed through the Public Service Board whose approval must be gained for appointments which have been requested by the colleges and ratified by the Director of Teacher Education. There is no general establishment for ancillary staff in the colleges, and whether appointments are made depends on the judgment of the Board's investigating officer as to their necessity. The ratio of typists and shorthand typists to full-time professional staff accepted as desirable in the plans prepared by the Education Department as part of the National Survey of Educational Needs in April 1970 is 1:4. In February 1969 the ratios operating in teachers colleges ranged from 1:12 to 1:15, and, because of the shortage, typists employed were almost fully occupied in the administrative work of the colleges, leaving the requirements of academic staff for course work largely unfulfilled. The absence of registrars qualified to handle budget arrangements meant that the detailed planning of estimates, supervision of expenditure and ordering were done by lecturing staff. However, in the budget estimates for 1969-70 allowance was made for increases in the ancillary staff of the colleges which provided a further 39 positions above the 63 already existing. An important

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innovation in the new positions was the allocation of a registrar to each of the colleges at more senior Public Service clerical level than any employed at that time. The salary offered, however, appears to have been insufficient to attract people with the training and experience in accountancy required to allow this position to relieve college professional staff of their tasks in connection with estimates and expenditure. Laboratory technicians and technical assistants were also included in the new appointments approved, and the number of typists was increased, bringing the overall typist/lecturer ratio to 1:10 of 1970 lecturing staff. The plans prepared by the Education Department as part of the National Survey of Educational Needs suggest an ancillary staff establishment for teachers colleges which would require the employment of an additional 117 people above the 102 employed or promised in March 1970. The shortage of typists and technical assistants in the colleges was still acute in July 1970. Though there had been some improvement over 1969, the full complement of extra ancillary staff approved in the 1969-70 budget had not yet been appointed.

TEACHERS COLLEGE STUDENTS

16.31 In 1970, 1,696 students entered the first year of preparation for teaching in government schools, and 63 first-year private students were admitted to teachers colleges, making a total of 1,759, representing 32 per cent of the number of students studying at fifth-year level in South Australian secondary schools in 1969. In 1954 there were 232 entering students. The total number of departmental students in the colleges increased from 511 to 4,359 over the period. A total of 121 private students were studying in the colleges in 1970. Table 16.5 expresses the total number of full-time students in training as a percentage of the number of teachers employed for each of the Australian States in 1968. These figures, subject to the qualifications which attend all interstate comparisons in Australian education, indicate that, especially in the secondary field, the scale of teacher education in South Australia in 1968 exceeded the national average, and for primary and secondary fields combined was greater in relation to the teaching force than that undertaken in any other State.

Table 16.5

FULL-TIME TEACHERS COLLEGE STUDENTS AS A PROPORTION OF THE TEACHING FORCE

AUSTRALIA 1968							
	N.S.W. (inc. A.C.T.)	Vic.	Qld.	S.A. (inc. N.T.)	W.A.	Tas.	Total
	per cent	per cent	per cent	per cent	per cent	per cent	per cent
Primary	14.35	29.28	27.88	26.59	28.01	20.74	23.25
Secondary	49.08	46.43	31.88	56.04	40.93	42.46	46.29
All Students	29.24	36.76	29.28	37.91	33.18	30.91	32.84

Source: Department of Education and Science, *Education News*, February 1970.

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16.32 The Department has prepared estimates of projected numbers of teachers needed and the number of teachers college students necessary to supply them to 1981. These estimates, discussed in Chapter 6, are hypothetical in the sense that their fulfilment would require considerably greater financial support for teacher education, enabling it to take place on a scale which would allow for reductions in class size as well as for estimated increases in population and in retention rates. Table 16.6 gives the actual numbers in teachers colleges in 1969, and projections of total student numbers for selected years to 1981, relating them to the estimated numbers of teachers who will be employed in the same years. The number of teachers in training in relation to teachers employed should fall after 1981, by which time planned reductions in class size should have been attained, a greatly increased pool of qualified teachers should be available for re-employment, and the rate of increase in secondary retention rates is likely to have diminished.

Table 16.6

ACTUAL AND PROJECTED NUMBERS OF TEACHERS COLLEGE STUDENTS

SOUTH AUSTRALIA 1969-1981

Type of Course	1969	1972	1975	1978	1981
Primary and Infant	1,621	2,413	3,012	3,584	3,930
Secondary General	1,768	2,283	2,746	3,011	3,416
Art and Craft	431	576	658	622	835
Total	3,820	5,272	6,416	7,217	8,181
Total Students as a Percentage of Teachers Employed in the Schools	38.6	46.6	48.8	50.5	52.7

Source: Education Department.

16.33 Teachers college students wishing to follow university courses must be matriculants who have been accepted into university quotas. Since 1967, changed matriculation requirements have required a fifth year of study at school. For all other courses the nominal entrance requirement is an acceptable level of performance in five Leaving (fourth-year secondary) subjects, including English. Because of the increasing numbers of students completing a fifth year at secondary school there have been sufficient applicants for non-university college courses for the Education Department to be able to require a fifth year of study for all but 3 per cent of entrants to such courses in 1970. This has resulted in an improved educational background among teachers college students, and places their courses more firmly within the context of tertiary education. Most, but not all, students qualified to enter universities study there. Some have entered courses of training where relevant university courses are not offered. Others choose to confine their study to college courses. As shown in paragraph 11.27, there has not yet been in South Australia a large number of people qualified to enter university and desiring to study there for whom no places have been available, although all

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students gaining entry to university courses have not been able to enter the faculty of their first preference.

16.34 Table 16.7 shows the proportion of students entering teachers college courses of all kinds from 1960 to 1970 who were qualified to matriculate, and who had had five years of secondary schooling. The Table shows that, while the period of schooling required for acceptance has risen over the period, the proportion of entrants qualified to matriculate has fluctuated, showing a marked fall in 1967 when the new matriculation requirements became partially operative, and in 1968 when they became fully operative. The continued fall in 1969 may perhaps be attributed to an increase in Commonwealth university scholarships in that year. In 1970 the trend operating since 1966 appears to have been arrested when an increased proportion of entrants to the colleges was qualified to matriculate.

Table 16.7
ACADEMIC QUALIFICATIONS OF SUCCESSFUL TEACHERS COLLEGE ENTRANTS
SOUTH AUSTRALIA 1960-1970

	Proportion Qualified to Matriculate	Proportion with Fifth-Year Study
	per cent	per cent
1960	65	50
1961	63	53
1962	59	50
1963	64	54
1964	74	63
1965	75	68
1966	77	65
1967	62	66
1968	51	80
1969	47	92
1970	51	97

Source: Education Department.

16.35 Table 16.8 shows the proportion of entrants to various types of teachers college courses in 1968, 1969 and 1970 who were qualified to enter university. An increase in the number of students admitted to internal secondary courses in the colleges (2 per cent of all students entering training to become secondary general teachers in 1967, 15 per cent in 1969), accounts for the fall in the percentage of matriculants entering such courses over the period. In 1970, the majority of those preparing through college courses to enter secondary general teaching were admitted to Salisbury Teachers College. In our view, teachers who have not themselves qualified to matriculate are unlikely to be of the intellectual calibre we should regard as necessary for teaching at this level. We should hope that recruits to secondary teaching will in future be qualified to enter university, and, for the most part, will take their courses there. A majority of students entering primary courses was unmatriculated and only one-quarter of infant trainees

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were in a position to undertake any university studies in 1970. This situation, we hope, will also improve.

Table 16.8

PROPORTION OF STUDENTS ENTERING TEACHERS COLLEGES
WHO HAVE QUALIFIED TO MATRICULATE (a)

SOUTH AUSTRALIA 1968-1970

Course	1968 per cent	1969 per cent	1970 per cent
Secondary General	98.9	86.2	84.7
Primary	45.0	41.2	41.9
Infant	13.3	19.6	25.7
Commercial	6.0	6.8	12.5
Physical Education	64.7	52.0	64.4
Art	14.5	10.1	25.5
Boys' Craft	17.9	15.1	12.2
Girls' Craft	12.7	8.9	23.8
All Students	50.8	47.4	50.5
All Students excluding Secondary General	31.8	31.6	34.9

Source: Education Department.

(a) Excluding mid-year intakes.

16.36 To test the academic quality of teachers college students taking university courses, a comparison was made between teachers college and other students entering the two South Australian universities in 1969. Standardised marks for the best five subjects undertaken at matriculation level in 1968 were aggregated for all students entering arts and science courses at the University of Adelaide and Flinders University in 1969. Teachers college and other students were compared, with the results shown in Table 16.9. Ranking all students according to marks gained, 25 per cent of each group would fall in the top 25 per cent of students if both groups were similarly distributed over the whole mark span; we should expect 50 per cent of each group to be in the top 50 per cent of students, and so on. In both arts and science the teachers colleges gained less than their proportion of the most able students, measured by matriculation results. The discrepancy was much more marked in science where only 17 per cent of students attached to the colleges were among the top 25 per cent of students. At the other end of the scale, 30 per cent of science students training to be teachers fell within the lowest 25 per cent of students who entered science courses ranked according to matriculation marks. Among teachers college students entering arts, on the other hand, only 23 per cent fell in the weakest 25 per cent of students entering arts courses. Teachers college students entering science courses were thus weaker throughout the scale than students destined for other professions entering science courses. The number of students entering teaching who were in the apparently most able group of science students may be inadequate to maintain the level of academic leadership needed in this area of the profession. Among the more able students entering science courses through teachers college a proportion

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will take honours degrees, and the loss to teaching among honours graduates is relatively high. On the other hand, the material presented does not indicate that only the weakest students entering arts and science at universities are attracted to teaching. Outside the top 25 per cent, the quality of arts students training to be teachers was higher than the average of all arts students, and among science students 17 per cent of intending teachers of science were among students of the highest quality.

Table 16.9

COMPARISON OF TEACHERS COLLEGE AND OTHER NEW STUDENTS ENTERING ARTS AND SCIENCE COURSES AT UNIVERSITY OF ADELAIDE AND FLINDERS UNIVERSITY, 1969

Students Ranked according to Marks Gained	Arts				Science			
	Teachers College		Other		Teachers College		Other	
	No.	per cent	No.	per cent	No.	per cent	No.	per cent
Top 25 per cent of Students	97	23.4	45	28.0	30	17.3	76	30.3
Top 50 per cent of Students	209	51.5	74	46.1	74	42.4	139	53.3
Top 75 per cent of Students	311	76.6	114	70.8	122	69.9	197	78.6
Total Number of Students	406	100.0	161	100.0	174	100.0	251	100.0

Qualifications Gained by Students

16.37 There have been several Australian studies of the socio-economic background of students entering teachers colleges. Those by Bassett,⁴ Radford,⁵ and Rowlands and Fary,⁶ among others, have shown Australian teachers to be drawn preponderantly from the families of small businessmen, farmers, and clerical, sales and manual workers. Although the socio-economic level of female students training to be teachers is higher than that of males, the social composition of the group as a whole is markedly different in its lower representation of children of professional workers from that of students training at university to enter other professions. This is clearly illustrated by the Committee's survey of the occupations of fathers of new tertiary students in 1970. Among teachers college entrants there was significantly lower representation of professional, technical and related workers and of administrative, executive and managerial workers, and higher representation of primary producers and of skilled tradesmen and labourers compared with non-teachers college entrants to Flinders University (see Table 14.8). The socio-economic background of the students is important, since it suggests that, without the financial support provided by teachers college allow-

⁴G. W. Bassett, "Some Comparative Aspects of the Medical Profession and Teaching", *Australian Journal of Education*, Vol. 7, No. 1, March 1963.

⁵W. C. Radford, *School Leavers in Australia, 1959-60*, A.C.E.R.

⁶E. J. Rowlands and N. G. Fary, *A Survey of Academic and Socio-Economic Backgrounds of First Year Studentship Holders at Monash Teachers College, Victoria, 1967*, Victorian Institute of Educational Research.

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ances, a high proportion of students training to be teachers might be unable to undertake tertiary education.

16.38 To provide a picture of the qualifications gained during its period of study, the 1964 intake of students preparing to become teachers of general subjects in secondary schools was followed through one college, and the 1966 intake through another. All these students were admitted to full university courses. The 1966 intake of students training to become primary and infant teachers was followed through a third college. The general points which emerged are summarised in the following paragraphs.

16.39 Among secondary trainees, information is complete only for the 1964 intake, because a proportion of the 1966 intake was still studying in 1970. Information about the numbers entering schools with less than full qualifications, and loss rates are thus not final for this group. Table 16.10, which sets out the main information obtained from the study of these two intakes, must be read with this reservation in mind.

Table 16.10

TWO INTAKES OF SECONDARY GENERAL TEACHERS
IN SOUTH AUSTRALIAN TEACHERS COLLEGES

	College A	College B
Year of Intake	1964	1966
Number of Students Entering	350	133
Loss over Period of Course	20 per cent	26 per cent (b)
Proportion of Continuing Students who Qualified in Minimum Time	48 per cent	54 per cent
Proportion Entering Schools without Completed Qualifications	29 per cent	13 per cent (b)
Proportion of Continuing Students Granted Extensions for Honours Degrees	13 per cent (a)	27 per cent

Source: Information supplied by College Principals.

(a) Twenty per cent of students who completed courses in College A took honours degrees, but 17 of the 55 students who did so resigned from the Department before entering the schools.

(b) By 1970.

16.40 The 1966 intake of students studying to become primary and infant teachers was followed through one college. Full details were not available of this intake into the other college at that time engaged in preparing teachers at this level, but the college confirmed that the material here presented was similar in pattern to its own experience. Of the 70 per cent of the intake studied who entered the schools after two years' training, 47 per cent held fewer than six classification units, and 19 per cent fewer than four units. A student would normally study at least six units in two years. The low qualifications with which many primary and infant teachers have entered the schools have been partly the result of a policy which has allowed longer courses to the more successful rather than to the less successful students. There has in practice been no level below which primary and infant teachers would not be employed if they had

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spent two years in a college. The holding of four units does not necessarily mean that the teacher would have been qualified for classification as Assistant B on appointment, because the units held may not have included some which were necessary for this purpose (see paragraph 6.27). The proportion of students from the college who entered the schools over a three-year period without meeting the requirements for classification is shown in Table 16.11. These exit students will have entered the schools unclassified or with a provisional classification which will have been confirmed after a period of probationary teaching if reports on their teaching were satisfactory. The loss rate over the period of primary training was lower than among secondary trainees. Of the college intake studied, 13 per cent dropped out over the period of training.

Table 16.11

PROPORTION OF STUDENTS ENTERING THE SCHOOLS AS PRIMARY AND INFANT TEACHERS FROM A SINGLE SOUTH AUSTRALIAN TEACHERS COLLEGE WITHOUT THE FOUR UNITS REQUIRED FOR CLASSIFICATION

	Infant Teachers per cent	Primary Teachers per cent
1966	14.7	25.2
1967	16.0	22.2
1968	15.9	21.5

Source: Information supplied by the College Principal.

16.41 It is clear from these studies that, particularly among primary and infant teachers, many teachers entering the schools from the colleges have been insufficiently qualified for promotion unless they undertake further study. The difficulties of improving qualifications during the early years of teaching are considerable. Young teachers are likely to be appointed to schools outside the metropolitan area, so excluding them from attendance at lectures and tutorials. Their school duties during the period of accommodation to teaching will require heavy preparation, and the more academically weak teachers are even more in need of daily preparation for teaching than their more able colleagues. This preparation will be done outside school hours, and time given to improving their own qualifications is likely to affect adversely their effectiveness as teachers, so emphasising the importance of gaining the required qualifications in pre-service study. Since only the more successful students have been retained in college beyond two years, it does not follow that a third year would raise the whole group to the minimum six units required for certification, though the fact that the majority of those who stayed on gained more than nine units suggests that this is likely. If the new nine-unit diploma is to become a basic qualification for teaching, many students will require more than the three years' training which all students will in future be allowed to gain it.

16.42 In our view the whole question of retardation in colleges requires special attention. Students repeating years in most cases do

so at their own expense, but infant and primary teachers in particular have in the past not been required to make up deficiencies in this way. At the end of a prescribed period they have been employed, whatever the level of their qualifications. Intensive courses over the long vacation would prevent many students from falling so far behind that they had to leave the colleges without a full qualification. The successful completion of courses should, we think, be a condition of employment. The registration of teachers which we have recommended (see paragraph 6.119) would draw greater attention to the qualifications of teachers, although it would not necessarily prevent the unqualified from being employed. The employment of people who are unqualified at the end of their training, quite apart from its effects in the schools and on the morale of training establishments, makes it difficult for teachers to claim professional status.

16.43 Accordingly, we RECOMMEND that:

- (a) Teachers college students should not be employed at the end of their period of training unless they hold the full qualifications required for registration by the Teachers Registration Board, whose establishment we recommend in paragraph 6.119.*
- (b) Students who fail subjects should be helped to make up lost ground during the long vacation through the provision of intensive courses in teachers colleges, where appropriate.*
- (c) Students requiring more than the minimum time to obtain full qualifications for registration should repeat, normally at their own expense but with the assistance of loans where necessary, to allow them to qualify for registration before they enter the schools.*

Student Allowances

16.44 Every year most teachers entering departmental schools do so at the end of a course of training during which they have been paid an allowance. In return for these payments and the free tuition at university, teachers college or other institutions that goes with them, the student teacher has signed an agreement to teach for a term of three years in a school to which the Director-General may assign him. This arrangement is popularly known as "the bond". During 1969-70 \$4.3m. was paid in allowances to teachers in training, a sum which amounted to 58 per cent of recurrent expenditure on teacher education.

16.45 Students are recruited at three levels:

- (a) At school: students may be helped as Teaching Scholars through a fifth year at school under obligation to enter a teachers college if successful. The practice of helping students through a fourth year of secondary schooling has been discontinued, but in 1969 there were 540 fifth-year students drawing allowances, and these must have con-*

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stituted a considerable proportion of the students who entered the colleges in 1970. The allowance must be refunded if the student decides not to take up teaching.

(b) At entrance to teachers college: students selected for college entrance sign an agreement with the Education Department at the end of the first nine months in college. The student may decide without penalty to discontinue his training at this stage, or the Department to undertake no further responsibility. The period of service contracted into is three years, except where allowances are paid for only one year. The Department may choose not to take up the option on the student's services by not appointing him within six months of the end of his college course. Otherwise, failure to serve requires that the moneys advanced be refunded. The obligation may be halved or waived in special circumstances. Marriage or pregnancy of female students in training or among women teachers during the contractual period of service are the main grounds for modification of the agreement.

(c) After graduation: university graduates may enter the Department as assisted students for the one-year postgraduate course of the Diploma in Education, drawing an allowance in return for an obligation to teach for one year. In 1969, 17 students were recruited at this stage, and 28 in 1970.

16.46 For the first time, in 1970 married women were admitted as students in receipt of allowances to teacher-education courses under bond to the Department. This arrangement will apply to graduates entering the one-year Diploma in Education course at a university as well as to entrants to a full training course. Such students will be admitted on the same financial terms as single women. Female students who marry during training may continue to receive an allowance and retain the financial and service obligations that go with it, or may choose to have their allowance discontinued and so undertake no added obligation. Pregnancy either during training or during the contractual period of service releases from all obligations females who leave to care for a child. Marriage after the end of a course halves the obligation of women.

16.47 In 1968 the basis of the allowance was changed, incorporating into it a book allowance in place of the free textbooks which had previously been supplied, and an allowance for travel for which varying amounts based on specific claims for individual students had been paid. After student dissatisfaction with the sum fixed upon as a substitute for these two items, the Minister of Education appointed a Committee of Enquiry into Allowances for Students at Teachers Colleges (the Barnes Committee) to make recommendations about the scale of allowances. The Committee reported in June 1969 recommending an increase in allowances. The Minister accepted the scales suggested and the new scales were paid from 1st July. The Committee recommended that allowances should be reviewed periodically and

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varied according to changes in the cost of living, among other factors. The rates recommended and accepted were as follows:

(a) As a Teaching Scholar in the fifth year of an approved secondary school:

\$200 per annum.

\$200 boarding allowance if applicable.

Return fare home paid twice a year if applicable.

(b) As a teachers college student:

First year	\$900
Second year	\$950
Third year	\$1,020
Fourth year	\$1,130
Fifth year	\$1,130

Return fare home paid once a year to students whose homes are more than 10 miles from college.

(c) As a university graduate entering a special one-year course of preparation for secondary teaching: \$1,800.

No boarding allowance applies to this group.

(d) As a mature-age student (of over 25 years) entering a teachers college: \$1,400 per annum.

(e) Married men in all categories receive an extra \$280, plus \$100 for each dependent child.

In addition to allowances, all trainees receive free tuition. Boarding allowances of \$280 per annum are available to single students living at a distance from their homes or faced with special financial hardship. In 1969, 1,060 college students, 28 per cent of the total, were receiving such allowances.

16.48 In an effort to attract able students into teaching, to hold those who had already entered training and to assist private students training to be teachers, the Department introduced Tertiary Teaching Scholarships in 1966. Unlike the normal training allowances, these scholarships may be held by private students including Commonwealth scholarship holders attached to a teachers college as private students. One hundred of these special allowances are awarded to entering students and a further 100 at the end of the first year of courses on the basis of academic achievement. The scholarships carry an extra \$200 a year above the normal allowance to teachers in training, with no obligation to repay the additional amount if the student does not fulfil the terms of the teaching agreement. Four hundred students were being paid Tertiary Teaching Scholarships in 1969. Of the 100 awards made to students entering teachers colleges in 1970 only one was made to a student not under bond to the Department, and six of the 100 awards made to students who had completed a first year of training in 1969 went to private students. The scholarships are open only to students attached to a teachers college, and almost all of them are paid to students who are already bound to teach in government schools.

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16.49 Unlike Commonwealth university and other tertiary scholarships, allowances paid to student teachers in training are not subject to a means test. This, together with their more generous scale, makes them attractive to middle-income as well as to low-income families, and causes a proportion of students each year to refuse Commonwealth scholarships in order to enter teachers colleges. In 1970, 109, or 6 per cent of students entering teachers colleges, did so, and a similar percentage in 1969. This represented approximately 10 per cent of students awarded Commonwealth university scholarships in each of these years. The maximum living allowance payable to students in receipt of a Commonwealth university or advanced education scholarship after the changes made late in 1970, is \$700 a year in the case of a scholar living with his parents, and \$1,100 for a scholar living away from home. To receive this full allowance, the gross income of the student's parents must not exceed \$2,800 plus \$300 for each dependent child other than the scholarship holder. The allowance paid to the scholarship holder falls as the parents' income rises, and no allowance is payable if the gross family income, adjusted to take account of other dependent children, exceeds \$6,026 if the scholar is living at home, or \$7,360 if he is living away from home. The bond of service which goes with teachers college allowances is the price paid by students for the more attractive levels and conditions which they offer.

BUILDINGS AND PHYSICAL FACILITIES

16.50 The provision of buildings and physical facilities for teacher education over the period of extraordinary increase of numbers in training since 1954 has lagged seriously behind need. Forward planning was doubtless frustrated by shortage of funds. The allocation of Commonwealth money for building purposes (the only Commonwealth financial assistance to teacher education except that received indirectly through assistance to universities) has facilitated long-needed expansion and replacement, much of which is as yet in the planning stages. In the 1967-1969 triennium, South Australia received \$3.2 million of the Commonwealth grant for teachers college building, and \$3.6 million will be allocated in the period 1970-1972. Before the Commonwealth grant, a large modern extension of Adelaide Teachers College had been built, and the first stage of Bedford Park Teachers College built and occupied. The college at Salisbury, the first stage of which was occupied in 1970, accounted for the greater part of the Commonwealth building grant in the first triennium. Both Wattle Park and Western Teachers Colleges have, since their opening in 1957 and 1962 respectively, been accommodated in make-shift premises, each spread over a number of physically separated sites. Between them these Colleges in 1969 accommodated a majority of the teacher trainees being wholly educated within the colleges. Building will commence at the Murray Park site in 1971 to replace the present college at Wattle Park. Land will be acquired for

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the new Western College in 1971, with a view to its building being completed by 1974.

16.51 The new colleges at Bedford Park and Salisbury have many excellent facilities, including gymnasia, theatres, audio-visual facilities, science and language laboratories and closed-circuit television. The cost of providing such buildings is stated in the National Survey of Educational Needs presented in 1970 to be \$3,700 per student place, excluding land, and an extra \$500 per student place is required for equipment. The Department's plans involve the expenditure of nearly \$15 million on teachers college buildings from 1970 to 1975, during which period no new colleges will be opened, expenditure being on the completion of Salisbury and the replacement of the present accommodation of Wattle Park and Western Teachers Colleges. The Committee visited Western and Bedford Park Teachers Colleges. The contrast between the two colleges in their physical facilities could hardly have been more extreme, emphasising the urgency of the replacement of the present Western Teachers College. The planned capacity of existing colleges is:

Adelaide ⁷	1,200
Bedford Park ⁷	1,200
Salisbury	800
Wattle Park (new Murray Park)	800 to 1,000
Western (new)	1,200
Total	5,200 to 5,400

The figures showing predicted numbers of students in training made available by the Education Department to the Committee indicate that if the absolute numbers of students taking courses mainly or wholly at the universities remain the same as in 1969, and such students are separated from the colleges, the present and planned colleges will be filled to capacity by 1976. On the other hand, if the numbers of students taking university courses increase at the same rate as the total numbers of students in training, and such students are no longer attached to the colleges, students taking college courses will be able to be accommodated in present and planned colleges until 1981 at least, if part-time students are excluded from the count. Much will depend on the numbers of students accepted into university quotas who desire to teach, and on the policy of the Department in relation to university training. A close watch will need to be kept on the forward planning of college places, and we suggest that the Institute of Colleges recommended in Chapter 11 and referred to later in this chapter should give continuing consideration to the problem.

16.52 In our view, four aspects of the provision of physical facilities for teacher education require further investigation, assuming that

⁷ The capacity of these colleges is stated here on the basis of equating every five university students attached to them as one full-time student. However, if all students were taking courses entirely within the colleges, the number who could be accommodated would be smaller than the totals here shown.

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the gross inadequacies of Western and Wattle Park Teachers Colleges will be rectified when new buildings are available. These are:

(a) **SIZE OF COLLEGES:** It may well be that the provision of a full range of tertiary facilities is more economically undertaken in institutions of larger than the existing and planned capacity of the teachers colleges. The provision of adequate libraries, for example, in relatively small tertiary institutions is expensive and unlikely to be such as will meet all specialist needs.

(b) **SCIENCE FACILITIES:** The science facilities at present existing, even in the newer colleges, are inadequate for the number of students they serve. They are particularly inadequate if secondary science teachers are to be trained within the colleges. It would seem desirable for one or two colleges to specialise in this latter area rather than to provide specialist facilities in the three colleges which are moving into this field, or for arrangements to be made to use the facilities of other colleges of advanced education.

(c) **LIBRARIES:** Judged by minimum standards set by the Association of Teachers in Colleges and Departments of Education in England in 1967, teachers college libraries in South Australia are deficient in some important respects.⁸ On the standard of sufficient places for one-quarter of the staff and students to be in the library at any one time, seating capacity in all existing libraries, except that of Bedford Park Teachers College, is under-provided. All book stocks fall short of the 70,250 set as a basic minimum. The largest library, that of Adelaide Teachers College, has fewer than half this number. Since the increases in staff in 1970, staff in college libraries come close to meeting the minimum British standard of four professional librarians and four ancillary staff for each 1,000 staff and students. All college libraries fall seriously below the standards set in the Second Report of the Commonwealth Advisory Committee on Advanced Education, both in book stocks and in staff numbers. These standards suggest a total staff of 16 for 1,000 students and a book stock of 50,000 volumes, including periodical subscriptions. The deficiencies in college libraries are particularly serious in the case of the three colleges whose students do not have access to university libraries.⁹ The fact that college libraries are

* According to a study made by the Committee in July 1970.

* The following Table sets out the position of the libraries of the four established Teachers Colleges, at June 1970:

	Adelaide	Bedford Park	Wattle Park	Western
No. of Staff and Students (a)	1,406	1,121	1,031	1,077
Seating Capacity	253	280	122	206
Book Stock	31,419	19,600	28,973	26,657
Periodicals Subscribed to	457	544	492	288
Librarians Employed	3%	3%	4%	4
Clerical Staff	3	4	3	3½

Source: Teachers College Librarians.

(a) Part-time students have been included as one-quarter of a full-time student, and part-time staff as full-time library users.

not open in the evenings limits the service which, in our view, ought to be available to students in a tertiary institution. Access to libraries for evening study is particularly important because of the large number of part-time students attending late afternoon and evening classes in some colleges, and because teachers college programmes typically involve a heavy commitment of hours during the day on course work.

(d) **CAFETERIAS:** If libraries are to open in the evenings and the possibilities of corporate life within the colleges further extended, it will be necessary for a full evening meal to be available on the premises. This would involve both longer hours and extended facilities in the cafeterias at present existing. Provision of this type is especially necessary in colleges with large numbers of part-time students.

16.53 Accordingly, we **RECOMMEND** that:

The Institute of Colleges, whose establishment we recommend in paragraph 11.60, should pay special attention to

(a) the capacity of the colleges engaged in the training of teachers in relation to teacher requirements;

(b) the appropriate size for such institutions;

(c) the facilities available for the teaching of science, giving particular attention to the possibility of concentrating the preparation of secondary science teachers within a limited number of institutions, if the training of such teachers within the colleges is to be continued;

(d) the appropriate standards of library provision and services;

(e) the facilities for evening meals and evening study within the colleges.

PRESENT ADMINISTRATIVE STRUCTURE OF TEACHERS COLLEGES

16.54 Irrespective of the institution in which their course is mainly taken, all students training to become teachers in government schools are attached to a teachers college. The colleges are part of the Education Department under the control of the Director-General of Education and the immediate supervision of the Director of Teacher Education and Services. All professional staff are employees of the Education Department. Over recent years, the relationship of the colleges to the Department has been modified in important ways, giving the colleges a wider measure of control over their affairs, although in theory they are still subject to direction from outside in every detail of their running.

Academic Control

16.55 In academic areas colleges have considerable freedom in courses and curricula and selection of staff. It is true that the general pattern of Diplomas in Teaching is laid down in *E.D. Circular 61*, newly revised in September 1969 by the Department, and the awards

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are made by the Department not the colleges. The detailed content of courses of study is worked out by the college staff involved, though it must be submitted for approval to Boards of Study on which administrative officers and teachers appointed by the Education Department outweigh college representatives. The schedules for the Diploma are in fact worked out by the college principals, and, once the Committee of Principals has ratified courses of study initiated by college staffs, it is unusual for these to be modified by Boards of Study. There is considerable variation between colleges in the structure and organisation of courses, especially in the area of professional training. However, the autonomy of the colleges in course patterns and content is *de facto* rather than *de jure*.

16.56 In the selection of academic staff below the level of principal the colleges have in practice a free hand, though the decisions of their selection committees are technically only recommendations to the Director of Teacher Education and Services. Staff establishments are determined by the Department, but freedom of choice exists and is not restricted as in most other Australian States by an obligation to seek candidates beyond the State teaching service only where it can be established that no suitable person exists within it.

16.57 The colleges have little or no control over the selection of their students. These are selected and allocated to the various training institutions by departmental officers who may vary the minimum academic standard of entrants without reference to the colleges. Thus the level and the nature of the courses are to some extent outside the control of the colleges.

Financial Arrangements

16.58 Departmental control is greatest in budgetary and ordering arrangements, in the employment of ancillary staff and in the control of building programmes. It should be pointed out that most restrictions operating in these fields follow automatically from the incorporation of the colleges as part of the Education Department, so confining them within regulations applicable to the Department itself as part of the State Public Service. The appointment of ancillary staff is thus controlled by the Public Service Board, and buildings and maintenance are the concern of the Public Buildings Department. Regulations covering the ordering and supply of material and equipment are those applying to the Public Service in general.

16.59 In 1968 a new method of budgeting was worked out between the college principals and the Director-General of Education which involves an itemised annual allocation to each college to cover library accessions, equipment, materials, postage, research, staff travel

expenses and so on. Salaries are paid direct by the Department and do not enter into college budgets. From the submissions made by the college principals to the Committee we infer that problems have arisen for the colleges, not from the imposition of budgetary limits, within which institutions of every kind must operate, but in the following ways:

- (a) Rational planning of expenditure by the colleges is made difficult by their ignorance of the actual sum allocated to them until the financial year to which it applies is considerably advanced.
- (b) Budgeting is on a strictly annual basis, which makes long-term planning for more expensive items impossible. Any money not spent by the end of the financial year cannot be held over, but returns to consolidated funds — a possible inducement to irresponsible spending.
- (c) Expenditure on all items must be approved by the Director of Teacher Education and Services as well as by the Principal of the college. Items costing more than \$100 must be accompanied by a detailed justification made out individually for each item before it is presented for approval. No items, however small, may be bought except through Public Stores to whom the signed and countersigned requisitions are sent. If the item is available in Public Stores, it will be forwarded to the college. If the item is not available in Stores, Stores will call tenders if the Accounts Branch confirms that the money is available. Alternatively, Stores may substitute a related item which is available but which may be unsuitable for its intended purpose. When it is considered that all this expenditure takes place within the framework of an itemised budget which has already been approved, and within which the Principal has power to direct spending from one major item to another only in respect of items costing less than \$100, it can be appreciated that the colleges are impatient with the delays and staff-time involved.
- (d) The purchase of library books takes place by the same routes, resulting in delays which may be serious for the academic work of the college.
- (e) At any point during the year it is difficult for a college to know the balance of its allotted budget which remains to be spent.

16.60 In addition, the requirements of the Auditor-General oblige the colleges to insist that students sign attendance sheets. These sheets are now returned fortnightly, and, theoretically, deductions are made for absence unless covered by a doctor's certificate. The arrangement is followed with varying degrees of strictness between colleges, and its existence emphasises a difference between college students and holders of scholarships which is resented by some students, and not desired by all colleges.

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16.61 In two further respects their position as a part of the Education Department limits the area of initiative open to the colleges. The first of these is in the employment of ancillary staff where the final decision on the necessity of appointments rests with the Public Service Board, whose employees they remain. The difficulties in this arrangement from the point of view of the colleges have already been outlined. Secondly, building and maintenance of the colleges is the responsibility of the Public Buildings Department. The problems in this area are in essence the same as those experienced by schools as they are discussed in paragraph 17.76.

CONTINUING EDUCATION OF TEACHERS

16.62 The continuing education of teachers has many purposes, among them being:

- (a) To raise the basic qualifications of the many teachers who have been appointed without adequate professional or general education over a long period of teacher shortage.
- (b) To enable practising teachers to improve their qualifications in order to gain promotion.
- (c) To update and deepen knowledge in subject areas and in the disciplines underlying the practice of teaching and educational administration. Pre-service education, however good, is inadequate in any system which is changing.
- (d) To provide for curriculum change, either by inducting teachers into new subject content and methods as a result of decisions made centrally or by enabling such changes to be initiated from below as a result of continued study and exchange of experiences, or by a combination of both.
- (e) To provide refresher courses for teachers who have been out of the work force for some years.
- (f) To enable the work of the classroom to be viewed in wider perspective, and to serve as an antidote to routine approaches likely to result from unrelieved daily pressures.
- (g) To equip people within the service for changed tasks in teaching, administration and research, and as inspectors and consultants.

Professional organisations, the universities and other tertiary institutions all share responsibility with the Education Department for ensuring that opportunities are available to meet these needs. The further education of teachers has two aspects — study to improve formal qualifications and in-service courses, organised on an *ad hoc* basis and carrying no formal credit, for which teachers are released from duty, usually for a single day.

Study to Improve Qualifications

16.63 Practising teachers are studying in large numbers to acquire qualifications, most of them at levels which ideally should have been

reached in the pre-service period. By far the greater part of this study is undertaken outside school hours, the only release for study being the full-time and half-time scholarships introduced for practising teachers in 1962. Full-time release scholars are paid \$2,000 for the year, plus \$200 for each dependant; half-time release carries full-time teachers' pay. There were 10 full-time and 55 half-time release scholars in 1970.

16.64 Study to improve qualifications is undertaken both at universities and at teachers colleges. Virtually no external studies are available at either university, but 940 practising teachers were undertaking part-time university study in 1969, 918 of them at Adelaide University and 22 at Flinders, their fees being met by the Education Department. The great majority of these teachers are taking undergraduate courses and Diplomas in Education. Beyond these initial qualifications, the degree of Master of Education requiring both course work and a thesis, and the research degree of Doctor of Philosophy are at present available in education. Few students have yet completed the degree of Master of Education, which is available at both universities, perhaps because the part-time completion of a thesis is a daunting task. In 1970 there were 69 subject entries spread over the four subjects of course work for the degree of Master of Education at the University of Adelaide, and 30 students, having completed the course work, were writing theses. Only one student was engaged full-time on the course. At Flinders University 13 students were taking qualifying courses for the master's degree and three were engaged on thesis work. The need for specialist postgraduate courses in applied psychology, both for counsellors and guidance officers and for teachers of handicapped children, and in educational administration, was raised in submissions to the Committee. A diploma in the areas of clinical and industrial psychology is being undertaken with a pilot group of students at the University of Adelaide in 1970, and Flinders University is likely to introduce a diploma in the area of clinical and educational psychology in 1971 or 1972 and is planning for a diploma course in educational administration several years later. Part-time study is followed at teachers colleges by increasing numbers of practising teachers. In 1969 there were 865 such students attending late afternoon and evening lectures and tutorials at three of the colleges.

16.65 Facilities for external study are important in South Australia where tertiary educational institutions are centred in Adelaide and a high proportion of teachers, especially of young teachers, is in schools outside the metropolitan area. External courses have been provided by teachers colleges since 1962 and student enrolment has increased from 318 in that year to a total of 1,988 students, representing over 2,000 subject entries, in 1969. The high enrolments in external and part-time courses are a reflection of the increasing numbers of students passing out of teachers colleges without having

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achieved minimum qualifications and of the low educational level of many direct appointments. Other teachers are taking the opportunity, which their short-term college courses did not provide, of completing a Diploma in Teaching. External students cover the same course and sit for the same examinations as full-time and part-time students. Of external students who sat for examinations in 1969, 61 per cent passed. As might be expected, the drop-out rate is high, examination entries representing 52 per cent of initial subject enrolments in 1969. Group tutoring is organised in several country towns through the Adult Education Centre, and in some subjects week-end seminars are arranged in Adelaide. Many external students face difficulties in obtaining textbooks, and, although a special library service is available, it is often impossible to gain access to reference books required for assignments. There is a Senior Lecturer (External Studies) located at Adelaide Teachers College and one lecturer is allowed for every 50 enrolments in each of the colleges handling external courses. This ratio is similar to that operating in the University of New England which has had long experience with external students, but the provision of clerical staff is substantially lower in South Australia.

16.66 Part-time and external studies at the colleges are at present open only to people currently teaching in departmental schools. However, the extension of courses to other students, particularly married women who might thus qualify for later teaching, is being considered, a move which we support.

16.67 An indication of the extent to which practising teachers are studying to improve their qualifications may be gained from Table 16.12. This total of 2,960 represented over 28 per cent of the staff employed in primary and secondary schools and teachers colleges in August 1969. While this impressive scale of study is a tribute to the enthusiasm of teachers, it nevertheless reflects the low levels of education at which many teachers have been admitted to the service in the past. The emphasis placed on qualifications in the promotions structure and the desire of qualified teachers to increase their knowledge provide added incentives for further education.

Table 16.12
PRACTISING TEACHERS STUDYING TO IMPROVE QUALIFICATIONS
SOUTH AUSTRALIA 1969

University of Adelaide	918
Flinders University	22
S.A. Institute of Technology	28
Teachers Colleges (Part-Time)	865
Teachers Colleges (External)	1,127
Total	2,960

In-Service Education

16.68 In-service courses, which do not carry credits or result in increased formal qualifications, are the responsibility of the Division

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of Teacher Education and Services of the Education Department. Courses are planned by an In-Service Advisory Committee with the following composition:

The Director of Teacher Education and Services (Chairman).

A representative from each of the Primary, Secondary and Technical Divisions nominated by its Director.

A representative from the teachers colleges nominated by the Committee of Principals.

A teacher nominated by the South Australian Institute of Teachers.

The Principal of the Raywood In-Service Centre.

The Senior Lecturer (External Studies), as an observer.

16.69 Attendance at courses is on a voluntary basis, and teachers are helped financially with the cost of travel and accommodation. Teachers from non-government schools may attend in-service conferences, and in their submissions to the Committee these schools expressed their appreciation of their inclusion and their desire to take an active part in in-service planning and to receive government financial assistance to enable them to participate. The number of in-service conferences increased from four in 1957 to 360 non-residential and 54 residential conferences in 1969, with 10,361 enrolments, 1,941 of them residential. The number of individual teachers attending conferences is not known.

16.70 The opening of the Raywood In-Service Centre in the Adelaide Hills in 1966 was an outstanding advance in in-service education. Residential conferences there last an average of four days and accommodation has been extended to house 38 students. Further extensions, including a camp school, are planned.

16.71 Apart from residential conferences and special courses in arts and crafts and in television techniques, most in-service courses are of one or two days' duration and are held in schools, both metropolitan and country, and in teachers colleges. It is planned to convert the present Wattle Park Teachers College into a day in-service centre when the college is rehoused and to extend the regional offices at Mount Gambier and Whyalla for a similar purpose. Most in-service conferences are concerned with the teaching of particular subjects at specific levels and their organisation is based on the school Divisions. As well as providing an introduction to new courses and teaching methods the exchange of experience and the inspiration gained are highly valued by most teachers. A new tendency is for the Education Department to arrange in-service conferences with the purpose of seeking the advice of innovating teachers as an aid in its own planning. Short induction conferences for those moving to new duties within the Department are also held. There is as yet no development on any significant scale of refresher courses for people return-

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ing to teaching after a period of absence. Some schools of three weeks' duration have been conducted for this purpose.

16.72 In-service education on such a large scale creates problems in the schools from which the teachers come; staffing establishment does not allow for such absences nor is itinerant relief staff available for such short periods of absence. Most proposals for the improvement of in-service training would involve removing teachers from schools for longer periods of time to enable study on a less *ad hoc* basis, emphasising that a condition of any radical change is an increased supply of teachers or a willingness of teachers and lecturers to undertake more lengthy courses during school vacations, or both.

16.73 We have drawn attention in Chapter 6 to the need for continuing education of teachers in a fast-changing world, and we have recommended certain steps which would allow it to take place in greater depth than at present and with less disruption to the normal life of the school (see paragraphs 6.83–6.85). In Chapter 17 we suggest that those entering duties requiring administrative competence should be given special training in that area. Some other aspects of the further education of teachers seem to us to require consideration.

16.74 A serious deficiency, in our view, of the present courses available for the further education of teachers is the absence of courses of an intellectually demanding nature for qualified primary and infant teachers whose initial training was taken in a teachers college. The advanced diplomas now being developed in the colleges will help to fill this gap. However, postgraduate qualifications are becoming increasingly necessary for higher positions in education, and the exclusion from them of the great majority of primary teachers who are not university graduates tends to make of graduates a closed élite in the profession. The provision of bridge courses and special credits which would allow people who have completed college diplomas to enter first and higher degree courses at a university would seem to be a necessary step to which we think the Tertiary Education Committee should give consideration. There is also a need for postgraduate training in early childhood education. Such courses would be particularly important in the preparation of lecturers qualified to help in the training of kindergarten and primary teachers.

16.75 The responsibility for developing courses in particular areas at greater depth than those at present available through departmental in-service programmes should, we believe, rest with teachers colleges, university departments of education, colleges of advanced education and professional bodies, advised by the Education Department and the non-government schools as to particular needs.

16.76 The area of short non-credit courses in which the Education Department has been so active is particularly important in facilitating

curriculum changes, including changes in teaching methods, in the dissemination of research findings and in sharing the experience of innovating teachers with wider groups. In order that the perspectives within which planning takes place may be broadened, we suggest that the In-Service Advisory Committee (see paragraph 16.68) should be enlarged. The inclusion of representatives of the non-government schools should benefit both school systems, particularly as teachers from non-government schools attend the conferences arranged by the Department. The increased participation of the teachers and teachers college lecturers would, in our view, give a better balance and co-ordination between the parties concerned in in-service education. We also suggest that the developing section of the Department which is concerned with curriculum research should be represented at the planning level.

16.77 Many important educational issues have implications for the whole school system which may be lost in the organisation of in-service training on the basis of the school Divisions. We suggest that in-service education should be regarded as an important means of breaking down the artificial barriers which exist between primary and secondary schooling and of promoting a unified view of the curriculum. An increased number of conferences spanning the primary and secondary areas would enable the development of wider perspectives and move beyond an exclusive concentration on practice in limited areas. To help in the development of a unified consideration of the overall purposes of individual schools, as distinct from the teaching of specific subjects, we have suggested in Chapter 6 that in-service conferences of the whole staff should be organised within schools (see paragraph 6.85).

16.78 Accordingly, we RECOMMEND that:

(a) The Tertiary Education Committee, whose establishment we recommend in paragraph 11.74, should encourage the development of arrangements for articulation of courses in the teachers colleges and the universities.

(b) The composition of the In-Service Advisory Committee of the Education Department should be broadened by adding, say,

Two representatives from non-government schools.

A second representative of the South Australian Institute of Teachers.

Two representatives from university departments of education.

A second representative of the teachers colleges.

Two representatives from the section of the Education Department responsible for research.

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16.79 While it cannot be expected that teachers entering the schools at the end of college or university courses will be accom-

plished practitioners, they should be able to enter the practice of their profession with some backing in confidence and experience. We do not accept the view advanced by some teachers in the schools visited by the Committee that the professional part of the education of teachers should be entirely in the hands of teachers practising in the schools, or the denigration of theoretical study which it implies. Such an arrangement would seriously inhibit changes, however well-based. There would seem, however, to be a need for a closer integration of theory and practice, for a greater measure of consultation and joint action between training authorities and the schools and for more experience in the schools as a required part of initial qualifications. In particular, the more active participation of headmasters in the organisation and supervision of teaching experience seems desirable. A high proportion of staff in the smaller and more remote schools at present consists of teachers taking up their first appointment. Especially in the secondary field there is often no experienced teacher to give advice or help in a particular subject area, and the level of prior experience and knowledge of the young teacher is of particular importance. While we have regarded the content of courses in teacher preparation as being outside our terms of reference, we believe that an investigation of the place of practice-teaching in teacher education should be undertaken by a committee jointly appointed by the training institutions and the schools. Such a committee should report to the Teachers Registration Board. We are impressed by the apparent success of the internship provision of the Bachelor of Education degree at Flinders University. This requires the student teacher at the end of his course to undertake, for two terms, teaching in a school under the joint supervision of college and school staff. The students return to the University for weekly sessions during which their experiences are shared and are discussed with the lecturer, and theory is related to practice. This should enable education courses to become more relevant to the school situation and provide support to the new teacher during his instruction.

16.80 Accordingly, we RECOMMEND that:

A committee representative of training institutions and the schools should inquire into, and advise the Teachers Registration Board about, the desirability of including a period of internship as a requirement of registration as a qualified teacher.

THE ORGANISATION OF TEACHERS COLLEGES

Overseas Developments

16.81 Changes have taken place in both the nature and the pattern of government of teacher education in many countries since 1945. In England and Wales teacher education had long been organised in two strata — university degrees and diplomas for secondary teachers and shorter courses in teachers colleges controlled by local

education authorities and church groups for teachers of younger children. In accordance with the McNair Report¹⁰ of 1944 the grouping of teachers colleges in an area in association with university faculties of education began in 1947. These groupings, called institutes of education, left the teachers colleges intact, but provided for joint supervision of courses and standards. The older image of the teachers colleges as second-rate institutions was passing. Minimum three-year courses were introduced in 1960, and in 1963 the Robbins Report¹¹ argued for a closer association between the colleges and universities, and a further raising of the status and standards of the colleges by the introduction there of degree courses conducted in association with university faculties. Bachelor of Education degrees have been available since 1966 to students taking four-year courses in the colleges. The possibility of gaining a degree in the colleges lessens the distinction between the fully university-trained and the fully college-trained teacher, a distinction which has never existed in Scotland where permanent teachers at all levels have been expected to be graduates.

16.82 Although developments since 1947 had ended the academic control of the English teachers colleges by the employing authority, most were still under the financial and administrative jurisdiction of local education authorities and church groups, though the number of places made available and the allocation of finance for teacher education were, and are, still controlled centrally by the National Advisory Committee for the Training and Supply of Teachers. In 1966 the Weaver Report¹² recommended that colleges should become corporate bodies, thus severing their control from employing authorities; and steps are now being taken to make the colleges autonomous institutions under their own governing bodies.

16.83 In the United States of America teachers are educated both in universities and in degree-granting colleges. All teachers follow a four-year degree course of training. In some States a teacher holding a first degree is granted only a provisional licence to teach and has five years in which to complete a master's degree before being granted a full licence. Some Canadian provinces have gone even further in closing the gap between the education of secondary teachers and those preparing to teach younger children. In Alberta and British Columbia separate colleges for the education of teachers have been abolished and staff and students integrated into the universities.

16.84 The trend in Scandinavian countries has been similar to that in the English-speaking ones. In all cases common elements

¹⁰ Report of the Committee of the Board of Education to consider the Supply, Recruitment and Training of Teachers and Youth Leaders, H.M.S.O., 1944.

¹¹ Report of the Committee on Higher Education, H.M.S.O., 1963.

¹² Report of the Study Group on the Government of Colleges of Education, Department of Education and Science, H.M.S.O., 1966.

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are present — longer training and the provision of degree courses for all teachers, the loosening of the organisational bonds between employing authorities and teacher education, the acceptance of teacher education as an integral part of tertiary education, whether conducted in separate degree-granting institutions or in universities, and the opening-up of higher degree courses in universities to teachers whose initial training was not taken there.

Australian Developments

16.85 In Australia much attention has been given in recent years to the organisation, content and standards of teacher education for reasons similar to those which have promoted change elsewhere. Social changes have greatly increased the demand for teachers at the same time as modifications in their role have required changes in the quality of their preparation. When knowledge is rapidly accumulating and being constantly restructured the teacher needs to be more than an instructor passing on a fixed body of information. No matter what the age of the pupils he teaches he needs a grasp of fundamental ideas in the disciplines he teaches firm enough to enable him to present these ideas in ways appropriate to the mode of thought of the age group concerned. He needs to have, and be able to make use of, scientifically based knowledge of the child and the learning process in order to assist his teaching. He needs to be able to promote learning in children covering a wide range of intellectual abilities, backgrounds and levels of motivation, and to raise all his students to a level of competence required of only a few in the past.

16.86 To be able to initiate children into a complex fast-changing democratic society the teacher himself requires a knowledge of society and a mind open enough to be accessible to rational argument and trained consideration of evidence. Over and above these formidable qualifications, if he is to be an educator the teacher needs to be a person capable of human relationships with his students and colleagues based on appreciation of each as an individual for whose development he feels concern.

16.87 In a period when the nature of education is changing, his training will need to have given the teacher practice in independent judgment, and knowledge which will enable him to initiate change in his own teaching and to take an intelligent part in determining educational policy beyond the classroom. The responsibility of the individual teacher will increase greatly in the coming period as decision-making over a wider area than in the past is delegated to him. There is, in short, greater stress on openness, adaptability and independence in the teacher, as well as a need for higher academic qualifications, than there was in periods when he was educating children for a more static, stratified and certain world. The

complex role of the teacher in advanced societies has led to concern about the type of education most likely to produce the type of teacher now needed.

16.88 Reporting on tertiary education in Australia, the Martin Committee argued that teacher education, as "one of the most significant aspects of education at the tertiary level", should be organised in autonomous colleges having their own governing bodies and associated under the general supervision of a Board of Teacher Education in each State, with a co-ordinating body at national level.¹³ Since the Committee reported in 1964, important changes have taken place in the scale and structure of tertiary education in Australia, the most important of which have been the development of colleges of advanced education with tertiary status, and Commonwealth financial support. The Martin Committee envisaged the growth of a three-pronged organisation of tertiary education in which teachers colleges, under Boards of Teacher Education, would be the third element, taking their place beside the universities and colleges of advanced education, the whole loosely co-ordinated for planning purposes. The Commonwealth Government initially rejected the idea of financial support for teacher education which it regarded as the responsibility of the States. However, since 1967, the Commonwealth Government has made two triennial grants for the building of colleges, although it has taken no responsibility for assisting their recurrent expenditure, as it has done in the case of universities and colleges of advanced education. Where teacher education has been incorporated as a school in a multi-purpose college of advanced education, it is receiving Commonwealth assistance on the same basis as other schools which are part of the college. As discussed in Chapter 11, bodies for the co-ordinated planning of tertiary education have been established in several States (see paragraph 11.51). The position of teacher education in some of these new arrangements is ambiguous.

16.89 The Commonwealth Advisory Committee on Advanced Education in its first report excluded the possibility of teacher education becoming a component part of colleges of advanced education, or of teachers colleges being themselves accepted as such. In its second report in 1969, however, the Committee at paragraph 1.33 argued that "the colleges (of advanced education) provide education with a vocational bias in many fields. There are good reasons why one of the numerically strong vocations, teaching, should be included." The Report of the Commonwealth Committee of Enquiry on Academic Awards in Advanced Education outlined the functions of the colleges of advanced education in ways consistent in many particulars with teacher education, though orientation towards industrial occupations is strongly stressed (see paragraphs 11.45-11.46).

¹³ Report of the Committee on the Future of Tertiary Education in Australia (1964), paragraph 4.77.

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16.90 Several different patterns of development in the field of teacher education are in evidence in Australia at the time of writing. Historical accident plays a large part in determining whether teacher education can be incorporated in colleges of advanced education. Some teachers colleges (e.g., Bathurst, Wagga and Hobart) have become associated with other institutions as colleges of advanced education, and in the newly developed college in Canberra a school of teacher education is to be included. New South Wales (1969) and Queensland (1970) have each legislated to set up a Board of Teacher Education. The New South Wales Act leaves the teachers colleges under the control of the Education Department, and the Board will act as a body to register teachers, plan research, advise the Minister regarding the development of teacher education in the State and collaborate with the New South Wales Universities Board and the New South Wales Advanced Education Board in planning tertiary places. The Queensland Act, on the other hand, enables teachers colleges to become autonomous bodies with their own governing councils and be regarded as colleges of advanced education for the purposes of their internal government if they so desire. A Board of Advanced Education is established which controls the general development of post-secondary education excluding universities, allocates finance, sets salary levels of staff, and so plays an important part in the control of teachers colleges, which have been reconstituted as corporate bodies. A Board of Teacher Education has also been set up which will collaborate with the Board of Advanced Education in matters concerned with teacher education, but whose chief function is the accreditation and registration of teachers, involving some supervision of courses. Committees are investigating the future government of teacher education in Victoria and Western Australia.

16.91 There have been changes, too, in the involvement of the universities with the professional aspects of teacher education. Traditionally the main involvement of Australian universities has been the provision of a one-year postgraduate Diploma in Education for intending secondary teachers, and higher degree studies. In recent years there has been much questioning of the appropriateness of this pattern, and alternative avenues of university qualification have been developed. For example, the Universities of Sydney, New South Wales and New England provide for the study of education in courses leading to the B.A. degree; Macquarie and La Trobe Universities offer a combined B.A.-Dip.Ed. programme over four years; Melbourne has introduced a B.Sc.(Ed.) degree for science students; and at Flinders University Part I of the Dip.Ed. programme is taken as part of a first degree course. These developments all relate to the education of secondary teachers. There has also been a limited movement of universities into the areas of primary teacher preparation and of specialist teaching qualifications. Sydney has a four-year undergraduate B.Ed. degree which can be taken in the field of primary, pre-primary or physical education. Queensland has a B.Ed.

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course which may be taken on the basis of the successful completion of a teachers college qualification. Western Australia, in its four-year B.Ed. course, grants some exemptions for study in other institutions. The B.Ed. course for primary teachers at Flinders University includes an important innovation in its internship. In the postgraduate field there are a number of developments in the area of specialist diplomas as well as in the long-standing higher general degrees in education.

16.92 There are three issues involved in considering the future pattern of government of the teachers colleges in South Australia:

- (a) Should the colleges be separated from the control of the Education Department?
- (b) If so, what alternative arrangements should be made for their internal government?
- (c) How should the co-ordination and planning of teacher education be organised, and what should be its relationship with the other two tertiary sectors, the universities and the colleges of advanced education?

Relationship of the Colleges to the Education Department

16.93 A number of organisations and individuals in submissions to the Committee urged the separation of the teachers colleges from departmental control. The main arguments which were advanced to support this change were as follows:

- (a) The control of professional training by the employer has an adverse effect on the status of the profession. Qualifications awarded may be suspect since there may be a temptation to fit standards to the finance available for training and to the need for recruits. Even if this view is unjustified, as in most cases it will be, it has an influence which cannot be ignored.
- (b) Such control is likely to inhibit independence of thought and action in two ways: through the restraints it puts on students who consciously or unconsciously fear that the youthful indiscretions which may be a necessary part of the growth to maturity will be noted by the employer, and through the limited intellectual stimulation likely to result from professional training undertaken in an institution governed by the same authority as the schools from which the students have come and to which they will return. Inbreeding is increased by the fact that a high proportion of staff have had their education and experience in the same system, making challenge to basic assumptions less likely than in other tertiary institutions.
- (c) Teachers colleges are unlikely to be accepted as full tertiary institutions able to compete with other such institutions for quality staff and students unless, like other institutions recognised as tertiary, they operate independently of employing authorities. While they are controlled by the Education Department they are likely to reflect its

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organisational climate in ways unacceptable to more independently minded potential staff and students. Universities are also less likely to give credit as a basis for further study to qualifications gained in an institution controlled by a government department.

(d) The supervision of students under bond to the Department is associated with the training institution itself where this is controlled by the same Department, distinguishing it from other tertiary institutions in the freedom that it allows. The enforcement of lecture attendance at some teachers colleges by the threat of reduction of allowances, the need to sign periodical attendance statements and the disciplining of students by placing them on probation or terminating their courses are not properly the business of the training institution except as they are related to the requirements of courses.

(e) The colleges have a large measure of academic freedom in the selection of staff, in the planning of courses and in control over academic standards, but their freedom in this area is not complete since it does not cover the selection of their own students, the length of courses or the award of their own diplomas, and the freedom which has been delegated to them has no legal basis and is therefore insecure. In addition, many of the virtues of separation from the control of the Department are absent in present arrangements, because responsibility is delegated only to college principals advised by staff, without participation in decision-making by the schools who will employ the output of the colleges, by other institutions involved in their education, or by the community at large to whom they are ultimately responsible.

(f) In the present relationship between the Education Department and the colleges the principals have considerable power which no formal requirement obliges them to share with their staff and students, although they have in fact done so to varying degrees. The selection of principals by departmental officers (except in the case of Bedford Park where the appointment is made jointly with Flinders University) is likely to limit the range of new ideas in significant places. The possibility of selection of like-minded people arises because college vice-principals are in effect selected by the Director-General of Education, advised by the principals, since college selection committees are composed only of those staff members equal or superior in standing to the person being selected.

(g) The effective organisation of the teachers colleges and the forward planning of their work are restricted by financial and ordering arrangements, methods of employment of ancillary staff and building and maintenance provisions to which they are subject as part of the Education Department.

(h) Control by the Department tends to make for undesirable uniformity between the colleges. The structure of the standard nine-unit diploma recently introduced may reduce the possibility of the development of specialist strength in particular colleges.

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(i) The delegation of responsibility to autonomous institutions as an expression of confidence that they will honour their obligations to the community is desirable in itself. The Robbins Report makes the point in these words:¹⁴

We believe that a system that aims at the maximum of independence compatible with the necessary degree of public control is good in itself, as reflecting the ultimate values of a free society. We believe that a multiplicity of centres of initiative safeguards spontaneity and variety and therefore provides the surest guarantee of intellectual progress and moral responsibility. We do not regard such freedom as a privilege but rather as a necessary condition for the proper discharge of the higher academic functions as we conceive them.

These arguments seem to us to carry considerable weight, requiring a strong contrary case to offset them.

16.94 The main arguments which may be raised against separating the colleges from the control of the Education Department revolve around fears that autonomous colleges might produce too few teachers and provide unsuitable courses. These arguments may be summarised as follows:

(a) The Department has a vital and legitimate concern with the numbers being trained in the colleges and the standard and nature of the training. In particular, its power to control admission is crucial in planning the supply of teachers, a responsibility which properly rests with those responsible for the schools. There is a danger that, if standards rest wholly with those who have no responsibilities for staffing the schools, then demands, unrealistic in terms of the supply of teachers, may be imposed.

(b) The second argument favouring the control of teachers colleges by the Education Department suggests that teacher education must be associated with the needs of the schools and a realistic appraisal of conditions in them, and that this requirement is more easily attained and teaching practice facilitated where both are controlled by the one authority.

(c) If the Department controls the nature of the courses offered in the training institutions it can then be satisfied that the teachers coming out of the colleges have been properly prepared for their tasks.

16.95 In our view, Departmental control of the teachers colleges is not necessary in order to guarantee an adequate supply of suitably educated teachers. The Department can retain a close control over the supply of college-trained teachers, as it already does over the supply of university-trained teachers, through the numbers of students to whom it offers support during training. The overall balance between the different levels and institutions of the education system will always, in the last analysis, be a matter of government policy. Any body set up to control the scale of teacher education would certainly include senior officers of the Education Department, as would governing bodies of individual colleges. We think it hardly conceivable that its representatives would not strongly influence these bodies,

¹⁴ *Op. cit.*, paragraphs 708-709.

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whose sense of public responsibility, we are confident, would be no less than its own. As an additional assurance, we later suggest that, where there is a shortage of places in colleges, students sponsored by the Education Department should be given first preference. There is no reason to believe that autonomous teachers colleges would impose standards which would unduly restrict the supply of teachers; indeed, present success rates do not appear to differ greatly between the teachers colleges and the universities, although the colleges are under departmental control and the universities are autonomous institutions (see paragraph 16.40).

16.96 In the arrangement of teaching practice, the effectiveness of collaboration between schools and the colleges rests to a considerable extent with the schools, whose co-operation the Department would be able to ensure as readily with autonomous colleges as with those run by itself. Already students for the postgraduate Diploma in Education, whose education is entirely in university hands, secure generous assistance from both the schools and the Department. In the many countries where teacher education and the schools are run by different authorities, the sense of public responsibility of each and the acceptance by both parties that the students are future teachers seem to have produced arrangements at least as satisfactory as those at present governing teaching practice in South Australia. Both the profession and the future employer will be associated with the government of the colleges in the arrangement we are suggesting, which should make for close co-operation of both the schools and the Department in the education of teachers.

16.97 Having taken all considerations into account, we are satisfied that the supply of adequate numbers of suitably trained teachers does not depend on departmental control of the teachers colleges, and that the arguments against such control are strong ones.

16.98 We believe that each college should be an independent corporate body governed by a council. This would enable the association in the government of each college of representatives of other institutions concerned in the particular courses it offers, lay representatives and teachers from the schools to which it will send its graduates, as well as representatives of the Education Department and of the academic staff and students of the college. Colleges would be able in this way to develop an individual character appropriate to the particular courses offered. The council of each college would take responsibility for managing the affairs of the college. On academic matters such as selection of staff below the level of vice-principal, selection of students, detailed content of courses, teaching and examining, it would act on the advice of committees of the academic staff of the college.

16.99 We do not consider that each college should operate as an institution entirely independent of others in the field. Overall planning of the scale of teacher education is necessary; the allocation of

money available for teacher training between the institutions involved must be undertaken by some authority. We also believe that the awards of diplomas and degrees made by a single authority external to the individual colleges would be accorded more general acceptance. Especially if the size of each college is to be limited to the 1,000 to 1,200 at present planned, it may be necessary to agree on areas of specialisation in order to ensure that all types of courses required are available. For these reasons we think the colleges should operate under the Institute of Colleges recommended in Chapter 11 and discussed further below.

16.100 Accordingly, we RECOMMEND that:

(a) *The teachers colleges should cease to be the responsibility of the Education Department.*

(b) *All five government teachers colleges at present in operation should be incorporated under Act of Parliament as independent institutions subject to the general supervision of the Institute of Colleges and operating along the lines set out in paragraph 11.60.*

(c) *The governing body of each college should be constituted along the lines recommended in paragraph 11.63, as follows:*

A Chairman, who shall not be an employee of the college or of the Education Department or a student of the college, to be elected by members of the governing body but not necessarily from among its members.

The Principal of the college.

Three members of the academic staff, elected by the academic staff.

Three students elected by the students.

Three members of the academic staffs of other tertiary institutions, of whom not more than one shall be from a college which has teacher education as its main concern, appointed by the Government.

Three members of the Education Department, of whom at least one shall be an inspector or consultant, appointed by the Director-General of Education.

Three members of the teaching staffs of South Australian schools, one of whom shall be employed in a non-government school, appointed by the Government.

Four members with a special interest in, or knowledge of, teacher education, appointed by the Government.

16.101 We suggest that, in selecting students for admission, the colleges should be required to give preference where necessary to those sponsored by the Education Department.

Teacher Education in the Tertiary Structure

16.102 The Committee considered three broad patterns through which the teachers colleges might be associated with each other and

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with the other two tertiary sectors. The patterns, not regarded as mutually exclusive, were as follows:

- (a) The association of teachers colleges with university schools of education along the lines of English Institutes of Education.
- (b) The grouping of teachers colleges in a third separately organised sector of tertiary education along the lines recommended in the Martin Report.
- (c) The association of the colleges in an institute of colleges along with the South Australian Institute of Technology and other institutions which are recognised as colleges of advanced education in South Australia.

16.103 Each of these alternatives has its own strengths and weaknesses, and a decision between them must rest largely on their appropriateness to the particular context in which they are to operate. There are strong arguments against educating teachers in institutions which isolate them from those training for other professions, because no other profession presents the same dangers of a closed cycle of experience. Other professionals will not return as adults to the school system in which they were educated. If teachers have spent the intervening years solely among people whose focus of interest is the schools, the world to which they are exposed is a very limited one, and they are unlikely to bring a robust perspective back to the schools as teachers. Whilst we are aware that the mere proximity in the same institutions of people studying diverse disciplines and training for different occupations does not guarantee the mixing and cross-fertilisation of ideas which we regard as desirable, it does make it possible. For both staff and students, perhaps particularly for staff, the effect is broadening.

16.104 On the other hand, there are distinctive aspects of the education of teachers which could be submerged in an organisation whose orientation was too strongly in other directions. Although it is an important element, the specialised academic excellence which is the criterion of evaluation of students at universities is not the only valuable attribute of a teacher. For some students purely academic pursuits will represent the path to the development of personal maturity and a humane system of values, and for these a university association may be the best preparation for teaching; but it will not be so for all. Similarly, the association of teacher education with colleges of advanced education primarily devoted to technological studies could inhibit the development of humanistic concerns which are vital to teaching. The Committee has considered each of the alternative structures for the government of teacher education as part of the tertiary sector in the light of the values expressed in this and the preceding paragraph.

16.105 THE ASSOCIATION OF TEACHERS COLLEGES WITH UNIVERSITY SCHOOLS OF EDUCATION IN INSTITUTES OF EDUCATION OF THE ENGLISH TYPE. The case for associating the academic supervision of teachers

colleges with university schools of education has strong theoretical appeal. There are good reasons why the universities should be more broadly concerned in the education of teachers. In 1969, for example, 58 per cent of students entering the faculties of arts and science at the two universities were preparing to teach. Of those taking out first degrees in the University of Adelaide in 1968, 90 of the 346 science graduates and 210 of the 335 graduates in arts entered teaching. The numbers and standards of students coming forward for tertiary education depend to a great extent on the quality of teaching in the schools, so giving the universities an interest in education at all levels. In order to increase the supply of people able to train teachers for pre-school, infant and primary work there is a pressing need to provide increased opportunities for university study both at postgraduate and at first degree level for teachers of young children. Admission to postgraduate work at universities of teachers whose initial qualification was gained at a teachers college would assist the more academically able to qualify for lectureships in teachers colleges preparing teachers of younger children. This could more easily be arranged if the colleges and universities were more closely associated.

16.106 In other English-speaking countries the unity of the profession has been promoted by the blurring of previous distinctions between secondary and other teachers through making degrees available for study at suitable levels for all. Universities in other Australian States have moved more positively into the field of education of teachers at other than secondary level than South Australian universities, where the movement has, if anything, been in the opposite direction in recent years except for the development of a Bachelor of Education degree at Flinders University. The association of the staff of university schools of education with teachers college lecturers in the planning and examining of college courses could provide valuable supervision of college standards, raise the value of qualifications gained, facilitate the accreditation of college courses as a basis for later university study, promote the unity of the profession and promote both in colleges and universities a broader overall view of preparation for teaching. The higher educational qualifications of students now entering teachers colleges should make such an arrangement more appropriate now than it would have been in the past.

16.107 Though it has much to commend it, we do not consider that an institute arrangement of the English type is immediately practicable as an overall pattern for the government of teacher education in South Australia. Three colleges have developed quite separately from the universities and are already strong and distinctive institutions. Patterns of teacher education have been worked out in the colleges which are at variance with university patterns. It is possible, as has happened in some English institutes, that association with universities could result in academic patterns in the colleges which would be unsuitable for many of the students at present study-

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ing there. In addition, it could result in too narrow a view of the colleges' functions, distorting them in the interests of later university study. Relationships between Adelaide Teachers College and the University of Adelaide over a period, and that University's attitude towards education subjects in first degrees, have not been such as would at present provide a favourable climate for the development of any close association between the University and the colleges. We do not say this by way of criticism but as a matter of fact. The relationship between the Bedford Park Teachers College and Flinders University has, however, been a close one. Hence, whilst we do not accept the institute arrangement as a possible general model for the organisation of teacher education in South Australia at the present time, we see advantages in the more active co-operation of teachers colleges and universities in the education of teachers, and suggest that the Tertiary Education Committee should keep the relationship between the two under review. In addition, we think that any pattern adopted for the government of the teachers colleges should be flexible enough to encompass the possibility of an arrangement of the institute type developing between particular colleges and particular universities.

16.108 **TEACHERS COLLEGES GROUPED AS A SEPARATELY ORGANISED SECTOR OF TERTIARY EDUCATION.** The grouping of teachers colleges as a separate tertiary sector under some such body as a board of teacher education, as recommended by the Martin Committee, has certain advantages. It enables the distinctive commitment of the colleges to children and schools to be preserved without the concessions to other values which a closer identification with universities or colleges of advanced education might involve. It does not rule out the possibility of courses other than those designed for the education of teachers being developed within teachers colleges, or the possibility of institute arrangements along English lines in special cases. It enables the scale of teacher education to be directly controlled through the provision of grants for teacher education. The needs of the Education Department might be expected to have more influence in a single-purpose grouping of colleges. Such a grouping represents less upset to existing arrangements than other alternatives, while separating teacher education from the control of the employer. It would allow teacher education, including the education of pre-school teachers, outside the universities to be planned as a whole, and it would ensure that its scale, nature and division between educational levels are appropriate for the needs of the schools. The association of single-purpose institutions would promote a high level of understanding of the requirements and techniques of teacher education and encourage research relevant both to it and to the educational process as a whole.

16.109 However, despite its apparent appeal, we do not regard a board of teacher education as the most desirable form for the organisation of teacher education in present conditions. There have been

important changes in the tertiary sector since the Martin Committee reported. The great expansion of education at this level which will take place over the coming decade and beyond requires, in our view, a more flexible structure for non-university tertiary education than would be possible under an arrangement which placed teacher education under an umbrella separate from that of colleges of advanced education. Unless population increases at a rate not at present expected, there will be some levelling-out of the rate of growth of the demand for teachers after the reductions in class size and other proposals recommended in Chapter 6 have been provided for. There will, in addition, be a greatly increased pool of qualified teachers available for re-employment. It may be expected that the total demand for tertiary education will continue to rise. This will occur because of the desire of a prosperous community for more education for its own sake, its increased ability to support it and the resulting general rise in the standard of education expected of entrants to all types of employment. In these circumstances, a pattern of organisation which set the teachers colleges in a sector apart would be a barrier to the flexible organisation required to make the best use of the resources available.

16.110 Another important objection to a board of teacher education is that it confirms and extends the isolation of teachers from those in other occupations. Proposals to lessen that isolation by introducing into teachers colleges courses for the preparation of social workers, journalists and others for whom some part of the courses at present being offered in the colleges would be suitable may have undesirable consequences. They might set up a dichotomy between the so-called liberal arts and technology by developing courses of a liberal arts type within teachers colleges rather than in institutions in which technologists were trained. For the technologist, as for the teacher, we think there are advantages in mixing during the training period with those preparing for other occupations with a different outlook. The development of mixed training institutions would be inhibited both for technologists and for teachers by the organisation of teacher education as a separate sector.

16.111 The grouping of teachers colleges as a separate tertiary sector would involve a more complex apparatus for the co-ordination of the non-university tertiary institutions than if one institute united the colleges with colleges of advanced education. The arguments in its favour would need to be strong ones if they were to compensate for the duplication of committees and secretariats which would be entailed.

16.112 We think these objections to a board of teacher education are persuasive. However, some overall organisation of the teachers colleges will be required if each is to become an independent institution governed by its own council. If the recommendations which we

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later make for the co-ordination of teachers colleges are not accepted, we should regard the board of teacher education as the most desirable alternative.

16.113 ASSOCIATION OF TEACHERS COLLEGES WITH COLLEGES OF ADVANCED EDUCATION. We think there are considerable advantages in regarding teachers colleges as colleges of advanced education, having a particular bias in the courses they offer. The fact that there are precedents for Commonwealth assistance in recurrent expenditure for teacher education where it is incorporated as a component in a multi-purpose college of advanced education, or the possibility that teachers colleges as autonomous single-purpose institutions might be more likely in future to receive such Commonwealth assistance has not been a major consideration in our thinking. Although the possibility of additional Commonwealth financial assistance might render this pattern attractive from the point of view of the State Government, we regard the whole issue as being too important to be decided on the basis of temporary expediency. The possibility of planned diversity in non-university tertiary education would be greater within a single institute which could decide where new courses could best be located. Duplication of facilities could be avoided, and their sharing encouraged. The existence of a single institute would facilitate the planning of new colleges in which schools of education could take their place alongside other schools each of which was not large enough to form a viable institution in its own right. If additional facilities for the training of teachers are required we favour their development in such multi-purpose institutions. The diversification of courses in present teachers colleges would not in our view be practicable on any considerable scale, quite apart from the objections raised in paragraph 16.110. To be successful a multi-purpose institution would require a reasonable balance between purposes; it would also require a principal and an administrative structure which were above the battle when competing claims were being considered. Teachers colleges which accepted students preparing for other occupations in order to further the central purpose of the institution would not be in this position. A single institute of colleges would provide the best opportunity for the development of institutions which were genuinely diverse.

16.114 A single institute of colleges would facilitate the organisation of courses for teachers which combined study in such establishments as the South Australian Institute of Technology, the School of Art and Roseworthy Agricultural College with professional studies undertaken in a teachers college. Indeed, it would raise the possibility that some teachers might, in the course of time, receive their full preparation in the South Australian Institute of Technology or other colleges of advanced education in the same way as many now do within the universities. If a single institute were concerned with planning the non-university tertiary sector as a whole, it would be

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possible to take the opportunity of any decline in the required provision for the pre-service education of teachers to introduce other courses into teachers colleges. Such developments could be planned in the wider perspective of the whole sector rather than in the narrower one of the teachers colleges. It may even be considered desirable, over the course of time, to plan for the conversion of the present teachers colleges into multi-purpose institutions by transferring some teacher training from them to other institutions and introducing a range of different courses into the present teachers colleges. Apart from its other advantages, this would be a considerable convenience to the many students now travelling long distances for particular courses, since there would be several such multi-purpose institutions. Such a development would also mean that students were not necessarily committed to a particular occupation at the threshold of their tertiary study.

16.115 If, as is likely in the near future, degrees are awarded for courses in education taken outside the universities, the authority of the institute would give them added standing. It would provide some guarantee of comparable standards in all degrees issued on the basis of courses taken in colleges of advanced education.

16.116 Possible fears about the effect on teacher education of a single institute of colleges do not, in our view, have a firm basis. The first of these is the fear that the scale of teacher education could be less directly controlled because in a single institute it would be competing for funds with other necessary developments. This would not in fact be the case, because in its application for funds the institute of colleges would be required to set out its estimates on the basis of the needs of its member colleges, and decisions about the scale of teacher education, as of all other developments in the area, would be made by the Governments concerned. The level of teacher training and supply is an obligation of the State in a direct way because of its responsibility for the running of the schools. The Government would be in a position to control it, as it now does, through its control of finance. We are confident that the sense of public responsibility of the governing body of the institute of colleges would in any case make it responsive to the needs of the Education Department as expressed to it by the departmental representatives among its members.

16.117 Another possible source of concern is the effect on teacher education of the divergent purposes which would be served by the member colleges of a single institute. Teacher education, it is said, is concerned with the development of people rather than with the production of things or the attainment of objectively measurable ends such as the maximisation of profit. It may, incidentally, be pointed out that technology and business administration, to take two examples, are themselves giving increasing consideration to human factors,

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and their stronger association with the social and behavioural sciences might accelerate this process. A more relevant point is the presence within the South Australian Institute of Technology of social workers, pharmacists and physiotherapists, all of whom, like teachers, are concerned with imperfectly measurable human ends. Within the universities very divergent disciplines, each with its own distinctive frame of reference, exist in a single institution.

16.118 There may also be concern that the multi-purpose nature of the institute would make it inappropriate to control the standard and content of teacher education courses. However, the same problem exists within universities, and it can be overcome in a similar way. In paragraph 11.59 we suggest the establishment of separate boards of study composed of experts in the field and not confined to members of the governing body of the institute of colleges. One of these boards would be in the field of education. The responsibility for recommending the approval of courses and for supervising the maintenance of standards would directly devolve on such a board.

16.119 We do not think that the single institute arrangement would be incompatible with the development of arrangements of the English institute of education type between particular universities and particular colleges. For purposes of general planning and finance and in the pattern of their internal government, colleges entering such arrangements would be in the same position as other colleges of advanced education. Different arrangements could be made for the planning and accreditation of courses which would then be under the control of the college and the university school of education with which it was associated instead of being the responsibility of a board of studies in education of the institute of colleges.

16.120 The inclusion of teachers colleges in a single institute of colleges would be in line with the recommendations we later make on the future of bonding. The object of these recommendations is, among other things, to bring the conditions under which teachers are trained more in line with those operating in other professions and to work towards ending the special and isolated position which teacher education has occupied in the past.

16.121 We understand that the Education Department expects that the proportion of teachers educated within the universities will continue to decrease, as it has done over recent years. However, we believe that an increased proportion of matriculated students will seek entry to teacher training as school retention rates rise, and that the number of university places available will be adequate to enable at least as high a proportion of teachers in training as at present to enter the universities. Because we think that early commitment to a particular occupation is best avoided, we favour a policy which allows teachers in training to pursue courses which give them some choice

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of occupation in the long run. We also regard the segregation of teachers during their training as undesirable.

16.122 Accordingly, we RECOMMEND that:

- (a) The teachers colleges at present in operation, including the Kindergarten Teachers College, be associated, each as a corporate body, with colleges of advanced education in an Institute of Colleges whose functions and composition are recommended in paragraph 11.60.*
- (b) A separate Board of Studies in Education under the Institute of Colleges, as outlined in paragraph 11.59, should be responsible for the academic supervision of teacher education courses outside the universities.*
- (c) Member colleges of the Institute of Colleges where courses in teacher education are offered should be free to associate with university schools of education in the planning and accreditation of their courses.*
- (d) No further single-purpose institutions should be developed for the education of teachers, and any necessary expansion of facilities should take place in an institution established as a multi-purpose institution by the Institute of Colleges.*
- (e) The proportion of teachers in training enrolled in the universities should not be permitted to decline further, and should be raised to the highest level possible.*
- (f) Where a sufficient number of relevant subjects in specialised fields is offered in a college of advanced education whose sole purpose is not the training of teachers, intending teachers should be encouraged to take part of their training there.*

BONDING

16.123 Australia is one of the few advanced Western countries to retain a bond of service in return for expenses involved in the education of teachers. France, Israel and New Zealand are the only other such countries to do so. It must be recognised that a different pattern of assistance to all tertiary students exists in many advanced countries which have no system of bonding. In some, like the United Kingdom, allowances are paid to nearly all students entering tertiary institutions of all types, and in some, like the United States of America, few tertiary students receive government assistance. However, Australia's retention of a practice rejected by so many other similar countries would seem to require special justification. Few would support the bond as being desirable in itself; the question at issue is whether the required numbers of teachers can be obtained without it.

16.124 A number of submissions to the Committee urged the discontinuance of bonding. The main arguments which may be raised against the bonding system are:

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- (a) The early age at which it commits students to a vocation, and, in practice, to a single employer is undesirable. The student may be unaware of his potentialities or of the full implications of the decision. This may arouse resentment in the student who subsequently changes his mind as he becomes aware of other possibilities, thus resulting in the recruitment to teaching of unwilling practitioners.
- (b) The student may in fact be unsuited to teaching but by the time he has found this out be too heavily committed to withdraw.
- (c) The level of the living allowance attached to the bond may tempt into a commitment to teaching some students who, if they were free from financial constraint, would rather enter another profession, thus lowering the morale of the teaching force.
- (d) The bond may have a depressing effect on teachers' salaries and conditions, since these do not need to be such as will attract qualified people directly into the profession in competition with other avenues of employment requiring a similar level of qualification and offering similar security of employment. The existence of a pool of exit students under bond from teachers colleges may be seen as an alternative to making country service in particular more attractive.
- (e) The bond does not succeed in holding some of the most able students who have taken honours degrees under departmental patronage. In fact, of the 1964 intake into Adelaide Teachers College, 17 of the 55 who proceeded to honours degrees resigned before taking up an appointment.
- (f) The existence of the bond, in the words of the Martin Committee,¹⁵ makes for "an unfortunate differentiation between young people preparing to be teachers in government schools and those preparing to enter other professions", which may lower the attractiveness of teaching in the eyes of more able or more independently minded students.
- (g) Students training under an agreement with an employer are likely to be over-conscious of outside limitations on the range of their thoughts and actions. This is likely to breed undesirable docility and conformity in a profession requiring imaginative thinking and the exercise of initiative.
- (h) Bonded students may apply themselves less than fully to study in the knowledge that they are cushioned against failure by virtue of the investment they represent. Whether or not they are properly qualified at the end of their period of training, they will still be employed. An example of this is the people who come out of primary colleges without full qualifications.
- (i) The position of students under bond is ambiguous. Although the former South Australian Solicitor-General expressed the opinion to the Barnes Committee that teachers in training were not employees, in at least some teachers colleges their conduct is regulated in ways seen by many students as more appropriate to employees than to

¹⁵ *Op. cit.*, Vol. I, p. 104.

scholarship holders, thus breeding resentment against their future employer.

16.125 It is interesting in view of the long-standing criticism of the practice in Australia that neither the students concerned, nor the South Australian Institute of Teachers nor the principals of teachers colleges urged the discontinuance of bonding to the Committee, though changes in its method of operation were suggested. The case against bonding was strongly put by university staff and university student groups, probably reflecting the dissatisfaction of the relatively small number of able students to whom alternative avenues of employment are most likely to be open.

16.126 The main arguments raised in support of the bond relate not to its desirability *per se*, but to its effectiveness in securing a predictable supply of teachers. These arguments may be summarised as follows:

(a) The Education Department is charged with the responsibility of educating children during the ages of compulsory attendance, and has in practice assumed responsibility for those choosing to stay beyond the compulsory age. These obligations require, within the limits of class size accepted as tolerable by the profession and the community, that specific numbers of teachers be available at particular times. Nor can government schools refuse to accept students, as can non-government ones. Hence, the Department needs whatever assurances can be built into the system that teachers will be available at the required times in the required numbers. The bond gives some assurance of supply at particular points of time.

(b) The Department has an equal obligation to children in remote areas and those in more populous areas. It has been a considerable achievement of the centralised systems in Australia that the quality of education is as nearly equal as it is, irrespective of where a child lives. Given the relative lack of attraction of some areas, this achievement cannot be maintained without the power to direct teachers to serve in certain places. A high proportion of teachers in government schools are married women willing to serve in limited areas only; consequently, in the absence of sufficient incentives to serve in remote areas, the staffing of country schools depends for its continuing quality on the Department's power to assign young teachers serving under bond to remote schools.

(c) A high proportion of students entering teacher training come from families who, without the higher allowances which are associated with the bond, would not be able to finance their sons and daughters through tertiary education.

(d) Throughout the period of their training teachers college students have received allowances from the State higher than those available to a more limited group of the most able training for other professions, and without a means test. The acceptance of those allowances

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must carry a moral obligation to serve the State. If this moral obligation were not reinforced by a legal obligation the less scrupulous would be able to evade it.

(e) To the majority of students, whose commitment to teaching is early and strong, the bond constitutes no hardship. In fact the assured employment which it implies gives a point to study which many would not undertake for its own sake.

16.127 Possible effects on the supply of teachers must be a central concern in any consideration of the discontinuance of bonding. Some or all of the following conditions would need to accompany the abolition of bonding if the supply of teachers were to be maintained:

(a) The numbers of people coming forward from grade XII in secondary school and desiring further education would need to be increasing at a substantially greater rate than the predicted numbers required to enter teachers colleges in order to staff the schools.

(b) All entrants to university and other tertiary institutions including teachers colleges would need to be assisted by the provision of many more scholarships of a uniform kind. This would be necessary both to keep up the number of students at tertiary institutions and to remove the temptation for able people who had no intention of teaching to accept teacher training allowances in preference to other awards.

(c) The attractiveness of teaching to people qualified to enter it and other alternative occupations would need to be increased. Emphasis would need to be placed on attracting rather than forcing people into the profession. Conditions would have to be improved by confining the duties of teachers to the professional work for which they had been trained, by increasing the areas of professional decision-making and by offering promotion prospects attractive to able people. Incentives sufficient to attract the required numbers of teachers to remote areas without bonding would need to exist.

Table 16.13

PROJECTED NUMBER OF FIRST-YEAR TEACHERS COLLEGE STUDENTS RELATED TO
PROJECTED NUMBER OF PUPILS IN GRADE XII IN THE PREVIOUS YEAR

SOUTH AUSTRALIA 1969-1981

	Projected Entry to Teachers Colleges A	Projected Grade XII in Previous Year (a) B	A/B per cent
1969	1,494 (b)	4,531 (b)	33.0 (b)
1972	1,935	6,430	30.1
1975	2,210	8,560	25.1
1978	2,482	10,950	22.6
1981	2,832	13,120	21.6

Source: Education Department and Committee's estimates.

(a) Projection B: migration 10,000 per annum and medium retention in senior grades.

(b) Actual.

16.128 The implementation of the second and third conditions involves questions of policy. As to the first, Table 16.13 relates the Education Department's estimates of numbers entering teachers colleges to the numbers that the Committee estimates will be retained into a fifth year of secondary schooling in the previous year. The Department's projections imply significant reductions in class size. The number entering teacher training in 1969 represented 33 per cent of the fifth-year secondary students in the State in 1968. By 1981 we expect the corresponding proportion to have fallen to 22 per cent. It is clear that in the next decade the Education Department will need a steadily falling proportion of the pool available for recruitment to teacher training.

16.129 We have given careful consideration to the whole question of the bonding of student teachers. Although we have been influenced by the fact that so many advanced countries have seen fit to discontinue the practice, we are conscious that the structure of professional incomes and opportunities and the conditions of access to higher education, as well as geographical factors, differ from country to country and affect the outcome in ways that make the simple transfer of argument from one country to another impossible. We agree that any alternative arrangement must ensure predictable numbers of teachers. We are impressed, however, by what seem to us to be the undesirable effects of bonding on the professional status of teaching, on the morale of a section of the teaching force which finds itself under compulsion, on students who have been committed too early to a vocation from which they find it difficult to withdraw and on the atmosphere of training institutions.

16.130 We wish to record our opposition to the whole principle of bonding and to the special allowances for teachers in training which are associated with it. We think both should be discontinued as soon as conditions permit. Since students trained entirely within the colleges have fewer alternative opportunities for employment, the maintenance of a supply of university-trained teachers who have a degree usable in other occupations is the main consideration in timing the abolition of bonding. Two conditions affecting the supply of graduate teachers would need to apply before bonding could safely be discontinued for this group. The numbers of graduates coming forward would need to be high enough to meet competing demands and to allow the recruitment of the required numbers to teaching as entrants to the Diploma in Education. As discussed in Chapter 11, it is expected that the number of tertiary students will increase greatly over the coming period until, by 1981, new enrolments at tertiary institutions, including the universities, will be about twice as great as the number who entered in 1970. Radical changes in the supply position may thus be expected. However, the abolition of bonding would also involve the ending of special allowances to intending teachers at the undergraduate level, and the increased

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number of students expected might not be forthcoming if these allowances are discontinued unless there were a comprehensive system of scholarships which assisted all students qualified to enter training for any profession. To end bonding while maintaining special allowances for intending teachers would involve the Education Department in the expense of subsidising many other students in order to secure the graduates it required. Hence, the recruitment to teaching on a basis comparable with recruitment to other professions requires that the numbers wishing to enter tertiary institutions be sufficiently high, and requires the existence of an extended scholarship scheme assisting students at teachers colleges, colleges of advanced education and universities. We would point out that the cost of teachers college scholarships in 1969-70 was 65 per cent greater than the cost of Commonwealth university and tertiary scholarships (see Table 15.1), so that if teachers college scholarships were abolished the savings could be used to much more than double the number of general tertiary scholarships at Commonwealth scholarship standard.¹⁰

16.131 We are not sufficiently confident of the effects to recommend an immediate end to bonding, although we think that the possibility of doing so should be kept under constant review. Meanwhile, we think that some steps in the direction of ending the bonding of student teachers should be taken. The first is that allowances to teachers college students, rather than increasing with the cost of living and in accordance with interstate changes, as recommended by the Barnes Committee, should fall as the supply position improves, bringing them closer to Commonwealth scholarship levels. Tertiary teaching scholarships, as a further aspect of special financial provision for teachers in training, could, in our view, be immediately discontinued without any adverse results. It is doubtful, in any case, whether they have been an effective means of securing the retention of able students as teachers or of enabling significant numbers of private students to train as teachers, the purposes for which they were originally designed. Further steps would be to reduce the scale and degree of early commitment to teaching by changes which would abolish agreements entered into at too early an age, encourage later-age recruitment, and make it more possible for those who changed their minds during the period of training to withdraw. The recruitment of students at school level should be discontinued. Such students are not in a position to choose between alternatives since their knowledge both of their own capacities and of other possible employments is limited. If financial assistance is necessary to enable students to spend an additional year at school, it should be equally available to all students, rather than be confined to those entering a single occupation. There can, on the other hand, be no objection to the

¹⁰ The Commonwealth Government has announced, late in 1970, a scheme to begin in 1971 whereby students will be offered unbonded scholarships to train as teachers at the Canberra College of Advanced Education under the same conditions as apply for Commonwealth University or Advanced Education Scholarships.

bonding of graduate students desiring to take a Diploma in Education. At this stage it is reasonable to expect a knowledge of alternatives and to offer inducements which might attract to teaching a larger proportion of the increased supply of graduates which will be forthcoming. Hence we are recommending that allowances at this level should be increased, say, to the level of Commonwealth Postgraduate Awards. This would require an increase of \$800 over the allowances at present paid to teachers recruited at this level, and an extra \$970 to married male students. The options open to the minority of students who find during their courses that they do not wish to teach could be extended somewhat by introducing a scale of allowances within which students could choose according to their means and the strength of their commitment to teaching. Those whose commitment to teaching was less firm could, if their circumstances permitted, accept lower allowances, so making their withdrawal less costly. For an even smaller minority of very able students who may desire to teach at tertiary rather than at school level, tertiary teaching could be accepted as a means of working out their period of obligatory service.

16.132 An additional step in the direction of ending distinctions between those training for teaching and those training for other professions would be to end the connection with the teachers colleges of those students preparing to teach through courses at universities, and to regard allowances as scholarships for whose payment and withdrawal the sponsoring authority was solely responsible. Students preparing to teach entirely through university courses do not, in our view, need to be connected with teachers colleges except for the purpose of studying any college units which are accepted as part of a university qualification. The connection with the colleges is academically undesirable, since the university courses being followed are in themselves full courses, to which college additions may only act as a distraction or as an extra burden. Attendance at university is valuable in reducing the isolation of teachers, and teachers in training who study there should be encouraged to regard themselves as full members of the university rather than as a special group within it. Other considerations also support the separation of teachers in training at the universities from the colleges. The connection at present places an unnecessary administrative burden on the colleges in the keeping of records, in the fortnightly payment of allowances and in the review of student progress. These responsibilities could not in any case be retained within the colleges if they are to become independent of the Education Department. The Department would then be in the same position as other prospective employers sponsoring students through universities, directly undertaking the responsibility for the payment and withdrawal of allowances. University students attached to the colleges are now counted as one-fifth of a full-time internal student in reckoning the capacity and staff/student ratio of the colleges. Their removal from the colleges would allow extra internal students to be accommodated with a lesser expansion of staff and

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facilities than would be required in the colleges under the present arrangement.

16.133 Accordingly, we RECOMMEND that:

- (a) *Bonding and the special allowances for teachers in training should be discontinued as soon as conditions permit. Meanwhile the Advisory Council of Education, whose establishment we recommend in paragraph 17.29, should periodically review bonding arrangements to determine when they could safely be discontinued.*
- (b) *Teaching scholars should have the option of accepting lower allowances sufficient to enable them in the circumstances in which they are placed to take university or college courses, but requiring lower repayments if they decide not to teach, or a shorter bonded period. A scale of allowances should be introduced, giving students the possibility of moving from one level to another during their courses.*
- (c) *Full-time tutoring or lecturing at universities or colleges of advanced education, including teachers colleges, should be accepted as teaching service in the working-out of the bond.*
- (d) *The giving of allowances to students at school on the understanding that they will enter teacher training should be discontinued.*
- (e) *The allowances paid to graduate students recruited immediately before the year of their Diploma in Education should be raised to the level of Commonwealth Postgraduate Awards.*
- (f) *Teaching scholars taking full courses at universities should no longer be attached to a teachers college.*
- (g) *Allowances to teachers in training should be paid directly by the Education Department, and not through the teachers colleges.*
- (h) *Allowances paid to teachers in training should be progressively reduced to Commonwealth scholarship levels as the supply position improves, and the bonded period adjusted accordingly.*
- (i) *Tertiary teaching scholarships should be discontinued.*

CHAPTER 17

Organisation of the Education Department

ORIGINS AND PRESENT ORGANISATION

17.1 The Government of South Australia first undertook to provide education, as opposed to subsidising education provided by other bodies, when it passed the Education Act of 1875. By that statute, a Council of Education was set up. It was to be constituted of not fewer than five nor more than seven persons. The Chairman was a salaried officer. The other members were appointed for two-year terms. The Council held lands for school purposes,¹ controlled the expenditure of all moneys appropriated by Parliament for elementary education and had authority to establish and maintain public schools, to appoint and remove teachers, school inspectors and other officers, to make regulations defining the course of instruction and character of school-books, for the establishment of scholarships, for the training, examining, appointment and classification of teachers and for fixing their salaries and fees and providing for the discipline to be enforced and observed in schools, the times and mode of teaching and the occasional use of schoolrooms after school hours for other purposes.² By the same Act the Government might appoint a Board of Advice for any school district, such Board to consist of not fewer than three persons, but the Council was to define the duties of Boards of Advice.³ The Council decided where public schools should be established, and it was empowered to establish a training school for the education of teachers and "Infant Schools, Evening Schools, Schools for the teaching of any branch of Science or Art and Advanced Schools for continuing the education of scholars who should have obtained prizes at Public Schools or otherwise applied for admission".⁴ There was thus established a centralised administration for public education within the province of South Australia.

17.2 The Council of Education was dissolved by the Education Amendment Act 1878, and all the powers of the Council were transferred to a "Minister Controlling Education". This position has continued unchanged until the present time, the title of the Minister being changed to Minister of Education in 1915.⁵ The scheme which was adopted when the 1875 Act was passed and an Education Department established was one of centralised administration, which has continued, though gradually to a lesser extent, to permeate the system. Until 1891 fees were payable for all children, but the fees could be remitted where the parents were unable to pay. Except for the doubtless small proportion of moneys obtained from fees, all the cost of State education, including provision of buildings and payment of teachers,

¹ Section 5.

² Section 6.

³ Sections 6 and 17.

⁴ Section 12.

⁵ Education Act 1915, section 6.

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was met by government grant, first to the Council of Education and from 1878 onwards direct to the Department under the authority of the Minister. The administration provided the buildings, staffed the schools, laid down courses of instruction and inspected both schools and teachers.

17.3 There were various factors at work which led to the centralisation of the administration of public education. The 1875 Act made it compulsory for parents to send a child of seven to school and to keep him at school until he attained the age of 13 years,⁶ although it was many years before this was fully enforced. The provision⁷ that schools might be established in any locality where at least 20 children were available to attend school indicated that Parliament was of the view that schools should be established even in sparsely settled areas. Although there were private schools in existence, there was no provision for their incorporation into the State system as there was in England. The Education Department therefore undertook an obligation to provide equal minimum standards for a geographically dispersed population. The local government bodies in South Australia have not at any time had the resources or interest to provide education within their districts.

17.4 The provision that the Council should make regulations defining the course of instruction and character of school-books was a measure which doubtless was designed to ensure uniformity of education. In 1875 prospective teachers were untrained and in many cases poorly educated. The change in the standard of education of the teacher was gradual, and the change in the capabilities of teachers, who have become individually better equipped to make professional decisions concerning teaching, has been accompanied by the organisation of teachers into a professional body through which they can voice the opinions of a large and ever increasing profession.

17.5 Although, in the ways which we shall mention later in this chapter, there have been attempts to decentralise the organisation of the Education Department, the structure in essence has remained centralised and hierarchical. The final responsibility for State education rests with the Minister of Education. There is thus a danger that deficiencies in the State education service which may be known to its officers may not be made public for political reasons.

17.6 The first report of the Education Inquiry Committee set up by the Government of South Australia under the chairmanship of Mr. E. L. (later Sir Edgar) Bean,⁸ in discussing the administration of the Education Department, said,

The actual type of education system which is established in the State depends not so much on the provisions of the Act as on the use which is made of the statutory

⁶ Section 21.

⁷ Section 8.

⁸ Presented 16th May 1945.

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powers. The creation and growth of the system is the work of the administrators, rather than the legislators. All the important problems as to what is to be taught, the objectives to be pursued, the types of schools, and the training and qualifications of teachers are directed by the administrator. For this reason the education administrator holds a position of considerable power and importance.

We do not see the growth of the education system as the function of the administration alone. Primarily it is the function of the professional teacher to decide within accepted purposes what is to be taught and how it is to be taught. Nor do we regard the training and certification of teachers as being among the functions of the administrators.

17.7 We see the main purposes of the administration as being:

- (a) To translate public views about education into educational objectives and to assist the Government to attain those objectives.
- (b) To keep the public informed of changes in education and to bring to its attention desirable directions for future change.
- (c) To facilitate the most educationally effective relationship between the individual teacher and the individual child, so that each child's potential may be developed through means most suitable to him.
- (d) To ensure between localities and groups equality of opportunity for children.
- (e) To be responsible for co-ordination and planning, including, but not limited to, overall curriculum planning, and for the supply of buildings and of teachers.
- (f) To promote educationally desirable changes by encouraging initiative from the teachers and by ensuring that adequate facilities are available for the continuing education and professional training of teachers.

17.8 The Department is now large and complex. Centralised decision-making may restrict initiative and cause wasteful delays. Meanwhile, teachers are better educated and more able to assume professional responsibility. The community itself is both more interested in education and more highly educated than it was, and this trend continues. As a consequence, more decisions can be taken at local level with confidence. The rate of change in all educational and social fields is greater than it was in the past. Delays are thus more serious, and local decision-making should enable the education system to change at a faster rate. The greater emphasis on the development of the individual child requires flexibility and a greater variety of courses and methods developed by professional teachers to suit the particular needs and abilities of the children they teach. Uniformity is not a goal in itself. Desirable directions of change will best be established by variety and experimentation. There is a need to distinguish between those decisions which should be made at the centre and those which should be delegated to other people and bodies, particularly those who will have the task of implementing them.

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17.9 The administration of the Education Act 1915-1966 is entrusted to the Minister of Education, who has vested in him the lands and other properties held in trust for the purposes of the Act and has the power to take and acquire either by agreement or compulsorily any lands or other property which may be required for the purposes of the Act.⁹ The Director-General of Education is the permanent head of the Education Department and the chief adviser to the Minister of Education.

17.10 The organisation of the Department and the allocation of authority between the Director-General of Education, his Deputy and the Directors are described as follows in the submission of the former Director-General (Mr. J. S. Walker):

The duties of the Director-General fall into three broad categories:

- (1) Chief adviser to the Hon. the Minister of Education.
- (2) Forward planning at policy level.
- (3) A range of outside activities which may be described broadly as public relations.

The Deputy Director-General is responsible to the Director-General for the day-to-day operation of the Department and exercises delegated responsibilities in certain broad areas including accommodation and staffing. Responsibility for decision-making has been delegated as far as possible, consistent with audit regulations and Government policy, to the Directors of the Divisions. Top management is supported by a Personal Assistant to the Director-General and a secretariat of five. The Director-General has recently requested the appointment of an Assistant Director-General to give further support.

Broad Responsibilities of each of the Professional Directors

The overall supervision of all schools or colleges or other educational institutions within his Division including:

- (1) The provision of appropriate courses.
- (2) The provision of adequate and suitable accommodation.
- (3) The appointment, transfer and promotion of teachers.
- (4) Financial control of funds allotted to the Division from revenue.
- (5) Advising the Director-General on forward planning.

The responsibilities of the Director of Administration and Finance include:

- (1) The management of the accounting and business services of the Department including the preparation of budget estimates.
- (2) The implementation in accordance with policy of land acquisition, school accommodation and maintenance, teachers' residences, transport, and supply functions.
- (3) Supervision of the clerical staff of the Education Department.
- (4) Administration of the Automatic Data Processing Section.

17.11 As we have pointed out, the Department of Education has been under the direct control of the Minister since 1878, though in South Australia the Minister does not have power to decide the curriculum, which is the province of the Director-General. Education is a matter of vital concern and interest to the public generally. We have had a number of submissions that the responsibility for the decision-

⁹ Sections 6-10.

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making as to the employment of the State's resources in education should be more widely spread than at present. Such suggestions are not of recent origin. The 1945 Education Inquiry Committee considered submissions that a Commission should be set up to exercise some or all of the powers as to public education conferred by the Education Act. One of the reasons advanced for setting up such a Commission reads strangely 25 years later. It was that:

There has been little effective public demand for modern educational facilities because the public, including Members of Parliament, typically have no knowledge of where Australia stands today in these matters. They are prevented from having this knowledge because the Ministry of the day is so directly responsible that the professional officers have to conform to the requirements of silence normally imposed on public servants.

It cannot be said today that there is a silence in any quarter as to the needs of education, although comment is not in all cases well informed. Another reason advanced to the 1945 Committee, namely, that the problems which arise in the Education Department affect the lives of thousands of children and teachers, and that decisions on such matters would be made more wisely by a Commission than by any one man, is an argument which has equal force today. We shall consider the question of an Education Commission in subsequent paragraphs.

DECENTRALISATION OF THE EDUCATION DEPARTMENT

17.12 The Education Department began as a small centralised and hierarchical body. At least until recently the policies of the Department have been developed in much the same manner, so that policy initiated at the highest level has been handed down through the various strata of authority to the teachers in the schools to implement. We will discuss in this chapter the extent to which, and the manner in which, there should be decentralisation in education. Two types of decentralisation require consideration. The first involves the inclusion in general policy decisions of people outside the Department; this type of decentralisation may occur at the central, or at regional or school level, or at all three. The second involves the devolution of authority within the Education Department itself. Here it may take the form of dividing the single school system which at present exists into a number of smaller separate systems, each duplicating in miniature the present administrative structure; or of delegating a range of decision-making to regional officers or to schools themselves within the framework of a single education department. In the case of decentralisation by an increased autonomy at school level, delegation may be to the headmaster alone, thus preserving the principle of hierarchy, or delegation to the headmaster of powers to be used in consultation with other teachers, each teacher having the duty of making decisions which affect his own teaching and of partaking in decisions affecting the school as a whole.

17.13 We have received a number of submissions relating to the first type of decentralisation, namely that there should be wider com-

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munity participation in policy-making. Most of these suggestions would require the setting up of some body apart from the Education Department with a power and duty to advise the Minister. We now proceed to discuss some of these suggestions.

Ministry of Education

17.14 One suggestion which we received was that the immediate staff of the Minister of Education should be separated from the Education Department so that there should be a Ministry of Education apart from the Education Department. In fact the Minister of Education has a small personal staff which is separate from the Education Department and which is known as the Minister of Education Department. The Department comprises a Secretary of the Department, a press secretary and a small clerical staff. Its functions are to provide the Minister with administrative, but not professional, advice as required on the matters coming before him, and with secretarial and public relations services; and to assist in providing liaison between the Minister and his departments and the organisations which make their approaches to the Government through him. These include the Libraries, Museum and Art Gallery Departments; the universities and the South Australian Institute of Technology; the Kindergarten Union; the Institutes Association; the National Fitness Council; the several parent organisations; the South Australian Institute of Teachers and educational bodies which receive grants from the Government. All correspondence and documents relating to these activities are channelled through the Minister of Education Department. However, the proposal for a Ministry of Education envisaged much more extensive functions than these, including the provision to the Minister of professional advice. Its proponents argued that the Minister has a responsibility far wider than that which the activities of the Education Department embrace, and that the Director-General should not be the sole adviser of the Minister in cases where the Department is one among several interested parties, for example, in matters affecting universities, colleges of advanced education, non-government schools and pre-school kindergartens.

17.15 In New South Wales a Ministry of Education was established from 1st August 1969 as a new Department of the Public Service. The functions of the Ministry of Education are stated to be as follows:

- (a) To ensure, over the whole range of education services, that matters involving more than one of the several educational authorities receive concurrent attention in consultation with the authorities, in order to provide co-ordinated, and promote consistent, advice to the Minister.
- (b) To provide the Minister with general assistance both secretarial and in regard to public relations.
- (c) To assist the Minister in the organisation of deputations and conferences, as required.

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(d) To ensure that each educational authority is kept informed of ministerial decisions on major matters.¹⁰

The Ministry of Education, the Department of Education and the Department of Technical Education are three separate departments within the Ministry of Education and Science. The permanent heads of the Departments of Education and Technical Education advise the Minister on policy matters in their respective departments although papers passing to the Minister from the departments normally flow through the Ministry of Education. The advocates for a Ministry of Education in South Australia seemed to envisage a Ministry to which the non-government schools and the pre-school kindergartens (among others) would have direct access. The New South Wales Ministry does not appear to act in conjunction with bodies such as these.

17.16 We recognise that it is desirable that there should be more than one channel through which those having a responsibility for education should have access to the Minister, and that the permanent head of the Education Department should not be expected to represent interests other than those of his own department. It is not suggested, however, that the non-government schools, for example, should be under the control of a Ministry of Education, and without some measure of control there would seem to be little point in the Ministry. If it were to be established as simply another tier superimposed upon the present structure of the Education Department it would serve little useful purpose. Moreover, although the Minister has the duty of superintendence over the State Library, Institute libraries,¹¹ the Art Gallery¹² and the Museum,¹³ each of these bodies is run by a Board, and it would not be appropriate to bring them under the control of a Ministry of Education. We are not satisfied that there are any significant merits in the proposal that we received for a Ministry of Education apart from the Education Department.

Education Commission

17.17 We have considered submissions that education should be under the control of an Education Commission. Such a Commission would determine general educational policy, and, generally speaking, would take the place of the Minister in administering the Education Act. Such an arrangement was, as we have said, suggested to the 1945 Education Inquiry Committee. It has been suggested that the Commission should exercise statutory powers, and should be substantially free from government or ministerial control. An example is to be found in the Australian Broadcasting Commission. This body consists of seven members appointed by the Governor-General on ministerial advice. It receives moneys appropriated by Parliament for its pur-

¹⁰ Information supplied by the Secretary of the New South Wales Ministry of Education.

¹¹ Libraries and Institutes Act 1939-1967.

¹² Art Gallery Act 1939-1968.

¹³ Museum Act 1939.

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poses, on the basis of estimates submitted by the Commission to the Postmaster-General. Subject to certain general conditions imposed by Parliament it is an autonomous body.¹⁴

17.18 Proposals for the establishment of an Education Commission were placed before the Panel of Inquiry under the chairmanship of Sir Norman Rydge which reported to the Premier of New South Wales in 1967. These were stated in the report to involve "a variety of conceptions of a commission" and to show "some fundamental differences in approach". The Panel rejected all of them and decided that there were "serious objections" to proposals "giving control of educational policy to a commission".¹⁵

17.19 The Queensland Teachers Union has put forward detailed suggestions for an Education Commission for Queensland.¹⁶ These envisage a Commission of seventeen members responsible to the Minister for Education for the control of all State education. Under the Commission would be established seven boards responsible to the Commission in separate fields of education or services to education. The advantages to be seen in such a proposal are a greater involvement of a greater number of people directly in education matters, a less hierarchical approach to the problems of education and a wider spread of responsibility and of advice to the Minister. It is suggested that questions relating to education would thus be further removed from the political arena. The Commission would have the responsibility not only for changes of policy in educational matters but also for disbursement of funds. The education vote would be made by Parliament for disbursement by the Commission.

17.20 There is much to be said in favour of the proposal for an Education Commission. It would free the authority responsible for running the schools from any obligation to cover up deficiencies in order to protect the Minister. A Commission would be its own advocate to Parliament, able to argue the case for improvements and seek grants sufficient to carry them out. It would enable a wider span of interests to be accommodated at the planning level. Nevertheless, there are substantial arguments for placing the responsibility for the obtaining and disposition of funds for educational purposes upon the Minister. Such funds nowadays form such a high proportion of State expenditure that it seems to us to be inconsistent with the principle of parliamentary democracy to remove education from ministerial responsibility and accountability to Parliament. A Minister is more sensitive to public opinion than a Commission would be. Although there is the danger that well-organised and articulate

¹⁴ Broadcasting and Television Act 1942-1968, sections 31, 61, 62, 64, 66, 68, 69.

¹⁵ Report of the Panel of Inquiry on the Establishing of an Education Commission in New South Wales (Rydge Report). Parliamentary Paper No. 128 of 1968-69, pp. 35 and 50.

¹⁶ *Education Commission for Queensland*, published by the Queensland Teachers Union, 1969.

groups may wield undue influence, we think on balance that responsiveness to public attitudes and demands is desirable in educational matters. An Education Commission would not necessarily result in a public more objectively informed than at present about conditions in the education system. Although it would not be obliged to protect the Minister, a Commission might succumb to the temptation to protect itself. We are not satisfied that the control of education by an Education Commission would yield a balance of advantage over the present ministerial control.

Advisory Council of Education

17.21 Before the passing of the 1945 amendment, the Education Act contained a provision enabling the Government to appoint an Advisory Council of Education to consist of 21 persons, including representatives of bodies responsible for education at all levels, of employers and employees, of agricultural interests and of organised teachers.¹⁷

17.22 The Council was required to make recommendations as it thought fit to the Minister:

- (a) Upon methods of or developments in public education which in the opinion of the Council it was desirable to introduce into the State.
- (b) Upon any matters connected with public education referred to the Council by the Minister.
- (c) Generally upon questions relating to the development and general administration of public education in the State and the due co-ordination of all branches in public education.

17.23 The Education Inquiry Committee of 1945 in its first report recommended that there should be established an Educational Policy Board to consider and advise the Minister upon general educational policy and to recommend long-term plans for the Education Department. One of its reasons for making the recommendation was that it

¹⁷ The actual composition of the Council was:

Six officers of the Education Department.

Four representatives of private schools.

Two representatives of the University of Adelaide.

One representative of technical schools within 10 miles of the Adelaide General Post Office.

One representative of other technical schools.

One representative of education in music.

One member to be nominated by the South Australian Chamber of Manufactures Incorporated.

One member to be nominated by the South Australian Employers' Federation.

Two members to be nominated by the United Trades and Labour Council of South Australia.

One representative of agriculture.

One member to be nominated by the South Australian Public School Teachers' Union.

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had received evidence that there was a good deal of dissatisfaction felt by a substantial body of teachers with the system of administration, and there was resentment against some of the administrators. Headmasters complained that they were merely nominal heads of their schools.

17.24 The recommendation was as follows:

We think therefore that there should be established a permanent but not necessarily full-time board to consider and advise the Minister upon general educational policy and to recommend long term plans for the department. The advantages of such a board in our opinion are the following:

- (a) It would provide an organ charged specifically with the task of improving the system of public education and directing the general lines of policy.
- (b) It would tend to remove the risk that one branch of education might receive more favourable treatment than the others.
- (c) It would be better able than any individual Minister or Director to plan and promote the carrying out of long term policies.
- (d) It would enable the public and the teachers to have a greater voice in the formation of educational policy.
- (e) It would constantly review and revise the general administrative practices of the department so as to abolish and avoid unnecessary work and promote administrative efficiency.

17.25 By the 1945 amendment to the Education Act the Advisory Council of Education was abolished and provision was made enabling the Governor to appoint a board to be called the Educational Policy Board. This was to consist of the Director-General of Education and four other members. The function of the Board was to inquire into, and report to the Minister upon, all matters referred to the Board by the Minister pursuant to the Act.¹⁸ In speaking to the second reading of the Bill, the Minister of Education, the Hon. C. L. (later Sir Charles) Abbott, said:

There has been for some years an Advisory Council on Education. The functions of that body have been considered by the inquiry committee, which has reached the conclusion that a small body, consisting of four members, will be far more satisfactory and better able to carry out the responsibilities given to it under the Bill than the Advisory Council has done hitherto.

The Minister, in answer to questions, said "I am not aware of the reasons which led to the recommendations for the appointment of a Policy Board. However, the Government has come to the conclusion that it is a desirable innovation and has included it in the Bill." After this somewhat vague recommendation the new Board was duly established, met once, and, so far as this Committee has been able to ascertain, did not meet again.

17.26 Advisory Councils for Education are used in England where two such Councils were set up under the English Education Act 1944, one for England and one for Wales. The Councils may advise the

¹⁸ See sections 19 and 23c.

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Minister "upon such matters connected with educational theory and practice as they think fit and upon any questions referred to them by him".¹⁹ The Minister is required to include in his annual report to Parliament an account of the "composition and proceedings of the Central Advisory Councils for Education".²⁰ The Advisory Councils, backed by considerable research staff, have been responsible for a number of important inquiries and recommendations, the most outstanding of which in recent years are included in the Crowther Report,²¹ the Newsom Report²² and the Plowden Report.²³

17.27 We have formed the view that it is desirable that there should be constituted a body representing interests in addition to those of the Education Department, and consisting of persons in the community with an interest in education. This body should be able to initiate matters for discussion, to advise the Minister and to report to Parliament. The objection which we have heard that the Minister might receive conflicting advice from the head of the Department and from such a body does not dismay us. The Minister's task is by no means limited to the administration of the Education Department. He has wider obligations. It should be of great benefit to him to have the advice of a body which was able to look at the educational system as a whole. It seems to us that nothing but benefit to the Minister and to the community would ensue from the fact that the Minister should receive advice from a body not under the aegis of the Education Department. The Director-General of Education is not in the best position to express the views of the non-government schools, the pre-school kindergartens or other educational bodies outside the Education Department. Furthermore, benefits to education would follow from suggestions made by outsiders looking in as addenda to the suggestions of those whose professional lives are spent entirely within the framework of the Education Department. The many problems relating to education which have been propounded to this Committee by a large number of persons and bodies indicate the necessity for a study of many facets of education both within and outside the Education Department.

17.28 It is true that a Council similar in composition to the one we are recommending existed before 1945, and was subsequently abandoned as ineffectual. However, certain arrangements which we regard as essential to the successful working of such a body did not exist in the case of the earlier Council. To be effective the Council requires a full-time Secretary-General of high quality, and the status and salary of the position must be high enough to attract

¹⁹ Great Britain. Education Act 1955, section 4(1).

²⁰ *Ibid.*, section 5.

²¹ 15 to 18: Report of the Central Advisory Council for Education, H.M.S.O., 1959.

²² *Half Our Future*: Report of the Central Advisory Council for Education, H.M.S.O., 1963.

²³ *Children and their Primary Schools*: Report of the Central Advisory Council for Education, H.M.S.O., 1967.

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such a person. In addition, the Council must have the means of undertaking the inquiries which are essential as a basis of useful and authoritative advice, and must be in a position to make its independent findings available both to Parliament and to the public. It should have power to initiate inquiries and to engage expert committees or to commission individuals to carry them out. It should be required to submit a report to Parliament annually. The Council will need a small full-time secretariat, independent of the Education Department and working under the Secretary-General.

17.29 Accordingly, we RECOMMEND that:

(a) An Advisory Council of Education should be established with the following powers and duties:

(i) To advise the Minister about desirable developments in education.

(ii) To advise the Minister upon any matters relating to education which may be referred to it by him, or upon which it may deem it expedient to advise him.

(iii) To report to the Minister each year on the operations of the Council during the preceding year, and generally on questions relating to the development and due co-ordination of education in the State; this report to be annexed to the annual report of the Minister and tabled in Parliament.

(iv) To conduct inquiries itself or through expert committees, to commission studies and to publish reports.

(b) The Advisory Council should consist of:

A Chairman appointed by the Government.

The Director-General of Education.

The Director of Further Education.²⁴

The Chairman of the Tertiary Education Committee.

The Chairman of the Pre-School Committee.

Four persons directly concerned in pre-school, primary or secondary education, but not in government schools, appointed by the Government.

Four members appointed by the South Australian Institute of Teachers.

Eight lay members, two of whom might be nominated by parents' organisations, appointed by the Government.

The Secretary-General, who shall be the chief executive officer of the Advisory Council.

17.30 We suggest that the Secretary-General should be a statutory

²⁴ See paragraph 12.51.

officer appointed for, say, seven years, and with a status and salary about equivalent to those of the Director-General of Education.

Education Organised on a Regional Basis

17.31 The Committee has considered whether there should be a decentralisation of education on a regional basis. Such arrangements exist in many countries, with varying degrees of central responsibility for financing the system and for the training, promotion and allocation of staff. In New Zealand, primary education is administered in four regions, each with a local education board, and secondary education is administered at the individual school level by boards of governors. The central Department of Education retains responsibility for many important matters, including all finance, but is relieved of the responsibility for staff allocation, except in the case of primary teachers under bond, and of the direct responsibility for running the schools. In Great Britain the councils of the counties appoint the local education authorities within the area and these are represented on the governing bodies of the individual schools. In the United States of America each school district has its own board whose sole responsibility is the administration of schools within the district. In both these countries, however, there is an obligation upon local government bodies to supply a substantial proportion of the funds for education. Resulting inequalities have of recent years led to the assumption of increased responsibilities by the central government and to the amalgamation of districts. It was argued to us that control of education by regional councils would breed a greater community interest in the schools in the region, would lead to the provision of better amenities in the schools and could result in greater diversity in the schools and greater attention to the particular needs of the area.

17.32 Complete decentralisation by regions, each operating as a separate educational system duplicating in miniature the present State system, is clearly impracticable in South Australia for many reasons. It would involve an expensive duplication of administrative machinery within a system whose total pupil numbers are smaller than those of many local education bodies in Great Britain. No responsibility for raising funds could be delegated to regions without creating considerable inequalities between them. Because of the pattern of population distribution, regions could not be required to recruit staff independently of each other without penalising more sparsely populated areas or certain areas of metropolitan Adelaide, which for various reasons teachers find less attractive. The inducements which some areas would have to offer to gain staff would make the operation of some systems much more expensive than others, even if staff of reasonable quality could be attracted. The regions would in any case be artificial constructions, since no tradition of regional responsibility exists and local government bodies have expressed no desire to become involved in educational provision. Even if regions could be

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created, the area over which some would have to operate in order to cover pupil numbers which would make them viable systems would be so great as to destroy the possibility of cohesion developing within them.

17.33 It would, of course, be possible, as in New Zealand, to retain crucial responsibilities, such as financial provision, in a centralised department and to lay down on a State basis conditions of staff promotion which required periods of service in certain areas as a condition of promotion in others. In our view, the training, recruitment and allocation of staff could not be delegated to regions in South Australia in present conditions without creating undesirable inequalities. If we accept that financial provision, the allocation of teachers, the provision of buildings and forward planning of resources are best organised on a State-wide level in South Australian conditions, a range of decision-making within a single system might still be delegated to the regional level. Some steps in this direction have been taken in the appointment of Regional Officers of the Education Department. It should, however, be noted that the delegation of responsibility for many areas of educational administration to Regional Officers in South Australia is not decentralisation of the type practised in New Zealand, Great Britain or the United States of America. A characteristic of the arrangements made in these countries is the participation of members of the local community in the educational system of the area. Such delegation on a regional basis as exists in South Australia is confined to people professionally engaged; it is restricted to employees of the Education Department and to two country districts.

17.34 We have given some consideration to an arrangement which would enable parents to participate at regional level. District education councils might be established, composed of representatives of staff and parents of government secondary and primary schools, non-government schools, pre-school organisations and institutions for further education. The council for each district might meet once or twice a year to discuss educational problems specific to the area, including those of articulation between educational levels, and the present and future needs of the area. We are not sufficiently convinced of the likely utility of such an arrangement to recommend its general implementation, although we think the proposal worthy of trial on a pilot basis. Through the Advisory Council of Education we have recommended greater community participation in educational policy-making at the highest level, and we think that in South Australian conditions the other level at which the community should be involved is the school, rather than the district or region.

Regional Offices

17.35 In an effort to decentralise the administration of the Education Department, Regional Offices have been established at Mount Gambier and Whyalla. The Regional Officer is directly responsible to the

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Director-General. He has authority to transfer primary staff within the region. In the Primary Division he is also concerned with buildings and equipment and inspection, and he is said, in the appendix to the submission from the former Director-General, to "approach full autonomy in all primary education matters". In the Secondary Division he is said²⁵ to act in a general way on behalf of the Director of Secondary Education to promote the interests of secondary education within his region. He acts in liaison with the Chief Inspector of Secondary Education in the transfer of secondary teachers and in the appointment of relieving teachers within the region, in applications for leave when on-the-spot consultation is desirable, in problems of a personal nature and in the interviewing of applicants for employment within the region. He helps with the inspection of secondary classes by arrangement with the Chief Inspector. He makes recommendations about all teachers' houses and about minor alterations to secondary schools, advises about the need for providing any new schools within the region and approves educational excursions which do not involve air travel or travel outside the State. He promotes and assists in the in-service education of teachers in the region. In practice it is found that all directives and most in-service courses still emanate from Adelaide, and no policy decision on employment of staff, no modification to buildings and no inspection schedules are handled locally. The result is that at least in secondary schools the consultations with the headmasters are mostly informal, as questions which are sent to Adelaide are generally handled there by officers of the Secondary Division without reference to the Regional Officer. Recently, regional advisory committees on curriculum have been established, and a guidance officer attached to each region. The establishment of two regional offices is, of course, comparatively recent, and the impact of the Regional Officer upon education cannot yet be fully assessed.

17.36 The Director-General expects that the responsibility of the Regional Officers will grow, and that further such offices will be developed outside the metropolitan area. At present there are primary inspectors but no secondary ones attached to the regional offices. In the present structure of the Department, the Regional Officers, because in theory they span both Primary and Secondary Divisions, are in a somewhat difficult position, there being no strong organisational link between the two Divisions. We do not think that any administrative decisions which can be made at school level or which can be dealt with only by the central office should pass through regional offices, although regional offices should be kept fully informed of decisions affecting schools in their region. Repairs and minor modifications to buildings, the granting of special leave to teachers and permission for educational excursions, for instance, should in our view be handled at school level. Staff allocation and the other major matters of policy are in any case referred to head office, and it is, in

²⁵ Circular to Heads of Schools 33:69.

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our view, preferable that they be referred direct from the school. We see little advantage in regional offices which act merely as an extra link in the administrative chain. We envisage the main functions of the regional offices as providing educational leadership and advice, promoting a unified approach to education at primary and secondary levels and advising the central administration on the allocation of resources to the region and on necessary future developments there. All these tasks are at present included within the functions of regional offices, but it is possible that the regions cover too wide an area for them to be performed as efficiently as they might be.

17.37 We have given consideration to an arrangement which would involve dividing the State into areas which would be larger than the present primary inspectorial districts, but smaller than the present regions. Within an area headmasters of larger schools might handle all matters which did not require action by central office. Areas based on geography or school population might each have an area office with a group of consultants under a chief consultant whose functions would be to help education in the area by advice, in-service education, circulation of material and the organisation of conferences. The area office might have subject consultants competent to advise at both primary and secondary levels, and general consultants on school organisation and on curriculum. The group might work as a team, replacing the present inspectorial system. It might be responsible for the arranging of the assessment of teachers wanting promotion. For this purpose it should use or include a visiting assessor from another area. The reduced frequency of assessment envisaged in the proposed promotional system should make this a workable scheme (see paragraphs 6.71–6.73). The area office might advise on forward planning in the area, and be responsible for the movement of floating staff, permanently attached to schools in the area, for relief purposes. Such an arrangement would not interpose an administrative group between the scene of action — the schools — and the source of funds and overall policy — the Department. It might ultimately develop to the point where separate Primary and Secondary Divisions became unnecessary in the central administration, the needs of areas and schools being directly met by service divisions dealing with personnel, buildings, research and so on. While we do not wish to recommend general reorganisation along the lines suggested in this proposal, we think the idea has sufficient merit to be tried out on a pilot basis. The functions it envisages being performed by area offices are, in our view, those which should be seen as essentially the work of the present and any future regional offices. This would only be possible if both primary and secondary consultancies and inspectorates were organised on a regional basis, working as a team through the regional office.

THE SCHOOL IN THE ADMINISTRATIVE STRUCTURE

17.38 The basic education unit is the school. In the case of some non-government schools the individual school supplies the whole of its

administration as well as its teaching. The headmaster, and through him the teachers, may be responsible for the curriculum, for discipline and generally for teaching methods. He in his turn may be responsible to a board of governors for the disbursement of funds, and the board may be wholly responsible for the obtaining of funds and for the provision of buildings, equipment and staff. In a State system of education the acquisition of funds cannot satisfactorily be left to the individual school. General administration, including the recruitment and deployment of staff, should remain, in our view, the province of the central authority. We have considered the proposition that the headmasters should recruit their own staff through advertisement of each vacancy. This would make it possible to bring together in each school staff whose common philosophy of education would give it a distinctive character, but it might result in an unequal distribution of staff of high quality. Progressive and stimulating headmasters would draw like-minded teachers, and the unadventurous might similarly congregate together. It is possible even within a centralised system of staff allocation for a headmaster to bring into his school some staff who are particularly attracted to his approach to education. Such an arrangement is, we think, desirable, but the full choice of staff by headmasters through open advertisement would in our view have undesirable consequences. If parents were free to choose the school to which they wished to send their child, enabling a matching of parental and staff attitudes, choice of staff by headmasters would in many ways be a good thing. However, even if there were no zoning which obliged parents to limit their choice to a specified number of schools, the distance of some from the child's place of residence would in any case impose limitations on choice. Open choice would be likely to result in quotas being applied in schools regarded as "good" by educated parents, and such schools would then become selective ones. Children whose parents lacked knowledge of the relative standing of individual schools would be at a disadvantage in comparison with those whose parents took a more active interest in, and were more knowledgeable about, educational matters. Schools in remoter areas or suburban ones regarded by staff as less desirable would be left with teachers who could not gain positions in schools regarded as more desirable. Although theoretically it has some advantages, we do not favour a system of staffing which advertises all vacancies and allows individual headmasters to choose between applicants. However, we think it desirable that, except in relation to the provision of finance and staff, the individual government school should operate in much the same way as the individual non-government school.

Headmasters

17.39 In discussing the school as a unit it seems to us appropriate to consider headmasters before we discuss school councils. In the first report of the Education Inquiry Committee of 1945, reference was

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made to evidence from the Headmasters' Association in which they alleged *inter alia* that they had

- (a) no control over the appointment of their teachers;
- (b) little control over methods of teaching;
- (c) no control over what is taught;
- (d) little control over the furniture, condition, layout or equipment of their schools;
- (e) no access to the superintendent beyond the normal access open to all teachers.

The report continued:

For these reasons the headmasters said that they were merely nominal heads of their schools. We also draw attention to the other parts of the evidence which reveal differences of opinion between the headmasters and the Department as to the necessity for a good deal of the clerical work which headmasters are called on to do . . .

17.40 The provision of more clerical assistance in the schools has to some extent met one of the complaints of the headmasters in 1945, although this Committee found on inspection of schools that there were still many complaints about lack of clerical help and about the multiplicity of forms requiring attention by the headmasters. For example, headmasters are required annually to complete a very detailed form as to the number of rooms and amenities in school buildings and head teachers' houses, though the buildings and amenities do not vary from year to year. Another example of the time-wasting form is that which requires particulars of every item, including crayons and pencils, supplied to children on the free list.²⁶ If forms such as these are considered essential, then it is certainly desirable that the time of the headmaster should not be consumed in completing them and that they should be completed by a clerk. The headmaster should be free to concentrate on his professional tasks as educational leader and decision-maker, in consultation with his staff.

17.41 In the submission to this Committee from the then Director-General it was said "Current policy is to encourage heads of schools to accept the fullest responsibility in the running of their schools both professionally and administratively". This trend is, in our view, highly desirable and we welcome the fact that it has been made more specific and authoritative by the memorandum issued to heads of government schools by the present Director-General of Education in August 1970. This memorandum makes explicit a break in the pattern of centralisation which we regard as important enough to justify the inclusion of its full text. The memorandum runs as follows:

Freedom and Authority in the Schools

I have been asked to define more clearly what is meant by the freedom you and your staff have been exhorted to use in the schools. I shall be grateful if you will make the contents of this memorandum known to your staff.

²⁶ Form P.C. 1.

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Let me say at the outset that you as Head of your school, by delegated authority from the Minister and the Director-General, are in undisputed control of your school.

Within the broad framework of the Education Act, the general curriculum advised by the curriculum boards and approved by me as Director-General of Education, and the general policy set by the Director of your Division and communicated to you by circular, you have the widest liberty to vary courses, to alter the timetable, to decide the organisation of the school and government within the school, to experiment with teaching methods, assessment of student achievement and in extra-curricular activities.

Grouping, setting, streaming, development of tracks, block timetabling and un-grading are all acceptable schemes of organisation. Co-operative teaching, team teaching, tutorials and independent study are all acceptable methods for teaching and learning.

In any experiment or variations the general well-being and education of the students must be the prime concern. Consequently any major change should be with the full knowledge of parents.

In exercising your authority and freedom to run your school as you think fit, of necessity you must have the backing of your staff. Without their support and participation and their adequate preparation, any departures from tradition will have little chance of success.

Just as you have professional freedom and delegated authority, so too the same privileges should be extended to your staff, who in turn must accept your ultimate authority in the school and the stake that parents and students have in what goes on in the schools.

Staff members will more readily follow a course of action if they have been taken into confidence and have shared in formulating the policy. They will be less effective and less enthusiastic if they feel that communication is all one way and their voices are not heard.

With any innovation it is expected that the motive is to meet more effectively the needs of students. A sound reason for rejecting, say, a trial of "setting" English or Mathematics or indeed of classes in any given subject, might be that there were insufficient teachers of the appropriate kind available at the one time to organise it. An unsound reason would be that "setting" is perhaps more difficult to arrange administratively.

No experiment must commit the Education Department to supply more staff, more accommodation, more equipment or more funds without prior consultation. Nor must parents be put to expense without their concurrence.

The question of government in a school is of prime importance, and should therefore make provision, especially in secondary schools, for student opinion to make itself known. Ways of bringing this about will differ with the size and nature of each school, and the relative age and maturity of the students concerned. Methods are best left for the schools to work out.

Finally, the sooner the old concept of the fixed timetable and strictly regulated movement as the blueprint of the school day disappears, the better.

The timetable should reflect a great variety of individual approaches. The timetable should be the servant of the curriculum, and both be servants to the student.

(Signed) A. W. JONES.

17.42 The memorandum is fully in accord with the thinking of the Committee, expressing the lines upon which, in its absence, we should have recommended change. However, while we welcome it as a statement of present policy, we recommend revision of the Regulations made under the Education Act so that the headmaster

will have the formal authority which he is now encouraged to assume. A headmaster who wishes to innovate may well be inhibited by the present Regulations under which he is required to follow the appropriate course of instruction determined by the Director-General from time to time,²⁷ and to consult with him before he makes significant changes. The Regulations lay down in great detail the responsibilities of the headmaster in relation to property, staff and teaching methods, although they give him few powers in relation to any of these areas. He has no power to vary the routine of his school without the permission of the Director-General. The assessment of pupils undertaken by the headmaster and his teachers is subject to careful consideration by the inspector. The headmaster may not grant leave of absence to any teacher for any reason or for any period of time. Such requests must be approved by the Director-General.

17.43 Not only are the Regulations in their present form restrictive of head teachers, but if obeyed they would tend to inhibit the freedom of other teachers. No regulation explicitly forbids teachers to make public comment on the education system, but the grounds on which disciplinary action may be taken against teachers²⁸ are so wide and vague, including "conduct likely to bring the Department into disrepute", as to have an intimidatory effect. School committees are required by the Regulations to report any breach of regulation by a teacher. All communications by teachers to persons in the administration must pass through the headmaster "who will endorse upon them such remarks and recommendations as circumstances require".²⁹

17.44 We are aware that the Regulations are not strictly enforced. However, they exist, and represent the formal situation. They are severely restrictive upon the initiative of the teachers. Many persons employed for years in a service where failure to observe regulations may be penalised lose the desire for independent thought and action. In our view, the Regulations require considerable overhaul. Perhaps the Regulations are, to some extent, responsible for the failure of some head teachers to accept responsibility, a failure which those in authority in the administration have deprecated. It seems to us that, if the school is to be the unit for immediate consideration of the needs of the individual child and for innovation and experiment, then neither the headmaster nor his staff should be hedged around with regulations which, if followed, would prevent the use of the initiative which the administration now wishes them to develop. It should, in fairness, be said that we visited schools where major innovations were in progress. In all cases the headmaster reported that, far from receiving any obstruction from the central administration, he had received every encouragement, including in some cases special financial allocations. However, a lack of desire for change or

²⁷ Regulations, Part XXVIII, R.4.

²⁸ Regulations, Part XXVIII, R.39.

²⁹ Regulations, Part XXIX, R.2.

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for the assumption of further responsibility seems common among both headmasters and teachers. The long history of centralised decision-making has bred an unhealthy lack of initiative, "the system" being blamed for failure to initiate change at the school level. It may also be that past attitudes have resulted in the promotion of the more conforming individuals to positions of responsibility, so making the possibility of radical educational changes at the school level limited. However willing, and indeed anxious, the central administration may now be for headmasters and teachers to exercise initiative, the weight of past policies drags heavily. In addition, the Regulations speak a quite different language from the present expressed desires of the central administration, and the lack of precise definition of the range of decision-making which now rests in theory if not in law with the schools must inhibit the assumption of responsibility below. Delegation in general terms is not likely to be effective.

17.45 Accordingly, we RECOMMEND that:

All the Regulations made under the Education Act should be reviewed in order to eliminate those which are not essential to the smooth running of the schools and which may limit the exercise of initiative at school level. The revised Regulations should state explicitly the range of responsibility and initiative required of the individual teacher.

17.46 The 1970 amendment to the Regulations raised to \$120 the amount of expenditure which could be incurred at any one time by a head teacher, a committee or a council for urgent minor repairs, but did not give to the head teacher the control of any departmental funds.⁸⁰ Repairs and alterations costing more than \$120 must have the approval of the Director-General. The Committee has been informed by the Director-General that at the present time an attempt is being made to give high schools their own budgets. In our view the head teachers of all schools, whether the school be an infant, primary or high school, should be supplied with an annual fund. This fund should take into account the size of the school, the age of the buildings, the past experience of the school and the needs of the particular community in such matters as welfare assistance. Out of the grant the headmaster should effect minor repairs to, and maintenance of, school property, purchase essential equipment and materials and pay the salary of any clerical and outdoor staff employed on the initiative of the school beyond the establishment made available from the centre. He should have discretion (which we should expect him to exercise after consultation with the school council) as to the expenditure of such funds, and should present audited accounts annually to the Education Department.

17.47 We do not see the headmaster as an authoritarian exercising strict control over his staff. We see him as a person whose ability,

⁸⁰ Regulations, Part IX, R.18, 32.

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experience and training enable him to make virtually all the decisions about the running of his school, but who makes such decisions in consultation with his staff. We recognise the fact that in discussing "head teachers" we have been referring to a group of great diversity. A "head teacher" ranges from the sole teacher at a primary school with an attendance of six children to the headmaster of the largest high school, and from the head teacher in his first year away from teachers college to the headmaster on the eve of retirement. The head teacher of a small primary school should not be required to make all the decisions which can be expected from an experienced and highly qualified headmaster, but he should certainly begin from his earliest appointment to take many decisions affecting his school. We commend the present arrangement to be found in country areas whereby experienced headmasters of larger schools act in an advisory capacity towards head teachers of small schools. Our recommendation in paragraph 8.70(f) would extend the benefits of this type of arrangement.

17.48 Accordingly, we RECOMMEND that:

- (a) Each school above a certain size should be allocated an annual budget assessed on the basis of its pupil numbers, the age of the buildings and any other factors considered relevant, including the degree of experimentation with new teaching methods and the welfare needs of the area.*
- (b) Special arrangements should be made for budgeting and expenditure on an area basis in the case of schools with an enrolment below a specified level.*
- (c) Within the budget the headmaster, in consultation with the staff and school council, should be free to allocate moneys between generally approved purposes, and to arrange all such expenditure directly.*

17.49 A teacher who is engaged in classroom teaching needs training in administration before being transposed to the post of headmaster. The Public Service Board concurs with our view that it is essential for teachers who are promoted to higher administrative posts to be given special training for them. We see it as equally necessary for a headmaster, as for an inspector or a superintendent, to be a capable administrator. A post-diploma unit in educational administration is offered at the Adelaide Teachers College. This course is accepted as a classification unit, and so is related to general promotion within the Education Department and is not necessarily associated with entry into positions requiring administrative competence. Adelaide Teachers College plans to appoint a lecturer in educational administration who, it is expected, will establish a one year's post-diploma course in the area. Flinders University also intends to establish a diploma in educational administration. We should welcome both these developments, which will each provide the opportunity for

study at greater length and depth than is at present available in South Australia. Some general introduction to administration would be valuable in the pre-service education of teachers. Such courses are best run by an authority independent of the Education Department because courses entirely under its control may merely have the effect of conditioning people to an existing system rather than of bringing fresh perspectives to it. Those taking post-diploma or postgraduate courses in educational administration to prepare them for administrative responsibilities at the level of deputy headmaster and above may need to be given some release from duties to enable them to complete the course.

17.50 Newly appointed headmasters at present undertake a short induction course at the end of the year preceding their taking up duty. Headmasters of secondary schools attend a one-week in-service course at Raywood during second term. The Headmasters' Association provides a week's school for headmasters during summer vacation. These courses are important in initiating the new headmaster into the detail of his duties. We believe that such practical courses combined with postgraduate study at a university or teachers college will fit the headmaster for the tasks of decision-making and of delegation of authority which we see as two of his most important functions. However, we should not wish to make the attainment of formal qualifications in educational administration a prerequisite for promotion to headships.

School Councils

17.51 There already exists some provision for community participation in school affairs in the form of school committees and councils, now incorporated under the 1970 amendment to the Education Act. The Regulations made under the Education Act provide that each primary school and each area school is to have a school committee. In the case of the primary school its members are all elected at a meeting of parents.³¹ In the case of the area school, of a committee of twelve, seven are to be elected by parents and five nominated by the Minister.³² The Minister may appoint a council of six or more members for any high school or technical high school. One-half of the membership of such a council is to be nominated at a meeting of parents and guardians, and approximately one-quarter each by the House of Assembly Member of Parliament for the district and by the local government bodies.³³ In all cases the staff of the school, including the headmaster and his wife, are ineligible for election or appointment to the committee or council.

17.52 The committees and councils are to a large extent fund-raising and fund-allocating bodies. Funds raised for projects approved

³¹ Regulations, Part IX, Division I.

³² Regulations, Part IX, Division II, R. 20-24.

³³ Regulations, Part IX, Division III, R.25.

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by the Director-General may be subsidised by the Department, an arrangement which we have recommended in paragraph 9.30 should be discontinued. The duties of committees and councils, generally speaking, relate to superintendence of the physical conditions of the schools.⁸⁴ Those duties are stated to be:

- (a) To exercise a general oversight over the school buildings and grounds, and to report to the Director-General on the condition thereof when deemed necessary.
- (b) To promote the improvement of the school grounds; the maintenance of school gardens and agricultural plots; the decoration of the school rooms; and the formation of school libraries and museums.
- (c) To assist in providing for the sanitary services of the school.
- (d) To use every endeavour to induce parents to send their children to school regularly.
- (e) To arrange, when necessary, for the suitable board and lodging of the teacher, at reasonable rates, especially when the teacher is a woman.
- (f) To visit the school from time to time and to stimulate interest on the part of both children and parents.
- (g) To prepare the accounts of the committees for inspection by the District Inspector at least once in every financial year.
- (h) To furnish to the Director-General, whenever required by him, a properly audited statement of receipts and payments.

The councils of technical schools (now technical colleges), however, have the additional power and duty of advising the Director-General "of any steps that should be taken to keep the work of the school up to the requirements of modern practice" and of maintaining "a close correlation between the work of the school and the local industrial necessities".⁸⁵

17.53 Parents, the community and teachers should all, in our view, be represented on both primary and secondary bodies. Primary committees, at present entirely elected by parents, should be renamed councils and be reconstituted to include members from beyond the school. Community representation might include people engaged in local industries, professional people and others with special interest in, or knowledge of, education. Such representation would benefit the school both through the contribution which members could make to its work and through increased appreciation of the school as a part of the community. Both the headmaster and representatives elected by the school staff should be members of the council, emphasising the common involvement of parents and teachers in the running of the school.

17.54 The present composition of secondary school councils was criticised in submissions to us on the grounds that parents were insufficiently represented on them. It was also stated that the members appointed from beyond the school were often older citizens who were out of touch with the needs of modern education. While we do not

⁸⁴ Regulations, Part IX, Division I, R.17; III, R.27.

⁸⁵ Regulations, Part IX, Division III, R.31(d).

believe that councils should be composed entirely of parents, so limiting community interest in the schools, we do think that parents should be more strongly represented on secondary school councils than they are at present. The number of members elected by parents should be increased, and, in cases where the size of the school warrants it, we think there would be advantages in allowing the parents of pupils in each year of schooling to elect their own representative to the council, so ensuring that the council is in touch with problems over the whole span of schooling for which it is responsible. As with primary schools, we think it important that teachers, including the headmaster, should be represented. Senior students would also be encouraged to take an interest in the development of the school if they were represented on its council. While we have recommended that members from the community beyond the school should be included in primary school councils and retained in secondary ones, we think that the total number of such representatives should in both cases be fewer than those appointed from within the school by the parents.

17.55 We recognise the difficulties of laying down detailed prescriptions which will be applicable in all cases regarding the composition of school councils. Primary schools are numerous, and many of them are very small, making a council of the same size and composition inappropriate for all. For this reason, we limit our recommendations to general principles, some of which will be inapplicable in smaller schools.

17.56 It was submitted to us that the scope of discussion and recommendations by school councils should be enlarged, so that they should be empowered to debate, and to make representations to the headmaster and to the Director-General upon, the following topics:

- (a) The quality and number of staff.
- (b) The range of subjects taught.
- (c) The principles on which classification of students is made.
- (d) The expenditure of all funds raised by the parents.
- (e) The improvement of school grounds.
- (f) The provision of ancillary school buildings and equipment.
- (g) Teaching methods within the education system as a whole.

17.57 We think that the time has passed when the interests of the school council should be deemed to be appropriately limited to questions relating to maintenance of buildings, sanitation and the like. The classification of an individual student is not, in our view, a matter for council discussion but the principles upon which classification is made are suitable for such discussion in the interests of communication. We do not think that any teacher should be subject to decisions of a lay body as to his teaching methods although such

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a body should have the right to comment on them. The council should be able to initiate discussion on the adequacy of the staff in general and on their academic qualifications. The other matters mentioned are all appropriate for discussion by the council, which should also have the power and duties analagous to the special power and duties of councils of technical colleges (see paragraph 17.52). It is essential, furthermore, that the headmaster should be able to discuss freely with the school council any matters relating to the school.

17.58 Accordingly, we **RECOMMEND** that:

(a) Primary school committees should be called councils and their composition changed to allow of the introduction of members other than those elected by parents.

(b) The membership of school councils should include:

The headmaster ex officio and members of staff elected by the staff, the number varying with the size of the school.

Parents of present scholars, elected by the parents. Where the size of the school warrants it, at least one member should be elected from among the parents of each year of students.

Two student representatives on each secondary school council, one from final-year students and one from students of the penultimate year, such representatives to be elected by their fellow students.

Members of the community outside the school, their number being smaller than the number of members who are parents.

(c) The powers of primary and secondary school councils should be extended to enable them to discuss matters of general educational policy within the school, and headmasters should make available to councils such information as will help in their deliberations.

THE EDUCATION DEPARTMENT AND THE PUBLIC SERVICE BOARD

17.59 There is at present divided responsibility for the creation of new positions within the Education Department and for the appointment of people to them. The Minister, on the recommendation of the Director-General, appoints the teaching staff and weekly paid staff within the schools; and transfers, promotes and dismisses teachers. All other staff are employed under, and hold their appointments subject to, provisions of the Public Service Act. In general, all professional staff above the rank of headmaster, and clerical and most other non-teaching staff, whether employed in the central administration or within the schools, are appointed by the Public Service Board. Whereas the Director-General advises on the necessity for the employment of additional teaching staff, it is for the Public Service Board to make decisions about the necessity for appointments of higher professional staff, clerical and ancillary staff and other staff under its jurisdiction. The Board considers the creation of new or additional positions in the light of government policy. It may, for

example, be directed to create additional positions for ancillary staff within schools, or among professional officers within the administration.

17.60 Several arguments may be advanced in support of Public Service Board control over non-teaching appointments within the Education Department. Positions under the jurisdiction of the Public Service Board are advertised and appointments are made by the Governor on the advice of the Executive Council. All recommended appointments, except that of the Director-General as permanent head of the Department, are subject to appeal. It is argued that such a method ensures that appointments will be made without favouritism. In addition it is said that a unified Public Service operating over all government departments ensures the same conditions of work and remuneration for people at comparable levels in each, and facilitates transfer between departments for promotion purposes, so offering broader opportunities to the people involved and a broader field of applicants for positions. Some check external to the department concerned is required to prevent undue expansion of staff and to conserve public resources.

17.61 We do not consider that all these arguments apply with equal force to all categories of people employed under the Public Service Act and working within the Education Department. The right of appeal and the case for free movement between departments have relevance only for people within the Public Service who are eligible for the appointment in question. In the case of education officers, inspectors, superintendents and directors (with the exception of the Director of Administration and Finance), invariably the appointees are former teachers. Public servants who lack teaching background are not eligible for such positions, and we see no logical reason why the appointment of these higher professional officers should not be made by the Minister of Education in the same way as teaching appointments are made. The right of appeal could be retained by applying to these positions the same provisions as exist for positions designated as special within the teaching service.

17.62 The relationship between the salaries and conditions of work of people employed under the Minister of Education and under the Public Service Board could be preserved where appropriate, even if certain categories were transferred from the one to the other. In the reasons for the Teachers Salaries Board Award of 28th October 1969, given by the Chairman, Judge Olsson, in his report to the Minister of Education, the Board declared its intention of following the principles of comparative wage justice whereby the tribunal would pay regard *inter alia* to wages "in other comparable industries operating within the area over which its jurisdiction or that of other local authorities extends".⁸⁸ The appointment by the Minister of Educa-

⁸⁸ *Per Williams, J., in The Clerks' Case, 33 S.A.I.R. 40 at 51.*

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tion of the professional officers entering the administration from the teaching service should not inhibit this approach to their salary determination. Nor can we see that it would entail a departure from other conditions of employment at present obtaining, for example in the matter of annual holidays, the present entitlement of the officers of the Department being that of Public Service officers and not the more generous allowance to teachers.

17.63 We see a considerable advantage to the relations between the officers of the Department and the teachers if the former remained part of the teaching service and were not divorced from it. The fact that a teacher who becomes an inspector also becomes a public servant under the jurisdiction of the Public Service Board and ceases to be a teacher must tend to create an invisible, but none the less real, barrier between him and the teachers. If, as we recommend in paragraph 17.104, there should be opportunities for inspectors to return to the role of teachers, this would be more readily achieved if an inspector remained in the same service as the teacher.

17.64 The Director-General should continue to be appointed as in the past. It is desirable that the appointment of the permanent head of a government department should not be made solely by the Minister controlling that department. For the same reason we think that Deputy Directors-General should be appointed under the Public Service Act. In the case of the Director of Administration and Finance and the officers under him, they are members of the Public Service who have often previously occupied posts within other parts of the Service. It has been submitted that the field of persons available to fill positions in this part of the Department would be considerably narrowed if these officers were employed by the Minister of Education and outside the Public Service Act. Governments throughout Australia and elsewhere have maintained that all administration of government departments should be undertaken by members of the Public Service. Nevertheless, in Victoria the professional officers of the Education Department with few exceptions have formed part of the teaching service. In New South Wales the Rydge Committee recommended that "teachers and other educational staff of the Department of Education in positions up to and including the level of area director" should be removed from the Public Service Act, but the Public Service Board was still to determine salaries, fees, allowances and conditions of employment. However, it was pointed out in the report that

The Director-General of Education and a small number of other senior educationists would continue to be appointed under the provisions of the Public Service Act as would non-teaching staff classified in the professional clerical and administrative and general divisions.

17.65 Among people employed within schools, laboratory assistants and teachers are at present employed under the Minister of Education and clerical and other ancillary staff under the Public Service Board. We have considered whether all people employed within

government schools should be employed under the Minister of Education, in addition to the officers referred to in paragraph 17.61. We have heard arguments that the Public Service Board is sometimes unaware of the special problems of the schools, fails to establish new positions which are requisite for the more efficient functioning of the Department and fails to renew appointments or delays in making appointments. The Minister of Education, through the Director-General, is, in our view, in a better position than the Public Service Board to estimate the needs of the schools. Laboratory assistants, clerks and other professional employees are sometimes alternatives to extra teaching staff in that they free teachers for classroom duties. The staff needs of a school should be considered as a whole; and this makes the appointment of these people by a single authority more appropriate.

17.66 The Public Service Association submitted to us that all professional, sub-professional and technical, clerical and general staff employed in the Education Department, but under the Public Service Act, should continue to be so employed. In particular it stated that clerical staff would suffer if removed from the Public Service in that the chances of promotion would be limited, and that, as a small minority group in the Education Department, they might find their claims overlooked. It suggested further that the Department would suffer from the elimination of a very large group of potential candidates for positions.

17.67 We believe that on balance the case for retaining within the Public Service all officers of the Department who are concerned directly with administration and finance, including the Director of the Division of Administration and Finance and those who occupy clerical positions within the central administration, is a strong one. Notwithstanding this, persons with teaching experience might be employed with advantage within the Division of Administration and Finance. However, we believe that, in addition to the education officers, inspectors, assistant superintendents, superintendents and other directors to whom we have already referred, the psychologists and all other professional officers employed in the central and regional administration should be appointed under the Minister of Education.

17.68 On the other hand, we think that all persons employed in the schools, including clerks, should be employed under the Minister. There has in the past been a completely inadequate supply of clerical assistants in the schools. The position has improved somewhat. The Minister should be in a position to decide whether teacher shortages might be further alleviated and the professional talents of teachers be employed solely for teaching by the supply of further clerical assistance.

17.69 Accordingly, we RECOMMEND that:

The Director-General, the Deputy Directors-General, the Director of Administration and Finance and the officers under him, and those

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holding clerical positions within the administration should be appointed under the provisions of the Public Service Act; all others, whether in the administration or in the schools, should be appointed under the Minister of Education.

THE EDUCATION DEPARTMENT AND THE PUBLIC BUILDINGS DEPARTMENT

17.70 Under the Education Act the Minister is empowered to establish schools and to erect and maintain school houses or buildings and works necessary for the purposes of the Act. Funds for school buildings are within the vote of the Minister of Works; and the Public Buildings Department is the agent of the Minister of Education in the provision of new schools, the reconstruction and replacement of old schools, major additions to school buildings, minor works and the maintenance and repair of school buildings. Accordingly both the Minister of Works and the Minister of Education have a responsibility for the capital programme of the Education Department.

17.71 When a new school is to be built a brief for the Public Buildings Department is drafted by the Education Department and the preliminary design is prepared by the two Departments in collaboration. There is a joint planning committee with representatives from each Department at senior level. Once sketch plans have been prepared, they go first to the Minister of Works who forwards them to the Minister of Education for his approval, after which the Minister of Works takes them to Cabinet for formal approval. If the estimated cost is over the statutory limit of \$200,000 the project must be referred to the Public Works Standing Committee. When the project has been approved, the Public Buildings Department appoints a project architect who has an overriding supervision throughout the building operations.

17.72 We have received submissions that the present arrangements for the planning and implementation of the capital programme of the Education Department are unsatisfactory. There is a divided responsibility between the two Ministers concerned, which may lead to delays. The Public Buildings Department, naturally enough, does not feel the same sense of urgency over the school building programme as does the Education Department. Moreover, the Public Buildings Department, through having an ultimate responsibility for the construction of school buildings, is placed in the position of both consultant and client, a situation which, in our view, is likely to result in buildings that may not meet the functional requirements of the Education Department as well as they should and that may not have been constructed with a due regard to economy. We have heard complaints on both these counts.

17.73 It seems to us that the Minister of Education should be in full control of the funds allocated to the Education Department for

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capital purposes, so that he can exercise a direction over the use of the funds with proper regard for priorities, the functional requirements of buildings and the cost parameters. The main arguments against this position are that, by keeping all funds for public works under the control of the Minister of Works, a more flexible programming of finance can be achieved and uniform standards maintained. We do not think that the argument relating to flexibility is a strong one since the capital expenditure of the Education Department is itself a very large amount and gives ample room for flexibility; and uniformity of standards hardly arises since school buildings are a distinct class of their own.

17.74 We are aware that liaison between the Public Buildings Department and the Education Department has greatly improved with the recent appointment in the former of a Supervising Architect (Schools), and that there is now close collaboration between the two Departments. We are of the opinion that most of the building work for the Education Department should be undertaken by the Public Buildings Department, which is in a position to specialise in school construction. However, we feel strongly that the relationship between the Public Buildings Department and the Education Department should be strictly one of consultant and client. While the Public Buildings Department would be the main architects for the Education Department, we think that the Education Department should be free to engage private architects for specific projects whenever it believes that the work can be carried out more economically or more expeditiously or when such private architects are able to make some special contribution. In this connection the great success of the recent consultancy of an English firm of architects in the design of open-type school buildings should be noted.

17.75 If the Education Department is to play the role of client effectively, it must be able to translate its needs into architects' briefs and to communicate with its consultants. Quite apart from these requirements, the Department needs officers who have an understanding of the part played in educational processes by the physical facilities within which the processes operate, and who are familiar with modern thinking in this field. We think that these objectives can best be achieved by establishing an architects branch within the Department. We envisage that it would be headed by a senior architect, who would need to be supported by a small staff of architects and draughtsmen. Its functions would be essentially liaison with project architects prior to and during building operations. Its role would be an advisory one within the Department. We do not see it becoming involved in design work.

17.76 The Public Buildings Department also has a major responsibility in relation to the maintenance and repair of existing buildings. The Public Buildings Department undertakes maintenance or repairs,

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and their cost is charged against its departmental funds. The Committee, during its visits to schools, heard many times about the problems in getting minor repairs and modifications effected. We heard numerous complaints in country areas, for example, of abortive attempts to obtain fly-wire screens for areas in which the fly exists in pest proportions. We have already recommended (see paragraph 17.48) that schools should have budgets, which might be used to effect minor repairs and alterations, and this may eliminate some of the problems. Moreover, we understand that the Public Buildings Department plans to set up in Adelaide and in various country areas decentralised minor works sections. We think that the Education Department should be directly responsible for determining priorities for maintenance and minor works in school buildings and teachers' dwellings and for administering the funds involved. It should be free to employ private contractors where appropriate.

17.77 It is natural to think of the Education Department in terms of teachers and pupils. But the Department owns buildings that at present house some 230,000 students and 10,000 teachers. By 1981 the numbers may rise to 290,000 students and 16,500 teachers. Over the next decade the Department may spend about \$170 million, at present costs, on new buildings and on the reconstruction and replacement of old ones, quite apart from maintenance, repairs and minor alterations. The Department is also responsible for furnishing and equipping the buildings, including the equipping of laboratories and other special-purpose areas. Buildings and plant are thus a major resource of the Department. In view of the proposals that we have made in the preceding paragraphs and of the importance of buildings and plant in education, we believe that there should be a new Division of Buildings and Plant in the Department, headed by a Director. The Director would need to be a person who has had considerable experience in the professional field of education and who would thus be sensitive to the educational purposes to be served by physical facilities and to the needs of professional staff. The architects branch, which we have proposed above, would belong to the new Division.

17.78 Accordingly, we RECOMMEND that:

(a) Funds for school buildings and the maintenance and modification of buildings should be allocated direct to the Minister of Education.

(b) A Division of Buildings and Plant should be established within the Education Department to take responsibility for the construction and maintenance of buildings and the purchase and maintenance of plant, and for planning to meet future requirements for land, buildings and plant.

(c) An architects branch should be established within the Division of Buildings and Plant, the function of which would be to advise the Department on architectural matters generally and to act as the

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Department's agent in dealings with the Public Buildings Department or with private architects.

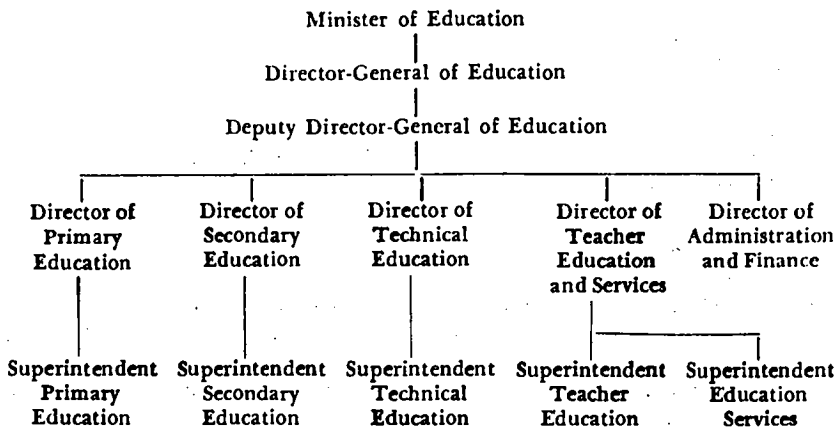
17.79 We were told that the requirement to refer all public works with an estimated cost of more than \$200,000 to the Public Works Standing Committee often caused considerable delays. It was suggested to us that the statutory limit should be raised in conformity with increases in building costs. We were also informed that, owing to the rise in costs, primary schools which, two years ago, were not within the purview of the Standing Committee now have to be considered by it. We understand that there are currently moves to raise the statutory limit. The question of the statutory limit, however, is beyond our terms of reference. We therefore make no recommendation on this matter.

ORGANISATION OF THE CENTRAL ADMINISTRATION

17.80 The Education Department is organised in the manner set out in Chart 17.1. The present organisation of the Department is a mixture of vertical Divisions according to the level of schooling — primary, secondary, technical, teacher education — and horizontal service Divisions serving more than one level, such as the Division of Finance and Administration. The Division of Teacher Education and Services combines both types. The school Divisions are responsible for employment, deployment, promotion and assessment of teachers, and in practice control to a considerable extent their in-service education.

Chart 17.1

PRESENT ORGANISATION OF THE EDUCATION DEPARTMENT



17.81 The existing arrangement of administrative responsibility was criticised on several grounds in the submissions placed before us. The more important objections were that:

(a) The arrangement is unduly centralised, requiring consideration

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of matters of detail by highly placed officers including the Director-General to whom staff officers are directly responsible.

(b) There is need for a further appointment at the level of deputy director-general or assistant director-general to enable the Director-General to be replaced during his frequent and necessary absences without detriment to the normal work of the Divisions, and to enable only those decisions which cannot be made within the directorates to be referred to him.

(c) The primary and secondary systems are in a sense isolated from each other. This inhibits consideration of education as a continuous process. Exchange of staff, overlapping of programmes and individual progression of pupils are very difficult to arrange between the levels.

(d) The special services, standing outside the relatively closed school Divisions, are not consulted and used as extensively as they might be because they are not part of the highly integrated provision of staff, equipment and consultancies organised on the basis of the school Divisions.

(e) Research should be elevated to a more important role in assisting policy-making.

(f) Curriculum development and research, including evaluation, is a different kind of activity, performing a function distinct from research related to educational planning. These two, although they should be under single direction at a higher level, should not be combined in a single section.

(g) No section of the Department is concerned with the ongoing development of personnel, from recruitment through deployment and promotion to further education. The result may be that insufficient attention is given to the problems and possibilities of individual teachers, resulting in a level of impersonality within the Department detrimental to general morale.

17.82 Two schemes for an alternative basis of organising the Department according to function rather than levels of schooling, in which each Division would be regarded as a specialised service Division, were set before us. The essential features of the first scheme are as follows: The central organisation of the Department would be divided into five Divisions. The first would be responsible for all matters relating to *personnel*, from recruitment, deployment and promotion to further education and development. The second would relate to *curriculum and instruction* and would cover advice and research relating to schooling at all levels and provide assistance to teachers in individual schools in the framing and execution of their educational programmes. The third Division would be responsible for *administration and plant*, including buildings and finance. The fourth would include *educational services* similar to those at present grouped under the Director of Teacher Education and Services. The fifth Division would be responsible for *planning*, including the

assessment of future needs in building and personnel. According to this arrangement, no Division would be in charge of the schools. Each school would obtain from each of the Divisions assistance in curriculum development and assessment, personnel, equipment and buildings and would annually assess its own requirements in these areas, subject to certain general rules of policy. Under this arrangement, inspectors would have important co-ordinating functions. They would not be attached to any Division, but would act as advisers to schools and draw the attention of relevant Divisions to any serious deficiencies in particular schools. The advantage of this form of organisation is that it would place the school itself in the centre of the picture and would oblige it to use initiative. All departmental Divisions would be regarded as service Divisions directly serving the schools. No single director would stand above the individual school. Each headmaster would have access to all directorates. This form of organisation would enable a degree of specialisation which should improve the quality of the service offered the school. Greater continuing attention could be given to the development of personnel, and curriculum could be dealt with as continuous. Horizontal collaboration between schools of the same type facing common problems would be difficult initially, though it could perhaps be ultimately achieved through conferences. But these are minor objections. Our main objection to the scheme, representing as it does an extreme degree of decentralisation, is that past experience has not prepared the heads of schools for the exercise of such responsibility.

17.83 A second suggestion on similar, but not such extreme, lines would involve a movement towards a functional or horizontal division of responsibility within the Department, specialist functions being performed across the board without relation to level of schooling. This proposal would retain a degree of vertical organisation, however, through a Division organised on a regional basis and responsible for running the schools. This scheme would require the elimination of the centralised primary and secondary Divisions, passing the responsibility for running the schools at both levels to regional offices; the regional offices would apply to the service Divisions to meet their needs in the same way as schools would in the previous proposal discussed. Such a form of organisation has as its main advantages the integration of primary and secondary education through regions dealing with both in a single office, and the development of policies of staff recruitment and allocation on a unified basis.

17.84 In relation to the decentralisation of responsibility for running the schools, our view is, as we have said earlier, that delegation should be direct to the headmaster wherever possible. However, such a delegation would not be incompatible with the regional arrangement suggested, if regional centres, rather than being a link in the administrative chain as they are at the moment, were centres of advice and educational leadership as outlined in paragraph 17.36.

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Our objections to an immediate introduction of an administrative reorganisation along the lines of this second suggestion are practical rather than theoretical ones. It would represent a break with existing arrangements too radical, in our view, to be achieved at a single step. We favour changes which would move towards such an arrangement, but we think that a period of experience in the exercise of greater initiative at school level and in the co-ordination of primary and secondary schooling would need to precede the elimination of central Divisions responsible for the schools.

17.85 Any detailed laying-down of alternative schemes to the present organisation of the Department would require a greater knowledge of how the present system works than we have been able to gain, or than could in our view be gained by any persons who had not participated for some period of time in its operation or made a detailed study of the working of the Department. We have already made a number of recommendations which would affect the overall organisational structure. These were the recommendations that further education should become a separate department (paragraph 12.51); that the teachers colleges should be placed within an Institute of Colleges (paragraph 16.122); and that a new Division of Buildings and Plant should be established within the Department (paragraph 17.78). In addition to these changes, our inquiries have suggested other specific changes which we believe to be desirable.

17.86 The Director-General is frequently obliged to be absent from the State on official business, and when in South Australia is often away from the Department. These absences are a necessary part of his duties, but they create difficulties in the administration, since someone must deputise for him if decisions are not to be delayed. This requires that the director of a Division must forsake his normal duties to replace the Deputy Director-General while the latter is standing in for the head of the Department. The appointment of a second Deputy Director-General would enable the top leadership to sustain the absence of one of its members without creating major difficulties in the Divisions. We see other advantages in a further appointment at this level. It is, in our view, important that co-ordination of the Divisions of the Department should operate below the level of the Director-General, according to an arrangement that we shall outline later, which would require one Deputy Director-General to have overall responsibility for the operation of the schools, and another for resources. Moreover, the Director-General, as the head of the Department, should be relieved of direct responsibility for all decision-making except at the highest level, in order to work closely with the Minister, to have time to observe the operation of the whole system and to make contact with teachers, the public and administrators at all levels. We believe that the employment of a second Deputy Director-General, along with the extent of delegation to schools which we envisage, would help to achieve this.

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17.87 We propose that all Divisions and sections responsible for the operation of the schools, including the special services connected with their functions, be placed under the co-ordinating supervision of a Deputy Director-General (Schools). This would enable a closer co-ordination of education at primary and secondary levels, the absence of which we have frequently indicated as a weakness in the present system. Special services should be regarded as an integral part of the work of the schools.

17.88 A second Deputy Director-General (Resources) would have overall responsibility for the Divisions and sections concerned with planning, providing and maintaining the resources used by the schools. Responsible to him would be the Director of Buildings and Plant, whose functions we have already outlined, the Director of Finance and Administration, and sections relating to recruitment and personnel development and welfare. We think there would be advantages in regarding all these service functions which are not directly a part of the educational operation of the schools as a combined responsibility. It would remove the responsibility for the development of resources from the sections responsible for the operation of schools, allowing them to concentrate on their professional objectives.

17.89 General recruitment policy, including the selection of students to be assisted through their teacher training by the Department, is at present handled by the Director of Teacher Education and Services. We propose that a section grouped with the resources side of the Department should handle this function. There would seem to be a need for activity relating to the welfare and development of personnel within the Department, for which we suggest such a section might also be responsible. Over the course of time personnel functions, including deployment of staff, their promotion and further education, which we have left with the Schools Divisions, might conveniently be grouped in a single Division under the Deputy Director-General (Resources). We prefer at this stage the more limited function that we have proposed for a recruiting and personnel section, leaving further developments to be made on the basis of experience.

17.90 The Department has recently established a Research and Planning Branch and expects its staff to grow rapidly over the next few years. Its functions are to include the development and evaluation of curriculum, methods and teaching aids, the compilation and analysis of statistics, and the forecasting of numbers of students, teachers, schools, etc., likely to be the responsibility of the Department in future years. Most of the Australian States have placed these rather diverse functions under the umbrella of a single branch or division, although in recent years several States have separated them into different branches or sub-divisions of a larger unit, sometimes still under the direction of the same senior officer. In our view all the research conducted within the Education Department will help, sooner

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or later, in making decisions about policy, and therefore must be a part of the planning process. Nevertheless the projection of trends based on demographic data, retention rates in schools, changing pupil/teacher ratios, changing patterns of school size and organisation and changing views about special education, and their translation into numbers of pupils, teachers and schools or into needs for equipment are an activity of a rather different kind, serving different purposes in planning from studies of the educational process as it goes on in schools. Such studies may include the compilation of data upon which a draft curriculum may be drawn up, or the evaluation of its results in schools under the wide variety of conditions in which it will inevitably be used. Research of the latter kind must be done largely in the schools and in close accord with teachers and often with parents. Its results may lead to recommendations about such matters as the size of groups used for learning and teaching purposes, the nature of both pre-service and in-service preparation of teachers or the construction of buildings, and therefore may have a direct influence on the projection of trends in, for example, the numbers of teachers required or of equipment needed. In nature, however, it is a different activity.

17.91 Research should, in our view, play a vital part in the determination of educational policy, and should for this reason be directly available to policy-makers at the highest level. Such a relationship would also ensure that the activities of research officers are directed towards problems central to policy-making. Increased expenditure on education emphasises the need to study alternative lines of development on the basis of the results of research so that resources can be used effectively and with confidence. Value judgments unsubstantiated by evidence are no longer an adequate basis for policy, if they ever were. The importance of research will, in our view, be more readily accepted if it is accorded high status in the organisational structure. It will also be more effective if it is not under the control of a Division with operational responsibilities. For these reasons we are recommending that a Director of Research be appointed to direct both types of research outlined above, which should be organised in two separate sections. He should be directly responsible to the Director-General. We hope that the educational research section in particular will work closely with the Schools Divisions and with the Psychology Branch, all of which are in a position to identify problems and provide information relevant to their solution.

17.92 There is at present operating at the highest level in the Department a Management Committee consisting of the Director-General, the Deputy Director-General and the five Directors of Divisions. This Committee meets fortnightly and assists the Director-General in the making of major policy decisions. It serves as a means of conveying information among senior people, enables more junior officers to be brought in for consultation and experience and promotes a policy of decision-making by consultation and consensus which we

should regard as desirable at all levels. Under our proposal the Management Committee would comprise the Director-General, the two Deputy Directors-General and the six Directors. We should like to emphasise our strong support for the concept of the Management Committee and our hope that it will inspire the Department with a spirit of consultation and communication. We think that a similar committee, which might perhaps be called the Schools Committee, should be instituted to co-ordinate the work of those directorates and sections directly concerned with the operation of the schools and that the Director of Research should also be a member of it. The membership of this committee would be the Deputy Director-General (Schools), the Directors of Primary and of Secondary Education, the Directors of Research and of Special Services, and the senior officers in charge of each of the special services, including recruiting and personnel. Through such a committee an integrated approach to the educational process could be achieved, and the recognition of its continuity through primary and secondary levels be promoted. Those concerned with the work of the schools could be kept informed of developments in all areas, including research relevant to the work of the schools, and matters of general policy could be discussed.

17.93 Accordingly, we RECOMMEND that:

(a) A second appointment at the level of Deputy Director-General should be made; each Deputy Director-General should have specified operational responsibility, one for activities concerned with the schools co-ordinated through him and through a schools committee of senior officers, the other for those concerned with the supply of resources.

(b) A Director of Research should be appointed who would be responsible to the Director-General. Research under him should be carried out in two sections, one in the area of educational research, the other in research relating to the planning of resources.

(c) A separate section, responsible for recruiting, welfare and personnel policies except those relating to the deployment and promotion of staff, should be established under the Deputy Director-General (Resources).

17.94 The changes that we have here recommended, together with those recommended elsewhere, would result in a pattern of organisation in the Department along the lines shown in Chart 17.2.

INSPECTORS AND CONSULTANTS

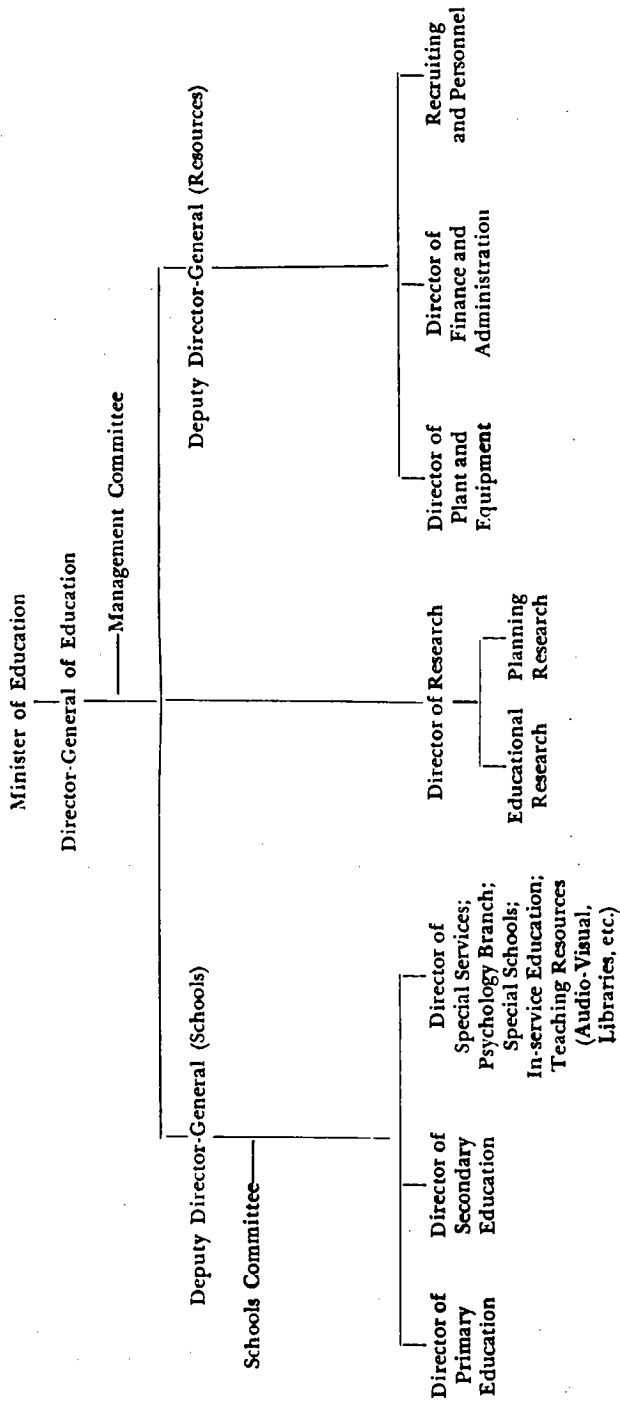
17.95 The office of Inspector of Schools dates, in South Australia, from 1852. The Education Act which came into operation in that year and authorised government grants for schools, provided that there should be an Inspector of Schools whose duty was to "visit, inspect and report on all schools established under the Act".⁸⁷ Then the role was solely that of assessor. Today the inspector is required to maintain what must at times be an uneasy equilibrium between

⁸⁷ No. 20 of 1851, section 15.

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Chart 17.2

SUGGESTED ORGANISATION OF THE EDUCATION DEPARTMENT



the role of assessor and that of adviser. The general rules for inspection of schools contained in the Regulations³⁸ include detailed instructions for inspectors. These instructions will, we assume, be modified if the proposed new system of promotion of teachers is adopted and only those teachers who apply for inclusion on the promotion lists will be assessed (see paragraphs 6.71-6.73).

17.96 The role of subject consultants who move between schools giving specialised advice, conducting demonstration classes and participating in curriculum change overlaps to some extent the functions of the inspectorate, especially in the secondary system where inspectors are themselves subject specialists. The inspector has in the past been seen as bearing the added authority of an emissary of the central administration, carrying the policy of the centre to the schools and ensuring its implementation there. This aspect of his role is becoming less important, and, with the added autonomy which we have recommended should be given to the schools and which the Director-General has delegated in his August 1970 memorandum, we hope it will diminish still further. We regard the activities of the consultants and inspectors as being very important in promoting change in the system if their authority is seen as deriving from specialist competence rather than from status. Inspectors are in a position to give advice on problems of general organisation and of staff development, bringing into individual schools a perspective derived from a knowledge of many schools, from a study of administration and from their experience, as well as from any special subject competence they may have.

17.97 We think it important for the effective performance of such a role that an inspector should never be the sole assessor of the teaching competence of teachers whom he advises. We are aware that the headmaster plays an important part in such an assessment, but we think that all inspectors, both primary and secondary, should operate on a district basis and should assess for promotion teachers in areas outside that in which they act as advisers. Alternatively, assessment should be by a panel which includes an inspector from outside the district. We see inspectors rather in the role of general educational advisers and think that where a regional office exists they should form a team with other consultants and advisers attached to it, along the lines suggested in paragraph 17.37.

MOBILITY AND DEVELOPMENT OF STAFF

17.98 Hitherto when a teacher has moved from the teaching service into the administration to the position of inspector his role has thenceforward remained in administration. We should like to see provision made for interchange between administrative and teaching positions, in particular an interchange of the positions of headmaster and inspector, in the same way as consultants now move back into

³⁸ Regulations, Part III, Nos. 3-4.

schools. This would be more easily achieved if, as we recommend, inspectors were appointed under the Minister of Education, and if the salaries of these two positions were comparable. It seems to us that there would be advantages if, after some years of experience as an inspector, some former teachers were to become headmasters for a period. The opportunity to do so without loss of income would be beneficial not only to the individual but to the Department as a whole. The inspector has had an opportunity of assessing the value of education offered in many schools. If he were for a time to occupy the position of headmaster the breadth of his experience as an inspector should benefit that school. Furthermore, up-to-date experience in the problems of running a school, including any problems arising from developments in education or recent social changes, would assist him in advising headmasters on a subsequent return to the role of inspector.

17.99 Breadth of experience is a valuable teaching asset, whether it be gained from teaching in other systems or from employments other than teaching, including the experience of raising a family. All these experiences assist in opening up the schools to the outside world and in bringing in new ideas from other systems. For this reason, we suggest that teachers with a stated period of experience in South Australian schools should be granted leave of absence without pay on a generous basis to allow them to teach in other Australian States or in other countries and be fully credited with the experience so gained when they return. Similarly, recruitment into the South Australian system from other States and countries should be encouraged by the acceptance on a simpler and more generous basis than appears to operate at present of experience and qualifications gained elsewhere. We recognise the difficulties of equating qualifications and status gained in different places, but unequivocal and simplified procedures would be more beneficial to the South Australian system than confusion occasioned by more finely calculated equivalents. Teachers who wish to return to South Australian schools after a period spent in occupations, including housekeeping, which are not directly associated with teaching lose one year in seniority for periods up to five years spent out of teaching, and two years for periods of between six and ten years. To encourage the re-employment of such people, whose gain in general maturity and experience must be considered valuable, we suggest that they be re-employed without loss of seniority on condition that they undertake suitable refresher courses either before, or within a specified period after, their re-employment.

17.100 The isolation from each other of the State education systems in Australia must limit the horizons and rate of change in all. At the level of training, a national approach would allow the excess of graduates desiring to enter teacher training in some States to be accommodated in others. There would also be great advantages in a national approach to service. Agreements between States which would

encourage exchange between them through full mutual acceptance of training and experience and through portable superannuation rights would ultimately benefit all systems. It would also hasten a national salary scale and national conditions of employment which would further facilitate staff exchange, both at the highest and at the lowest levels. Arrangements which would encourage a degree of movement between States have been the subject of discussion between State education departments for many years. We believe that the question should be regarded as one of urgency and that it should extend beyond teachers to the possibility of exchange of administrators. In particular it seems to us that the interchange of administrators, consultants and inspectors between the States would lead to the infusion of new ideas and would stimulate research into education. If superannuation and long-service leave were portable, teachers from non-government schools might also interchange with those from State schools to their and the schools' mutual benefit.

17.101 Most senior officers in the Education Department have had the opportunity of observing the education systems of other countries during one or more visits overseas. The opportunities for overseas study and observation should, we believe, be considerably extended, be made more freely available to younger people of promise and be planned ahead in their scale and timing. There are important objections to the present arrangements. The money made available for the purpose by the South Australian Government is so limited that most overseas study is financed by private foundations or by foreign governments. This introduces a fortuitous element into decisions about who goes where, and when he goes. The periods of absence for study purposes are unduly limited, few people being able to take full courses of any length overseas. Moreover, those people already advanced in responsibility and age are the most likely to gain grants for overseas experience. We think that there are considerable advantages to be gained from financing promising young people through doctoral courses in centres which have a high reputation for studies in particular areas. The South Australian Government should, we believe, offer annually a number of overseas scholarships to the professional staff of the Education Department. The appointment of extra teachers to cover those granted leave for study, which we recommend in paragraph 6.114, would provide replacements for people granted leave for study and observation overseas.

17.102 We also think there would be advantages in allowing people to enter professional service in the Education Department at reasonably high levels. Positions above the rank of headmaster are advertised, although open advertisement and the selection of applicants from beyond the system are confined to a small number of positions, usually those requiring a high level of specialised competence, and to the highest positions in the service. We see no reason why there should not be open advertisement for all positions above

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the rank of headmaster, and for positions at headmaster level in the case of larger schools. Without national salary scales and portable superannuation between States and between the government and non-government school systems, the possibilities of entering the Department at higher levels would be somewhat limited. However, such a policy of open advertisement might be expected to hasten these arrangements.

17.103 It would also be valuable to employ in the Department at senior levels and for limited periods of, say, six months people of distinction in particular areas. The recent consultancy on school buildings is an example of the helpful advice which might be so gained. Scholars of high standing in particular subject areas would be valuable in curriculum research; statisticians, economists, administrative experts and educationists from universities and from government and non-government systems in other States are further examples of people whose advice in particular areas could be of benefit. It is true that the Department will employ people on a permanent basis in all these areas, but it is not able to offer salaries which will attract top-line people in any numbers; many such people have, in any case, a main field of interest which is not education. In our view, many valuable ideas could be gained from people entering the Department for limited periods and bringing fresh perspectives and high-level expertise.

17.104 Accordingly, we RECOMMEND that:

- (a) Exchanges between the positions of inspector and headmaster should be made possible, and any necessary adjustments in salary scales should be made to allow of this.*
- (b) Experience outside South Australian government schools should be recognised on a generous basis in recruiting and re-employing staff.*
- (c) The South Australian Government should co-operate with other State Governments to establish arrangements which would facilitate the interstate movement of teachers and administrators.*
- (d) The Education Department should annually award 20 scholarships open to its teachers and administrators for study overseas. The scholarships should be tenable for from one to three years.*
- (e) People highly qualified in particular fields should be employed by the Education Department as short-term consultants.*
- (f) The position of headmaster in larger schools, and all positions above this level, should be publicly advertised and open to people who are not employees of the Education Department.*

PUBLIC INFORMATION REGARDING THE EDUCATION SYSTEM

17.105 Intelligent public participation in the educational process requires a public which is well informed and up-to-date in its know-

ledge of present arrangements. The Education Department collects and collates a good deal of information which is either not made available to the public or made available two years after the situation to which it relates, through the Minister's Report to Parliament. In our view, the fullest possible information regarding the detailed distribution of class size, the qualifications of teachers employed and such other matters which are of public concern should be available to the public at an early date. In Great Britain, for instance, a great deal of information of a kind that is never made public in Australia is made available in an attractive form to the public a few months after the end of the year to which it relates. We believe that sufficient staff should be employed to make this possible in South Australia and that the public right to information should be increasingly acknowledged. There is an additional problem. Comparisons between Australian education systems are very difficult, both because there is a paucity of public information in all States and because the statistics are compiled on varying bases. The standardisation of information is an aim which we should like to see promoted further by Ministers and Directors-General of Education with all urgency. Education is a legitimate public concern, and information which would enable its more active and knowledgeable public discussion is, we believe, an obligation of all departments entrusted by the people with the responsibility for operating the schools.

17.106 In the course of preparing this Report, we have been impressed by the difficulty that we have experienced in obtaining accurate basic information about the educational system, even with the considerable co-operation that we have received from the Education Department. In addition to material normally collected by the Department, we have found it necessary to ask the Department to prepare special tabulations and to undertake a number of special-purpose surveys in order to gain information which we regard as basic for policy formation. In our opinion, information of the kind which we have found it necessary to gain by special arrangements should be publicly and promptly available.

17.107 Accordingly, we RECOMMEND that:

The Education Department should take steps to improve the range, quality and flow of up-to-date information on the educational system, and to make this information freely available to the public.

ORGANISATIONAL CLIMATE

17.108 Changes in formal organisation will not of themselves achieve the purposes with which we have been concerned in this chapter and throughout our Report. These purposes are to open up the education system to influences beyond the Education Department, and to reduce its rigidity, defensiveness and uniformity by promoting a variety of initiative from below and by enabling people from out-

side the Department to enter it at high level. They involve moving decision-making whenever possible to the point where it will be implemented, reducing the dependence on instructions from the centre and promoting a pattern of decision-making by consultation at all levels. In schools the parties affected include pupils as well as staff, and we should like to see decisions about his own learning increasingly made by the pupil himself as he grows older. Even at primary level there is no reason why pupils should not participate in forming the rules of the school and in implementing them.

17.109 Initiative from below can expand only if headmasters and teachers are willing to take responsibilities beyond those at present exercised, and if the administration really desires them to do so. The administration can assist the process by creating a formal structure governed in a less rigid and authoritarian way than that reflected in present regulations. It can consult with heads and listen to teachers — and pupils and parents — and express its faith in the professional competence of the teachers it employs in the schools by allowing and even requiring them to take the major part of the responsibility for what they will teach and how they will teach it. It can extend to schools the power to decide how they will use their budgets, allowing them to make their own choice, for example, between extra ancillary staff and equipment. It can provide teachers with time to think and plan, with expert advice and resource centres and with reasonable physical conditions in which to perform their professional tasks. But it cannot make teachers into imaginative professionals, except perhaps by providing more avenues by which they may learn, both through formal education and through the freedom to make and profit from their own mistakes. In the last analysis it will be teachers who set the pace.

CHAPTER 18

Curricula and Teaching Methods

CENTRALISED CONTROL AND FREEDOM FOR THE SCHOOL

18.1 Although there are already some signs of changes in several States, there is a long-standing tradition in Australian schools that the curricula and the syllabuses and the courses of study which they follow will be prepared and distributed by a central authority, whether this be an education department, a public examinations board or a similar body. In other parts of the English-speaking world there are different traditions. Such centralised preparation is not found, for example, in England, where considerable freedom is given to schools and to teachers in choosing what they will teach and how they will go about the teaching. In England, the U.S.A. and Canada, bodies outside the formal educational structure, such as the Nuffield Foundation in England and the National Science Foundation in the U.S.A., have made major contributions to the development of both curriculum and teaching methods.

18.2 There is growing in Australia the belief, expressed perhaps most forcibly by secondary school teachers, that teachers should have greater freedom than they have to devise their own curricula within broadly common objectives, and to organise their schools and use methods of teaching which they believe to be in the best interests of their students. Although there is still a wide gap between the majority of Australian practices and those which give a much greater degree of responsible freedom to teachers in, say, England and the U.S.A., within the Australian tradition South Australian practices are liberal. They have developed over many years of trial and error. There is little doubt that they provide for a diversity of curricula and of teaching methods which benefit many children. Whatever changes take place in the future, the children in the schools must be assured of equally good curricula and equally good methods. We believe that changes recommended later in this chapter will retain these benefits while adding others.

18.3 In South Australia, responsibility is at present given to the Director-General for determining the curricula of the schools in his charge. There has, however, been a noticeable trend in recent years away from detailed prescription of curricula by the Education Department and towards giving more freedom to schools. This is in keeping with the longer period of training given to teachers for primary schools, and with the progressive abolition of public examinations for secondary schools. At the upper level of the secondary school, syllabuses are also drawn up by the Public Examinations Board of South Australia in subjects which are examined by that Board. In a number of submissions reference was made to the need to give freedom to the

individual school and to the individual teacher to choose the best experiences for their pupils; but even more of the submissions took it for granted that there would be central prescription, either by the Education Department or by the Board, of the subjects to be offered and the content of those subjects.

18.4 In the following discussion, because of our terms of reference, we concentrate our attention on the procedures used by the Director-General for keeping under review the curricula and teaching methods of the schools of the Department, and not on the procedures used by a school or a teacher to ensure that what is offered to the pupil is satisfactory.

18.5 We should like, however, to make our position clear. We believe that, subject to acceptance of the purposes of the schools as these are determined by the South Australian community and expressed in statements of goals provided through the Education Department, and after consultation with the school council and the parents, teachers in the schools should be free to choose subjects, to choose the content of subjects, to organise the school as they think best for the children and to use whatever teaching methods appear to be most suitable for the teachers, the subjects and the pupils. The considerable freedom available in primary schools and in the first three years of the secondary schools and the responsibility being increasingly given to schools to determine their own courses are to be applauded.

18.6 Such freedom has its dangers; and it carries with it considerable responsibility. The dangers lie in the possibility that some teachers may use their freedom in such ways that their students will be handicapped by lack of knowledge or of skill or of understanding. They may teach subjects (e.g., languages) which children cannot take in later study. A school may offer too few subjects or an unbalanced selection of subjects. The content of subjects may lack scholarship or be limited in other important ways. These dangers can be avoided or minimised if head teachers and staffs accept the responsibility that such professional freedom entails. One of the responsibilities of the Education Department in association with its teachers is to ensure that freedom for the teachers does not limit the opportunities of their students or make it impossible for the students to realise reasonable expectations. The Education Department will still have a major responsibility, in the first instance, to ensure that the purposes for which the schools are established are being observed and attained, and, in the second, to ensure that it employs teachers who are adequately prepared to accept such responsible freedom and to introduce change. The Department must also ensure that teachers have available, to choose from as they see best, good courses of study, teaching aids, textbooks, teaching and learning materials, and tests and other procedures to be used as yardsticks against which to measure their performance. The Department

will use its knowledge of schools and teachers, and the services of specialists in subject areas, in pupil learning, in teaching methods and in school organisation, to provide teachers with suggestions in content, method and organisation, and to keep them abreast of the best in current thinking and research. There will still be a need for consultants and advisers, for curriculum and research officers, and possibly for specialists at secondary school level who will present to the Director-General and to the community independent reports on the state of the subject or area of the curriculum that is their special responsibility.

18.7 We envisage a steady continuation during the next decade of the movement towards greater autonomy in curriculum and teaching methods for the individual school and teacher. If it is to improve the education of the children in the schools, the movement will require a considerable increase in in-service education for the teachers, and a rapid expansion both in the number of consultants and in the number of teaching-resource centres in which teachers can study new courses, examine new materials and discuss new methods. Pre-service courses must also give much attention to the criteria and processes of curriculum development and the choice of learning experiences suited to individual children.

18.8 It will still be necessary to have procedures for review, for modification, for steady improvement and for effective dissemination of improved curricula and teaching methods. Ideas which lead to change come from many sources. Scholars improve the knowledge basic to their disciplines; psychologists and others add to knowledge about child development; society's perceived needs change as technologies are applied to aspects of daily living and as the need for knowledge about the world changes in nature or in emphasis; a teacher tries out something new in his school and it is judged to be good and worth dissemination; reports about overseas or interstate innovations are read, or are given by returned travellers. All these and other possible sources need to be taken into account in developing new curricula and new courses of study.

18.9 Few innovations which ultimately prove successful are introduced simply and in brief time. There are often long delays between the dawn of an idea and its application in a classroom. Sometimes it needs to be developed into a set of materials or a set of classroom procedures, and these must be given adequate trial in schools. Considerable involvement by those who are to use the courses or the methods is essential in the developmental period as well as later. In-service education of adequate length is often needed to prepare teachers to introduce something new. Attitudes may need to be changed — both those of teachers and those of their students. The time for introduction has to be chosen carefully to avoid putting too

much strain on teachers, since a spate of innovation can be as damaging to teachers as to children unless they have been thoroughly prepared for it.

18.10 We turn now, therefore, to a consideration of the present procedures for the review of curricula and teaching methods in the primary and secondary schools of the Education Department. The Department has at present also a direct responsibility for curricula in the teachers colleges, in the technical colleges, in the South Australian School of Art and in adult education. The procedures used in these other areas of departmental responsibility are not dealt with here.

Definitions

18.11 Both of the terms, "curricula" and "teaching methods", need definition. In this chapter we use the term *curriculum* to mean different things from time to time. We think that the context in each case will make the meaning clear, but the principal meanings are as follows:

(a) The sum of all the formal and informal experiences provided by a school for its students. (Some of these experiences are sometimes not seen as part of the curriculum — e.g. the methods of teaching used, or the type of discipline.) It may be sub-divided by the level of school into, say, "the infant curriculum", "the primary curriculum", "the secondary curriculum"; and terms such as "science curriculum" or "English curriculum" may be used to cover the experiences over a period of years in particular subjects.

(b) Syllabuses in the various subjects or "learning areas" or whatever else they are called, that make up a school's time-table. Syllabuses usually present what is intended to be taught in fairly broad outline only.

(c) Detailed courses. These may either "spell out" the syllabuses, or be set out without there being a broad syllabus as well. Some of the detail may be presented through textbooks or printed materials, but it may also be presented orally by the teacher from his own experience and wider knowledge, or it may arise from the activity of students directed towards inquiry on their own behalf and encouraged in the students by their teachers.

Sometimes what is set down as the intended curriculum is far removed from what is actually used, taught and learned. The teacher's interpretation is often the critical factor.

18.12 The term *teaching methods* is also wider in meaning than its most frequent connotation, which refers only to the ways in which a teacher presents material to the students. We use it to include all the ways in which students are encouraged to learn, whether these require the physical presence of a teacher or not. It includes, therefore, such things as the use of television and radio, (and audio-visual

procedures other than these), field excursions, the provision of material aids in the classroom, the use of the library, homework, projects and assignments, team teaching and the use of community resources in art and music. Curricula reflect the purposes of the community and the goals of the school and the teacher. The latter's teaching methods are his means of using the curriculum to achieve many of his goals.

PRESENT ARRANGEMENTS FOR CONTROL AND REVIEW

18.13 As the administrative head of the Education Department the Director-General of Education has the ultimate responsibility under the Education Act (1915-1966) for the curricula and teaching methods used in the schools and colleges under his jurisdiction.

Advisory Curriculum Boards

18.14 Regulations under Section 28 of the Act originally required that the Education Department have four advisory curriculum boards, one for each of primary schools, high schools, technical high schools

Table 18.1

SOURCES OF MEMBERSHIP (a) OF ADVISORY CURRICULUM BOARDS AND COMMITTEES (b)

SOUTH AUSTRALIA 1970

	Primary		Secondary		Total
	Board	Committees	Board	Committees (c)	
Education Department (Directors, Superintendents, Consultants, Curriculum Development Officer, Inspectors, Members of Branches, etc.)	4	20	5	32	61
Teachers in Government Schools (Head Teachers or Assistants incl. Masters or Mistresses of Method)	3	56 (d)	5	144	208
Teachers College Staffs (Principals or Lecturers)	-	18	1	29	48
University Staff	-	1 (e)	-	-	1
Independent Schools	-	2 (f)	4	-	6
Others	-	5 (g)	-	-	5
All Sources	7	102	15	205	329

(a) The same person may serve on more than one committee. They are treated as different persons in the above Table, except for the Curriculum Development Officer who is on all but two of the Primary Committees.

(b) Not including Regional Advisory Curriculum Committees.

(c) The committees have power to co-opt specialist teachers.

(d) Including three from secondary schools and one from the Gilles Street Science Centre.

(e) Elder Conservatorium.

(f) Music and social studies.

(g) All on Aboriginal Curriculum Subject Committee.

and rural schools. They set out also procedures for the nomination of teacher-members of these boards. The Rural Schools Board dealt with the curriculum of area schools. After the reorganisation of the Department in 1967, the three secondary boards (for high schools, technical high schools, and rural (area) schools) were consolidated into a Secondary Schools Advisory Curriculum Board. There are therefore in operation in 1970 only two boards, the Primary Schools Advisory Curriculum Board and the Secondary Schools Advisory Curriculum Board. Each has a number of subject committees. All the members of boards and committees are nominated by the Education Department. Table 18.1 sets out the sources of membership of both boards and committees.

18.15 PRIMARY SCHOOLS ADVISORY CURRICULUM BOARD. The Primary Board consists of the Director of Primary Education, the Curriculum Development Officer,¹ two Assistant Superintendents of Primary Education, a Master of Method from a primary demonstration school, an Infant Mistress from an infant demonstration school and the Headmistress of a primary school. It has committees in mathematics, English, handwriting, music, physical education, social studies, science, creative art and craft, and foreign languages. There is also an Aboriginal Curriculum Subject Committee, established in 1970. Apart from two officers of the Education Department, the last committee has on it members from the Departments of Aboriginal Affairs and of Health, and from the Commonwealth Employment Service. It has also one lay person interested in this field. The members of the other committees are head teachers, assistant teachers, lecturers from teachers colleges, inspectors of schools, and supervisors and members of special branches. The Curriculum Development Officer (or a member of his section) is a member of each committee except those on foreign languages and Aboriginal subjects. There is a high school teacher on the mathematics, science and foreign languages committees, and a member of staff of a non-government school on the music and social studies committees. There is a member of the staff of the Elder Conservatorium on the music committee. Otherwise, the members are drawn from primary schools of the Education Department, from the administrative officers of the Department and from the teachers colleges.

18.16 SECONDARY SCHOOLS ADVISORY CURRICULUM BOARD. The Secondary Board consists of the Director of Secondary Education and two members of that Division, the Directors of Primary and Technical Education (or their representatives), five heads of government secondary schools, four representatives of non-government secondary schools, and one principal of a teachers college or his representative. It has a number of committees, each of which includes a group known as co-ordinators in addition to the committee members. Membership

¹ This title refers to the situation early in 1970.

of the committees includes teachers from departmental schools, consultant teachers, lecturers from teachers colleges and inspectors of schools. There are such committees in geography, languages, history, English, mathematics, science, social studies, agriculture, economics, commercial subjects and art and crafts. There are no representatives on any of these committees from either universities or non-government schools (but see Public Examinations Board, paragraph 18.25). The Curriculum Development Officer is not at present a member of either the Advisory Board or any of the committees, and there is at present no comparable officer on the Secondary Board. The function he serves on the Primary Board and committees is served for the secondary committees by the consultants and by inspectors who are specialists in the subjects concerned.

Function of Boards

18.17 The Advisory Curriculum Boards are expected to keep current trends in curriculum and methods under review and to make recommendations to the Director-General whenever this is necessary. It is a major part of their responsibility to survey the total curriculum of the schools, to recommend the appropriate balance between different studies and to consider how curriculum and organisation and methods interact with one another. They therefore deal with all major and significant proposals for development and change, from whatever source. Matters are referred to them by the Director-General, or arise from views, representations, or suggestions made by their own members, as well as by individual teachers, schools, school councils or committees, universities, non-departmental schools, and others. Both Boards invite views from practising teachers.

18.18 Late in 1969 curriculum committees with an advisory role in their own regions were set up in each of the Mt. Gambier and Whyalla regions. Each is chaired by the Regional Education Officer, and each includes teachers from primary and secondary schools. Their declared role is:

To make recommendations to the Primary Schools Advisory Curriculum Board, and in particular to make suggestions for modification of any existing curriculum to cater for special requirements of the regions.²

18.19 After a new curriculum drawn up by a subject committee (usually in the form of a syllabus or a course) has been considered and recommended by the appropriate Advisory Board, it is normally given a year's trial in a small number of schools. This trial is followed by revision. Further trial, of what is usually considered the pilot edition of the syllabus or course, then takes place in a larger number of schools which are used as demonstration centres to which other teachers come to observe and discuss the course and its presentation.

² From a memorandum of the Director-General of Education.

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Further revisions are then made to it, and it is introduced in a comprehensive way to all the schools concerned. At both trial and pilot stages, therefore, there is opportunity for the critical assessment and evaluation of the course by teachers, consultants, inspectors and others, and for the deep involvement of those who will have to put it into operation in the schools.

18.20 We have referred already to the consultants. These are relatively new appointments in the curriculum field, although consultative functions have been undertaken for some time by members of the Psychology Branch, headmasters of metropolitan technical colleges, and demonstration assistants in physical education, libraries, music and audio-visual education. (There are in all 32 of these demonstration assistants.) The consultants in the Primary Division, of whom there are 25, include a mathematics consultant in each inspectorial district, an art consultant, two music consultants, a science consultant, and a supervisor of education for the deaf. There are eight consultants in the Secondary Division. They cover the fields of mathematics, science, social studies and English. All consultants in both Divisions are now full-time officers.

Curriculum Development and Research

18.21 The Curriculum Development Officer and the other officers who will be concerned with curriculum matters were in 1970 members of the Research and Planning Branch.^{*} In the past the small staff devoted to curriculum affairs operated relatively independently of any other research activities undertaken in the Department. In 1969 the Curriculum Development Officer was helped by four curriculum officers, two on a full-time seconded basis, and two on a part-time basis. None of these four was appointed for more than a year. The Department's intention is that the resources of the Research and Planning Branch, which will include full-time curriculum officers, will be available to the Boards and their committees. The Department intends to provide the Research and Planning Branch with more staff for both its advisory and its evaluative work in curriculum development.

18.22 It was one of the functions of the Curriculum Development Officer to keep in touch with interstate and overseas developments in both curriculum and teaching methods. His other responsibilities did not allow him much time to develop this responsibility to any great degree, although a good deal was done. It would be wrong

^{*}In paragraph 17.93 we have recommended the appointment of a Director of Research to direct both educational research and planning research. However, we use the title of "Research and Planning Branch" throughout this chapter when referring to the existing organisation. When we use "Educational Research Branch" we refer to the research staff engaged in activities centred around the process of education — curriculum development and evaluation, studies of method and organisation, and related matters. (See paragraphs 17.90–17.91.)

to give the impression that as a result the Boards have not been informed about such developments. Senior officers and specialist inspectors in the various administrative divisions, lecturers from teachers colleges and teachers from the schools have all, in one way or another, by visits to other States or overseas, and by reading and correspondence, kept themselves informed about particular developments in which they were personally interested. In its curriculum activities the Department has used the information held by such officers and their judgments on developments with which they were familiar.

18.23 Although the description of procedures set out in the foregoing paragraphs may suggest a high degree of centralisation, there has been, as stated in paragraph 18.5, a strong movement over the last few years away from the prescription of detailed guides by the Department. Such detail is still given as a matter of course during experimental and pilot trial of new syllabuses, but when a new or revised syllabus or course of study is proposed for general use considerable freedom is given to schools and teachers to frame the details to be used in their own setting. They have been encouraged to develop their own curricula or to adapt those approved by the Advisory Boards. In addition, the secondary schools have been encouraged to experiment with different groupings of subjects and different methods of school organisation.

Public Examinations Board of South Australia

18.24 The newly constituted Public Examinations Board of South Australia is responsible for the conduct of the Matriculation examination prescribed by the statutes or regulations of the universities in South Australia, and of other examinations approved by the Minister after recommendation by the Board. The only "other" examination now conducted is the Leaving examination. Most of the students in the high schools of the Department, but few only in the technical high schools, take both these examinations, and the Department has therefore a direct interest both in the courses of study and in the range of subjects prescribed for these examinations. It is represented on the Board by the Director of Secondary Education and eight other officers, including five principals of high and technical high schools.

18.25 The Board has in recent years provided new subjects and syllabuses that it hopes will give a wider range of studies than was hitherto available at either Leaving or Matriculation level, and it is considering others. For example, in 1969 Asian history, typing and Spanish were introduced at Leaving level and classical studies at Matriculation level. A number of additions are being considered, such as Malay and music at Leaving and agricultural science, Spanish, and commerce at Matriculation. Each year the Board appoints a committee for each subject in which an examination is

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to be held, to be responsible for both course and examination. Each committee dealing with a subject in which there is a Matriculation examination is chaired by a member of the academic staff of one of the universities. The remaining members of a committee include members of university staffs and teachers from both government and non-government schools. The Board has the final say about the subjects and syllabuses at Leaving level, but acceptance by the universities determines whether a subject or a syllabus will be approved at Matriculation level.

EVALUATION OF CURRENT ARRANGEMENTS

18.26 There are, in our opinion, both a clearly defined and active organisation and a reasonably effective set of procedures operating within the Education Department to keep under regular review the curricula, the syllabuses and the courses of the schools of the Primary and Secondary Divisions of the Department. There appears to be less adequate provision for a similar review of teaching methods in the several Divisions. There is need also for a wider professional representation in the bodies concerned with curriculum development. Neither the scholarship that the university disciplines could contribute nor the experience and interest of the non-government schools appears to be adequately used. Nor are community needs and views affecting the curriculum provided for adequately in the present Boards at primary and secondary levels. A more definite procedure for co-ordination of both curricula and teaching methods between infant and primary levels, between primary and secondary levels and between secondary and tertiary education appears also to be needed. We make recommendations on these matters in the following paragraphs.

Proposals relating to Curricula

18.27 Many proposals were made to us regarding the subjects or learning areas which should make up the curriculum. Some submissions dealt with the general nature of the curriculum. Some expressed dissatisfaction with the nature and content of present subjects, and proposed changes in them. Still others proposed new subjects. Considerable detail was included in the proposals about particular subjects, and the associations of subject teachers in particular showed both an informed concern and a realistic approach to the problems of their own subjects. Several submissions referred to the need to take a more national outlook on the content of particular subjects, and criticised the concept of separate State curricula either as a whole or in subject areas. A number of the proposals and suggestions are listed in Appendix H.

18.28 It is not within our terms of reference to discuss the detail of particular subjects or of the structure and parts of the curriculum

as a whole. Our concern is with the methods used to keep the curriculum under review, and on this specific topic we received a limited number of proposals. These can be summarised as:

- (a) The expansion of the curriculum development activities of the Research and Planning Branch. (In this context we propose to consider the status of the curriculum officers and consultants.)
- (b) The release, for full-time work in curriculum development, course writing and experimental work on syllabus design and student assessment, of university and teachers college lecturers and of both teachers and administrators of the Education Department. Their replacement by adequate reliefs was an important feature of these proposals.
- (c) The need to give sufficient trial to new or revised courses so that they are not introduced to all schools until it is certain that they can be put into effective operation by well-equipped teachers.
- (d) The need for some procedure which would keep under constant review the whole curriculum from kindergarten to the end of grade XII, and its integration with tertiary education, so that it can be seen as a whole rather than as a collection of parts each devoted to a particular level.
- (e) Wide representation of teachers, parents, and persons with experience in industry and commerce on committees and working parties set up to revise or to initiate curricula, syllabuses or courses of study.

RESPONSIBILITY FOR CURRICULA AND TEACHING METHODS

18.29 The Director-General of Education should, in our view, be responsible for ensuring that schools under his jurisdiction achieve the purposes for which they are established. Curricula and teaching methods, interpreted and used by teachers, are the means by which this responsibility is borne. This is not the same thing as saying that he should be directly responsible for determining curricula and methods as he now is. The moves made in recent years away from central prescription, and towards giving more initiative to the schools themselves, seem to recognise this difference between central responsibility for ends and the widest possible dispersion of responsibility for means. In these moves South Australia has been in the mainstream of recent theory and practice in developing curricula and implementing change, and every encouragement should be given to strengthening the moves. Nevertheless there is still a very important place to be filled in the development of curricula by authorities in subject-matter and in learning procedures, by those with long and wide experience in organisation and method, by those whose day-to-day tasks give them an overview of practices and their results and by those skilled in evaluating achievement. Their contributions should go hand in hand with the vital contributions that only teachers can make. There is no formula to decide what part each should play in preparing a curriculum or a syllabus or a course of study. The contribution will differ from subject to subject and from level to level.

18.30 The practices of planning and implementing new curricula in schools vary widely within Australia and indeed around the world. It seems fairly clear, however, that the preparation of curricula for South Australian schools is no longer a matter for part-time work by inspectors and teachers, and that those directing the preparation and trial of new curricula need to be full-time officers with acknowledged competence in curriculum development and evaluation, possessing sufficient status and seniority to exercise considerable influence both on the administrative organisation of the Department and within the schools. At times these full-time officers will be involved in work on nation-wide curricula such as the Australian Science Education Project. At other times they may well be concerned with curricula which affect only a small number of schools. Whatever the range of their activities, however, they will be concerned, at every stage in the development of a curriculum or syllabus or course of study, with its effects and the results of its operation. Evaluation of these is a constant task of those who develop curricula, and the use of such regular evaluation is a necessary part of the process of developing workable and accepted changes in curricula. Evaluation of the results of a change in curriculum, or of a new curriculum, after it is in operation in the schools, is important, but the continuing evaluation of the change as it is occurring is even more important. Part-time workers in curriculum development can rarely, if ever, give the necessary time to such evaluation.

18.31 As we have already indicated, it is important that schools have freedom in choice of curriculum, but the alternatives available to them should include the best that the Department can make available. Sometimes this "best" must itself include alternatives; it is, for example, clear that there could be a number of courses in English or mathematics or history, each good in itself and each, in the hands of different teachers, achieving either the same purposes or different but equally valuable ones.

ROLE OF THE RESEARCH AND PLANNING BRANCH

18.32 The Education Department plans that the Research and Planning Branch be expanded considerably, and that the Branch staff concerned with curriculum should work closely with inspectors, consultants and teachers. It does not expect the Branch to be responsible for developing syllabuses and courses, or writing textbooks or producing teaching aids, but envisages it as co-ordinating the work to be done, and providing supporting services through its full-time staff. It expects that the major developmental work will be done by inspectors, consultants, lecturers and teachers who will be seconded from normal duties to work full time on general or specific curriculum projects. The expertness of the staff of the Branch, and the resources available to them for evaluation of the results, will therefore be important factors in the proposed procedures. The status of the

officers of the Branch who sit on the Advisory Boards and on the subject committees must be high. The status and role of the officers to be concerned with this work have not yet been determined. In our view, the officers of the Branch engaged in curriculum work should include several senior officers of equal rank with the inspectors seconded for curriculum work. At least one of these senior officers should be well versed in theories of learning and instruction, and have experience in applying them to curriculum development and teaching methods. The Branch, too, should be more than a service organisation for boards and committees. It should be in a position to propose both developmental and evaluative work without waiting for briefs from either the Advisory Boards or subject committees.

18.33 The Branch will be expected by the Education Department to be more directly involved with teaching methods and teaching aids than with the substance of the curriculum, and more involved with the evaluation and review of new syllabuses and courses than with course writing. Its initiating and supporting roles in in-service courses have yet to be worked out in detail. There is an obvious place during such courses for it to report the results of its reviews and evaluations. However, its responsibilities for in-service courses on new or revised curricula should not, in our view, be regarded as a major function. It will be easy for its major purposes of research, review and evaluation to receive less attention than they require because of the very importance of the valuable function served by giving at such courses information about the effects of changes.

18.34 The importance which we attach to the operations of the permanent staff of the Research and Planning Branch does not mean that there is not an important place for seconded staff in the development of the curriculum. Many such secondments will be required to keep the curriculum and its parts adapted to changing needs and advancing knowledge of subject matter, of child development and of human learning. They will, in our view, normally be full-time secondments, and adequate reliefs will be needed for them in the schools or other institutions from which they come. Special provision may therefore be needed in the staffing schedules of particular institutions to allow for particular people to be detached for a period of time for curriculum duties.

18.35 We believe that amongst those involved in curriculum development there should be, as well as staff from the schools and from the teachers colleges, members of the staffs of other tertiary institutions and of non-government schools. It should not be difficult to make the necessary arrangements for such secondments, although it will perhaps be more difficult for any non-departmental institution to replace the member concerned than it is for the Education Department to effect such replacements in its own schools and colleges.

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18.36 At present, there are possibilities of conflicting responsibilities in the proposals for curriculum and syllabus development. It is not clear, for example, who will chair a particular syllabus committee, and to whom it will report, or to what extent the Research and Planning Branch has, or is intended to have, any responsibilities related to the curriculum work of the Technical Division, or to what degree servicing is to be given by the Branch to curriculum or syllabus committees, or to the Advisory Boards. It may be that the problems inherent in the divided authority under which the officers of the Branch will operate and in the range of potential interests which the Branch could be asked to assume will work themselves out, in practice, in productive ways. The direct line of responsibility of the Director of Research to the Director-General, which we have proposed in paragraph 17.93, will make it easier to resolve the above problems.

18.37 At present, no one appears to have responsibility for advising the Director-General on the integration of aims and methods, and ensuring the continuity and sequencing of the development of knowledge and skills.⁴ Someone is required with a continuing responsibility, and we suggest this should be one of the functions of the Director of Research.

18.38 Integration between curricula at the other principal transition point, that between secondary and tertiary education, is equally important. There are a number of institutions concerned — the schools, technical colleges, colleges of advanced education, teachers colleges and universities. If, as we expect, more diversified curricula and a wider range of courses are developed in the post-secondary institutions, those responsible for the courses in these institutions will need to work in close association with those responsible for developing and teaching the courses in the secondary schools. Both the Education Department and the Public Examinations Board will be deeply involved. No single co-ordinating committee seems appropriate in such a situation, when so many courses and institutions are involved. We suggest that a senior member of the Educational Research Branch be given responsibility for the close liaison between secondary and tertiary institutions that effective integration of curricula will require, and that such liaison be treated as a matter of major importance.

18.39 The Education Department's proposals for participation by research and curriculum officers in curriculum development and its evaluation have evolved out of experience. They are a marked advance on previous practice, and hold considerable promise. We have suggested some responsibilities that the Branch may carry in integration and liaison, and indicated some possible difficulties in lines of responsibility.

⁴ As shown in paragraph 18.14 there are at present no secondary representatives on the Primary Board.

18.40 Accordingly, we RECOMMEND that:

- (a) *The Division of Research should be so staffed that those staff members of the Educational Research Branch who are on the Advisory Boards and the subject committees have at least inspectorial status and are able to make contributions as equals rather than act in a service role.*
- (b) *The respective responsibilities for initiating and developing change in curricula and teaching methods should be specified, with particular regard to the role of the Educational Research Branch.*
- (c) *When officers are seconded to the Division of Research the secondment should be normally on a full-time basis and the seconded officer should be replaced in his "home" institution.*

MEMBERSHIP OF CURRICULUM BOARDS AND COMMITTEES

18.41 Of the five points referred to in paragraph 18.28, the Department's plans for the development and use of the Research and Planning Branch, and our recommendations set out above, seem to us to deal with all except the questions of membership of the Boards and committees, and the total review of the curriculum. These are to a considerable degree interrelated. Although the responsibilities of the Director-General are limited to the schools under his jurisdiction, there is no doubt that the recommendations made by the Department's Advisory Curriculum Boards and the subject committees have a wide influence on other schools in South Australia. Their composition and methods of operation, therefore, are as much the concern of the whole community as are the purposes of the schools and the conditions for learning which are established in them.

18.42 Concern was expressed, in a number of the submissions made to us, about the nature of the total curriculum, and the subjects which it should incorporate. Uncertainty about purposes is at the root of part of this concern. It reflects itself in such proposals as the need for a greater variety of courses for children of different backgrounds, interests and abilities, for avoiding specialisation of study before, at the earliest, the last two years of secondary schooling, for providing opportunity through a wide range of subjects and for exploration of interests and potentialities in the early years of secondary schooling. But some of those who were reasonably certain about their aims were uncertain about whether the curricula and methods used to attain them were appropriate. Many of those who made submissions believed that they could make positive contributions both to the statements of aims and to the nature of the curriculum. Representation on boards or committees concerned either with the curriculum as a whole or with syllabuses and courses was therefore sought by a number of bodies from which the Committee received submissions.

18.43 The Committee sympathises with the wishes expressed, and agrees that it is very important to have representation of diverse interests and of expert views on committees concerned with curricula and syllabuses. The scope of representation, however, seems to us to be very different according to whether purposes and goals are in question, or the syllabuses and courses of study.

18.44 We can see, for example, no good reason why parents as parents, or members of a school council as such, should be represented on the committee concerned with drawing up a curriculum in primary school science, or social science at the upper secondary level, or music for the junior secondary school. On the other hand, there is a strong case for including on such committees scholars in the subjects and scholars in learning processes. It is possible that some parents and some members of school councils will fill such a scholarly role, but if they become members of the committees it will be in that role, and no other. There is an equally strong case, we believe, for the interests and opinions of school councils and committees to be represented on both the Primary and Secondary Schools Advisory Curriculum Boards, where purposes and goals are under constant review and where the views and contributions of parents and community should be heard. There they will play a role in helping to ensure that the total curriculum is consonant with the purposes of the schools, and also, because they will see the final form of subject syllabuses and of detailed courses, that these too are appropriate. These representatives could consult with their Associations and seek the views of their colleagues. They should therefore be able to present some community viewpoints.

18.45 We believe, however, that even with this lay representation the Primary Schools Advisory Curriculum Board could better fulfil its tasks if it included representatives of a wider range of interests, in order to bring to its deliberations a wider range of scholarship and practical experience. We believe that a representative of pre-school education should be included because of the growing interest in this level of education and the need to ensure close liaison between pre-schools and primary schools. Both head teachers and assistants are now playing more responsible parts in initiating and in implementing change and improvements, and we think that they should have greater representation. They will still, under our proposal, have only seven members in a Board of 17, but this number should be enough to give effective voice to the practising teachers who are directly and intimately involved in planning and introducing new curricula and methods.

18.46 We believe also that the Secondary Schools Advisory Curriculum Board could use effectively a somewhat wider representation, and in particular should be so constituted that its liaison with the Public Examinations Board and with tertiary institutions is ensured

by their direct representation. In addition to membership from the teachers colleges, we think that representation from the tertiary sector should include a member from institutions other than teachers colleges.

18.47 Accordingly, we RECOMMEND that:

(a) There should be at least two representatives on each of the two Advisory Curriculum Boards, appointed by the Minister from panels of names submitted by the South Australian Public Schools Committees' Association and by the High and Technical High Schools Councils Association.

(b) The Primary Schools Advisory Curriculum Board, in addition to its existing membership (see paragraph 18.15) and the two lay members referred to above, should include a representative of the Secondary Division of the Department, two more teachers from departmental schools (one from primary and one from secondary schools), two representatives from other tertiary institutions, one representative of pre-school education and two representatives from non-government schools.

(c) The Secondary Schools Advisory Curriculum Board, in addition to its existing membership (see paragraph 18.16) and the two lay members referred to above, should include the chairman or secretary of the Public Examinations Board and a nominee of the Tertiary Education Committee whose establishment we have recommended in paragraph 11.74, the latter to be from tertiary institutions other than the teachers colleges.

18.48 On the subject committees set up to advise the Advisory Boards we do not think community representation necessary. Our view is that, in the light of the known purposes of the schools, and of a total curriculum recommended by the appropriate Advisory Board, the working-out of a syllabus or a course of study is properly a task for those professionally concerned with teaching, and for experts in the content of the subject and the methodology of teaching it. There are, however, some aspects of the membership of these subject committees which we think call for comment. The composition of the present subject committees for primary schools seems to us to reflect fairly well the various interests involved, although there appears to be scope for greater representation of non-government schools. The Public Examinations Board's committees contain many representatives of non-government schools, and we believe that the Department subject committees at the secondary level would benefit also from representation from these schools. The secondary committees could also use to advantage the experience of carefully selected primary school teachers, fully aware of the preparation given in primary schools to those beginning secondary school courses. The subject committees at both primary and secondary levels would benefit from the advice of scholars from the appropriate disciplines in the tertiary

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institutions as a whole. Teachers colleges are at present well represented on the committees, with the exception of those for handwriting and for the Aboriginal curriculum at primary school level, and for agriculture at secondary school level.

18.49 Accordingly, we RECOMMEND that:

(a) *Subject committees at both primary and secondary levels should include scholars from all kinds of tertiary institutions to ensure that advanced scholarship and changing views on the subjects may be rapidly drawn on.*

(b) *More representatives of non-government schools should be invited to participate in the work of both primary and secondary subject committees.*

(c) *Experienced primary teachers should participate in the work of the secondary subject committees.*

Review of Whole Curriculum

18.50 The role that we suggest for the Research Branch in integrating the curricula of the various Divisions of the Department does not touch on the statement we made in paragraph 18.26 that the translation of community needs and views is not adequately provided for in the present organisation for curriculum review. We received few suggestions about this, other than that a permanent full-time curriculum review board should be established. We do not think such a review board is necessary if the Boards, their committees and the Research Branch operate as we have proposed, although we do propose periodic reviews of the curriculum.

18.51 It seems necessary that there should be machinery for an independent body to report regularly and publicly on the purposes of the schools, the curriculum and teaching methods contributing to these, and the need for either varying, continuing or abolishing existing practices. Such a body needs to represent a wide spectrum of community interests, including teachers and parents. We would not expect such reviews to add to the knowledge of social change and other trends that the Education Department could be assumed to have already, but we see a need for an independent appraisal which, being made public, can mobilise public opinion to support necessary change. We envisage that a special sub-committee of some 10-15 members will be required with membership drawn, if necessary by co-option, from the central administration, teachers in departmental and non-government schools, tertiary institutions, parents' and citizens' organisations and the community at large.

18.52 Accordingly, we RECOMMEND that:

Every five years, the Advisory Council of Education, whose establishment we recommend in paragraph 17.29, should report to the Minister

of Education on the purposes, curriculum and methods of the schools of South Australia, and this report should be published immediately after its completion.

ROLE OF CONSULTANTS

18.53 We have been impressed with the work done by the consultants in both Primary and Secondary Divisions, and their appointment has been a bold and valuable step by the Education Department. Their functions in ensuring that innovations in curriculum and method are transmitted and implemented, in helping teachers and in providing information to the subject committees and to the Advisory Boards about the operation of changes and the need for others, are important ones that no amount of formal committee work can replace. All the reports about them which we received, from schools as well as from associations of teachers, pointed to their importance and to the help they gave to teachers. Their role is not an easy one to fill, and they require considerable resources in tact and patience as well as skill in their subject areas. At present those in the Secondary Division are drawn from the ranks of Special Senior Masters or Special Senior Mistresses. In addition to their normal salary as a Special Senior Master or Mistress, they are paid a special allowance while serving as consultants. There are no promotion possibilities within the position of consultant. Present policy appears to be that those appointed spend no more than three or four years as consultants. Their experience is such that it is likely that, if successful as consultants, they have special qualification for positions in the inspectorate, or on the staffs of teachers colleges, or perhaps in the future, as it develops, within the Research and Planning Branch. We agree that it would be unwise to keep teachers as consultants for more than a few years. It seems to us important, however, that provision be made for appointments of successive consultants in the same subject or area to overlap in time, so that the experience gained over a number of years is not lost and the periods of trial and error inevitable in the early months of a consultant's tasks are reduced in length.

PROPOSALS RELATING TO TEACHING METHODS

18.54 Teaching methods applied to the curriculum and syllabuses for a particular group of children are directed towards the achievement of goals. It was natural, therefore, that we received a number of suggestions and submissions related to teaching methods, and equally natural that many of the suggestions were interrelated with those on curriculum matters.

18.55 As stated earlier, the Education Department envisages that one of the functions of the Research and Planning Branch will be to advise curriculum committees on current and new teaching methods

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and teaching aids appropriate to particular curricula, syllabuses or courses. A good deal is already being done, but limitations of staff have prevented as much being done as is required. Some advisory services to teachers have been given in the past by inspectors, by consultants and by headmasters, and it is intended by the Department that these services continue. As with curriculum development, the function envisaged for the Branch in regard to teaching methods will largely be to support and to co-ordinate the work of committees of inspectors, teachers and lecturers usually seconded for the purpose by the Department. It is unlikely that there will be committees set up specifically to review or establish teaching methods, but in considering matters of curriculum teaching methods cannot but be reviewed.

18.56 Amongst the suggestions made relating to teaching methods were:

(a) The wider use of television. The Education Department envisages an increase in the number of televised lessons and has developed special facilities at Kilkenny Technical College, where there is provision for production and transmission if these are required. Courses in scripting, lesson preparation and presentation have already been given to many teachers.

(b) An increase in the number of teaching-resource centres and in the range of resources available in them. The Education Department has already three centres in operation (at Whyalla, Mt. Gambier and Wattle Park Teachers College), and intends to add to their number. Teachers have found them valuable.

(c) The provision of more teaching aids and educational material to help to train children in independent study. This was seen as important at all levels, and particularly so at the pre-tertiary level. An increasing supply of teaching aids is being made available by the Department.

(d) The arrangement of buildings to suit the methods desired. The quality and organisation of the building and conditions in which learning and teaching take place influence the methods used. For example, the traditional classroom and traditional desk arrangements do not encourage either group activities or independent research and assignments; the availability of laboratory assistants and other ancillary staff makes it possible for the teacher to prepare for more individual work; an adequate and well-staffed library makes it possible to undertake a much greater variety of individual and group activities than are possible without one. Recent action by the Department in regard to buildings, aides and libraries holds out considerable promise for the future.

(e) More use of modes of organisation of school time-tables and of individual pupil time-tables which permit the schools to adjust to the variations in a pupil's basic knowledge and learning rate and the

changing needs of a flexible curriculum. "Setting"⁵ and "flexible time-tabling"⁶ are illustrations of this.

- (f) More use of team teaching in situations where it is appropriate.
- (g) More "remedial" teachers (teachers with special competence in diagnosing and remedying weaknesses) particularly in basic subjects such as reading.
- (h) The removal of the authoritative-submissive attitude in the classroom and its replacement by a more co-operative atmosphere.
- (i) More use of methods by which individuals progress at their own rates in accordance with their interests and learning rates. In this way, it is believed, pupils will achieve success and mastery appropriate to their own ability rather than to that of the class of which they are members. "Ungraded schools"⁷ are one approach to this objective.
- (j) More use of methods by which pupils, working either alone or in groups, are asked to solve problems rather than to receive and memorise instruction and to use others' solutions.

18.57 As we have indicated, television and resource centres are already being used by the Education Department and we were told that the suggestions made in the other points listed above were well known to the Department. Something is already being done about each of them, but there is no doubt that they will require for their effective implementing greater resources in staff and equipment than the Department at present has. To put some of them into practice, too, will require more retraining of teachers than the Department can provide without either closing some of its schools while the teachers receive training, or staffing the schools more liberally than is at present possible.

18.58 Because teaching methods were in the past regarded as synonymous with simple instructional techniques, there seemed to be little need to keep them under as regular review as was accorded to the curriculum. Change in them, too, seemed often to be a necessary accompaniment of curriculum change, so that a review of curriculum or syllabus often carried with it an incidental review of methods. There is now, however, a wide variety of possible methods even with the same syllabus or course. There is a growing awareness both that different children may learn the same thing best by different means

⁵ "Setting" is a device used for organising time-tables. "Sets" of children engaged in the same subject at the same time-table period include pupils of comparable attainment irrespective of the classes or forms in which they are otherwise accommodated.

⁶ "Flexible time-tabling" means that the school can lengthen or shorten periods and combine them or shift them in time to meet varying demands in activity within a school.

⁷ As their name implies, these are schools with no grades in the usual sense. Children may be in different groups for different subjects or in no group at all while working at their own pace.

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(e.g., some visually, some aurally) and that the same child learns different things best by different methods (e.g., speaking and writing by imitation, and painting by self-direction). The study of methods and the search for appropriate methods for particular children have therefore become more important than they were. Reliance for adoption of new methods on the reading done by teachers and on the dissemination of ideas by consultants and inspectors is no longer sufficient. We endorse the intention of the Department that its Research and Planning Branch should keep teaching methods under review and make appropriate recommendations to the Advisory Boards and others. We suggest that this function should not be limited to the officers designated for curriculum work, however. Those so designated are likely to be concerned with specific areas or subjects, and methods should both transcend subjects and vary within them. They affect school organisation as well as the curriculum. Every teacher is concerned in them, and everyone in any way involved in the development and operation of a curriculum or a syllabus must be aware of their significance.

18.59 The Educational Research Branch will play a very important role in initiation, development and dissemination, if it is required to advise on the costs and implications of proposals for major change. Forward planning of this kind should accelerate desirable change, and help in the evaluation of its results. Perhaps the most important feature of its planning will be procedures for involving teachers both in the development of curriculum and methods and in their prompt dissemination. Innovations and changes of any magnitude or importance happen not by chance but as a result of long and careful planning and deep commitment and involvement by many people. Change in curriculum and teaching methods within the Education Department will be effective only when teachers in the schools have felt themselves involved in working out the courses and methods, in trying them out in actual working situations and in suggesting modifications and improvements. Consultants can help in the dissemination of new ideas and practices, but their capacity to help every teacher is obviously limited by time and geography. In-service courses are essential. Teachers colleges and universities have a major role to play in introducing new ideas in both pre-service and in-service education. For anything in the nature of a major change (e.g., a new course in English for primary schools) far more is required than a series of one-day or two-day meetings. Special courses and special procedures for disseminating information are obviously essential in such circumstances.

18.60 Several submissions made to us referred to the increasing amount of movement of families between the Australian States, and to the difficulties faced by children on transfer when curricula, courses of study, textbooks, methods and the expectations of teachers regarding standards were different in both major and minor ways. The

difficulties arise both on transfer to and transfer from South Australia, and are greatest at the transition point between primary and secondary education and at the various examination levels. In terms of number of children affected, it is not a major problem, although for the children concerned it may be a serious one at the time.

18.61 The trend in Australia towards the abolition of all external examinations other than that at the end of secondary schooling will ease some of the problems, but the difficulties associated with different courses, methods, texts and standards may increase as greater freedom is given to schools and teachers.

18.62 Taken to its extreme, the plea for more uniformity would involve similarity in ages of entry to schools, length of primary and secondary schooling, time-tables, textbooks, methods, examinations, and school organisation, both within South Australian schools and between the six Australian States. It implies a degree of similarity such that a student moving from school A to school B would resume work in school B with the same textbooks, and at the same page or problems, as he would have met in his first school if he had not moved. Australian education, however, is so administered that there is no way except by consensus for a common pattern of school organisation, curricula, courses of study, methods or standards to be developed on an Australia-wide basis. There is a growing interest in using the best available Australian resources to develop curricular materials, such as those now being developed by the Australian Science Education Project, which are appropriate for Australian conditions and from which schools may choose materials suited to their needs. Uniformity may develop under these circumstances because of consensus of views on the quality of materials. Many trends, however, are in the opposite direction. Increasing freedom is being given to individual schools in all of the above facets of schooling. The latter tendency seems to us a good one within a framework of purposes accepted by all schools. Despite the difficulties it causes to children moving both between States and within States, it should be maintained because of the liveliness, variety and possibility of improvement it encourages, and because it releases initiative in ways that centralised prescription cannot expect to do. Moreover, we think the difficulties of transfer can be overcome to a very large extent by the schools which accept the transferees. If attention to the needs of the individual pupil is one of the purposes of the schools, then the needs of the transferee should be met as a part of the school's general plans to attend to such needs. There will be times when a transferee requires a special transition course in a particular subject to enable him to fit into a school's courses. There will be others when he has to take up a new subject, perhaps with individual tuition in a normal classroom. Such practices should, in our view, be regarded as normal, and the professional preparation of teachers should include experience of them. If schools and tertiary institutions accept this responsibility there will be few

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children seriously affected by transfer. None the less, schools and teachers need to exercise their freedom in responsible ways and with awareness of the expense and the learning difficulties which face children moving from one school to another when there are considerable differences between the schools.

PROVISION FOR RESEARCH AND EVALUATION

18.63 We have already referred to the plans of the Education Department to develop its Research and Planning Branch which will incorporate the Curriculum Development Officer and his present section. In early 1970 the Branch had as full-time staff only the Principal Research and Planning Officer, the Curriculum Development Officer, and one assistant research officer. The Department's plans envisage a steady increase in staff over the next five years, so that by 1975 the Branch will include the Principal Research and Planning Officer, two Chief Research Officers, six Senior Research Officers, nineteen research officers, and supporting clerical staff. This is a rapid rate of expansion, and it may not be easy to find officers with the necessary qualifications. The Department intends to give more attention than in the past to following up changes in organisation, curricula and methods to assess how effective they have been in their avowed purposes and to discover what other effects they may have had. The Research and Planning Branch as at present envisaged will have activities other than those concerned with curricula and teaching methods.^{*} None will be more important than keeping these changes and their effects under constant review and evaluating their measured results against the desired ones. These activities will require experience and ability of a kind in short supply in Australian education at present. We suggest that it will be more important for the Branch to develop with staff of high quality, even though this may mean slower expansion than is contemplated, than to expand rapidly with inexperienced staff.

18.64 The Education Department is not alone in its interest in research and evaluation. It should, we think, make use of the interest, time and competence of the staffs in the universities' departments of education, in the teachers colleges and in the colleges of advanced education. Independent evaluations of the nature and effects of change could help both the Education Department and teachers. A university department of education in South Australia or elsewhere, or a teachers college or the Australian Council for Educational Research could be asked to make such an independent evaluation of a major innovation or change of course or new method.

EXAMINATIONS AND CERTIFICATES

18.65 There are at present in South Australia at the secondary school level only two public examinations — the Public Examinations

* See paragraphs 17.90–17.91 for our views on separation of functions.

Board's Leaving and Matriculation examinations leading to certificates of the same names. In addition there are Education Department certificates at Leaving and fifth-year levels available to all students wishing to sit for internal examinations. Departmental schools also provide to such students as are leaving school and seeking employment a statement of school level reached (see Table 8.3).

18.66 It appears that it is the policy of the Education Department to use the external Leaving certificate less and less, and to look forward to its replacement by internal assessment. Although this is part of the process of giving more direct responsibility to schools, which we applaud, it raises certain practical difficulties which need to be considered. The present Public Examinations Board Leaving certificate is used by many institutions and by State and Commonwealth Public Services as a minimum qualification for entry into certain grades. Where there is a variety in curricula and possibly in standards of performance between institutions, internal certificates may have lower public status than their quality might often justify. Under these circumstances there is a danger that the prestige of the Education Department may give status to its internal assessments, leaving those of non-government schools without this status whatever their quality.

18.67 The Education Department has representatives of non-government schools on its Secondary Schools Advisory Curriculum Board. It should therefore be easy to have the non-government schools participating in trials of new courses and in the assessment of their value. It is only a short step for such schools, if they wish to do so, to award an internal Leaving certificate on the basis of their school examinations. This gives great freedom to the school in choosing curricula or syllabuses or even single courses of study, in evaluating them by its own devices and in reporting performances on that basis only. We can see no objection to this, provided that, in the interests of the students involved, ways are found of validating the schools' assessments and of ensuring comparability of standards between schools. The external Matriculation examination is one such indirect way, but others are needed. We endorse the procedure of the Department in providing tests of varying kinds to its schools to enable them to moderate their own standards at Leaving level, but we see a need to extend this service to all schools.

18.68 There is obvious concern, in the minds of several of those who made submissions, that there might possibly be bias against individuals in a school-based system of assessment. Others doubt the ability of the individual school to maintain constancy in assessing standards of performance of its students, in the absence of the common yardstick of the external examination. Both of these doubts have been raised before whenever an internal examination has been considered for adoption. We believe that they can be over-emphasised.

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Bias can be modified by professional ethics, and reasonable equality of standards guaranteed by moderation procedures, including the periodic use of reference tests and examinations of the kind contemplated by the Education Department.

18.69 It is obviously important that at the Leaving and Matriculation levels there be the closest possible collaboration between the Education Department and the Public Examinations Board to ensure that the interests of all students at those levels are considered. The Board is a statutory body representing all interested in secondary education, and has a legitimate concern for the standard of its certificates. The Department has as legitimate a concern for students for whom it considers the present public examinations and certificates less appropriate than they could be.

18.70 Such collaboration is important on two other grounds.

(a) The Board is already considering the development of courses for those of different abilities who are not suited by the customary academic courses.

(b) The non-government schools, which are dealing with an important segment of the secondary school population at these levels, find that in the Public Examinations Board their voice has been, and is, heard, whereas as yet there is no guarantee that they will be able to exercise comparable influence in the Secondary Schools Advisory Curriculum Board. Our recommendations in paragraph 18.47 will provide for closer liaison between the Department and non-government schools on the departmental Advisory Boards. The liaison on the Public Examinations Board should be equally close. Our recommendation that the chairman of the Public Examinations Board, or the secretary, should be a member of the Secondary Schools Advisory Curriculum Board should help in this respect also.

18.71 The existence of two separate sets of subject committees, one set up by the Board and the other by the Education Department, operating at the same levels and to a considerable extent dealing with the same students, seems to us uneconomical and unnecessary. It would give rise to undesirable comparisons and competition if, for example, the Board were to act as a monitor of standards in non-government schools through its external or other examinations while the Department emphasised in its schools the value and importance of internal assessment or examination. Certificates awarded by different bodies at the same level and for very much the same kind of work should not, in our view, compete for public esteem. In our view, the Board and the Department should work together at the Leaving level in awarding internal certificates based on internal assessment. Moderation schemes would then be supported by both, and there would not be two different certificates available. The certificates could be awarded by the Board and possibly invidious

comparisons thereby be avoided. Wasteful duplication of effort in developing and evaluating curricula and courses would also be avoided, and the talent available for curriculum development and evaluation would be concentrated and not dissipated.

18.72 Accordingly, we RECOMMEND that:

The Public Examinations Board and the Education Department should together establish an effective scheme for moderating internal examinations in all schools.

Public Examinations and their Effects on Schools

18.73 Several of the submissions made to us referred to the inhibiting effects on curriculum and teaching methods of the external public examinations at Leaving and Matriculation levels. It was maintained that the importance attached by parents and employers to the certificates awarded as a result of these examinations, and in particular the importance of success in the Matriculation examination for those wanting admission to tertiary education, led to far too much attention to the specific content of prescribed subjects, to formal teaching methods and to a lack of concern for the needs of the individual student. We agree with these views.

18.74 Many students regard success at the Matriculation examination as a very important feature in their plans for a career, and their parents and teachers accept this view and do their best to ensure that success. As long as such success in the examination is seen as the principal end of studies at the grade XII level, teachers will be reluctant to give preparation for the examination less than its present importance. Yet there is considerable strength in the argument that, were it not given so much emphasis, or if it were removed entirely as an examination based on agreed syllabuses, teachers would be able to provide an education for the students in the upper levels of the secondary school better adapted to their varying interests and abilities, taking account of their different destinations in further studies or other kinds of employment, and cultivating, more than now seems possible, independent habits of study.

18.75 Tertiary institutions in Australia have come to expect that applicants for admission will have reached certain standards before admission and that these standards will be attested to by passes in particular subjects at a public examination. Their expectation ensures that students in the secondary schools will undertake certain studies considered necessary as a preparation for their work at the tertiary level. The existence of the public examination has enabled the tertiary institutions to draw up order-of-merit lists when some form of selection was necessary. Authorities awarding scholarships have also found performance in the public examination the most convenient basis on which to make their awards.

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18.76 However, recommendations have already been made in both Queensland and Western Australia for the abolition of the public external examination based on approved courses of study, and for its replacement for certification purposes by school-based assessments whose comparability is to be ensured by moderation procedures of various kinds. Where order-of-merit lists are required it has been suggested that these be drawn up by using both school assessments and results on tests and examinations not based on approved courses of study, but endeavouring to assess the abilities needed for success in tertiary studies. It is, we believe, outside our terms of reference to pursue this question further in detail or to make recommendations about public examinations. Nevertheless, in the upper levels of the secondary schools there are already many students whose future careers, whether in study or work, are not best served by courses leading to existing public examinations. Teachers, students and tertiary institutions all have an obvious interest in the nature, use and effects of these examinations. We believe that the present Leaving and Matriculation examinations need critical review.

18.77 Accordingly, we RECOMMEND that:

The Minister of Education should authorise an inquiry into the nature and functions of examinations and certificates at the end of secondary schooling, and into the methods most appropriate for the assessment of student achievement at this level.

CHAPTER 19

Conclusions and Recommendations

PAST ACHIEVEMENTS AND DEFICIENCIES

19.1 Since the end of the Second World War the South Australian educational system has undergone a massive expansion. This expansion has been partly a direct consequence of population growth stimulated by the immigration programme, and partly a result of increasing demands for education which have shown themselves in the much greater holding power of the secondary schools and in rising aspirations for tertiary education.

19.2 The number of pupils in the primary schools is directly related to demographic factors, and the main impact of the increase in the number occurred in the decade following the war when it doubled. Since the mid-1950's the rate of increase in primary pupils has fallen, and in recent years it has been below 2 per cent per annum.

19.3 The rate of growth of the number of secondary pupils has remained higher than that for primary pupils because of increasing retention rates. During the past 15 years the proportion of boys and girls aged 15 years who were at school doubled, while that of the 16-year-olds increased two and one-half times and that of the 17-year-olds more than trebled. Currently about 60 per cent of 16-year-olds and about 25 per cent of 17-year-olds are at school. Consequently, the rate of increase of the number of secondary pupils remained very high until the mid-1960's, since when it has moderated partly because of demographic factors and partly because of a reduced scope for further increases in retention rates. The rate of increase of the number of secondary pupils is at present about 4 per cent per annum, although that for the senior secondary grades is nearer 20 per cent. In the second half of the 1950's, the number of secondary pupils doubled, and in the 1960's it increased by another 70 per cent.

19.4 Over the past decade the number of enrolments in tertiary institutions has doubled. This has been largely related to the growth of the population in the relevant age groups, although the rising trend in the propensity to enrol at institutions of higher education has continued, but at a slower rate than in the 1950's. At present about one young person in five enrolls at a tertiary institution, although a proportion of these do not complete a qualification.

19.5 There have also been significant increases in the provision of places in two other quite disparate sectors of education, pre-school education and further education. In the 1960's, places in pre-school centres affiliated with the Kindergarten Union of South Australia

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increased by about 50 per cent, while enrolments in adult education and the technical colleges roughly doubled.

19.6 As far as the primary and secondary sectors are concerned, virtually the whole burden of this extraordinary expansion has fallen on the Education Department. We believe that to have coped with it is a remarkable achievement, and that much criticism of the Department has ignored the great difficulties under which it has laboured during the past two decades. Its difficulties were increased by the fact that for much of this period the age groups supplying new recruits to the teaching profession were, for demographic reasons, small compared with the age groups constituting the school population.

19.7 It is not surprising, in view of the magnitude of the expansion, that there was some deterioration in class size and in the qualifications of teachers and that the rate of transfer of teachers from school to school was high. In primary schools the number of teachers did not keep up with the number of pupils, and the pupil/teacher ratio worsened steadily until 1957. The same happened in secondary schools until 1960. But since those years there have been marked improvements, and today pupil/teacher ratios are appreciably more favourable than they were 20 years ago in all categories of schools except high schools. In primary schools there have been big gains in the reduction of class size. Fifteen years ago 95 per cent of classes in the larger primary schools contained over 35 pupils; today the proportion has dropped to 50 per cent.

19.8 In our investigations we have been impressed by the Education Department's achievement in expanding the number of places in the educational system, in building and commissioning new schools and other educational institutions and in securing and training teachers to run them. We think that South Australia has performed at least as well as the average of the rest of Australia, and possibly somewhat better. Nevertheless we have observed serious deficiencies in government schools both in the provision of staff and of facilities and in the general climate in which the schools operate.

19.9 While pupil/teacher ratios have improved appreciably in the sixties, many classes in many schools remain much too large. We are aware that class size is a concept that is gradually losing its significance as team teaching and ungraded schools develop; but it would be quite unrealistic to suppose that it will become irrelevant, at least in the near future. Over 80 per cent of primary classes in government schools, exclusive of small rural schools, have more than 30 pupils, and over 40 per cent have more than 35 pupils. Nearly 80 per cent of secondary classes have more than 25 pupils; in high schools 75 per cent of classes have more than 30 pupils, and the most common size lies in the range 36-40 pupils, this range containing over one-third of all high school classes.

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19.10 There has been a marked decline in the number of teachers in government schools with university qualifications. In the last 15 years the proportion of primary teachers holding such qualifications has fallen from 14 per cent to 9 per cent, and the proportion of secondary teachers holding them has fallen from 66 per cent to 50 per cent; although it must be said that, in the latter case, the decline took place in the fifties and there has been some small recovery in the sixties. In recent years teachers have been able to earn a full diploma for study at a teachers college. If teachers who have gained this diploma are added to those with university qualifications, the situation appears less unfavourable, and some increase in the proportion of teachers with completed qualifications is evident over the past 15 years. However, there still remain the uncomfortable facts that in 1969 more than three-quarters of primary and infant teachers did not hold a completed qualification of any kind, that almost one-half of these teachers lacked the necessary classification units to become certificated teachers and that 30 per cent of secondary teachers did not hold a completed qualification.

19.11 During the past years the government schools have suffered from a high rate of transfer of teachers from schools. This is partly because of the loss rate (about 13 per cent of teachers leave the government teaching service each year) and partly because the rapid expansion of the system has inevitably meant much transfer of staff to growing schools and new schools. In the event, on the average, about one-third of the staff of a school leaves each year, and of these about two-thirds have spent less than three years in the school. The consequence of this staff instability on the life of the school is obvious.

19.12 Finally, some mention must be made of gross inadequacies in ancillary staff, in libraries and in equipment, and of the problems of accommodation in buildings, many of which are too small, obsolete or makeshift. In these areas there has undoubtedly been progress in the last few years, but there is a great accumulation of deficiencies to overcome.

19.13 Staff and physical facilities alone do not guarantee a healthy and dynamic educational system. There is the question of the whole climate in which the system operates. In our investigations we spoke with many teachers and officers of the Education Department, with laymen and with students. Past history lies heavily on the government schools. Decision-making has been centralised. There has been a strong sense of hierarchy. There have been pressures towards uniformity and conformity. There has been considerable inbreeding. We think that this climate is one which has affected the relations of pupil to teacher, of teacher to headmaster, of headmaster to central administration and of school to parent. It is antipathetic to a flourishing educational system and we believe that it should be changed. In say-

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ing this, we are aware that the Education Department has already taken some steps in the direction of decentralising the system.

19.14 During the past 15 years there has been relatively little expansion in the number of places in non-government schools; indeed since 1962 the number of places has remained almost constant. About one-seventh of primary and secondary pupils at present attend non-government schools in South Australia, a proportion far lower than that in any other State. Of enrolments at non-government schools 70 per cent are at Catholic schools. Generally speaking, the non-government non-Catholic schools have smaller classes, better qualified staff, lower staff turnover and greater retention to the end of secondary schooling than do the government schools; and they cost considerably more to run. In contrast, many Catholic schools in some respects fall below the standard of government schools and very much below that of the non-government non-Catholic schools. Financial assistance to non-government schools was introduced by the Commonwealth Government in 1964 with its programme for improving science facilities. More recently both State and Commonwealth Governments have begun to make direct grants to non-government schools.

FUTURE PROSPECTS AND PLANS

19.15 In assessing the future requirements of the educational system the Committee has fixed 1981 as its horizon, and it has estimated the number of places in educational institutions that it believes may be required in that year. As far as primary and secondary schooling is concerned, it has long been accepted by the community that there should be a sufficient number of school places to accommodate all those who are under compulsion to attend school or who wish to carry on to the senior grades of secondary school. Our projections for primary enrolments indicate virtually no increase in total enrolments until the mid-seventies, and an increase at the rate of about 3 per cent per annum thereafter, a rate which is higher than that of the immediate past although a good deal lower than that experienced in the 10 years following the Second World War. If, as is quite likely, immigration to South Australian turns out to be lower than that assumed in our projection, the rates of growth of primary numbers will be smaller.

19.16 Our projections for secondary enrolments are based on a continuation of observed trends in retention in the higher grades of secondary schools, such that, by 1981, nearly all 16-year-olds and over 50 per cent of 17-year-olds will be at school, compared with the present proportion of about 60 per cent and 25 per cent respectively. This implies that nearly 90 per cent of the secondary school entry will persist to grade XI, and over 50 per cent to grade XII. The projections indicate a continuation of the rate of growth of the imme-

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diate past (about 4 per cent per annum) until the mid-seventies, a rate which is considerably smaller than that experienced from the mid-fifties to the mid-sixties, and a decline in the rate to about 1 per cent per annum for the second half of the seventies. The number of pupils in the senior secondary grades will grow much more rapidly than the secondary school population as a whole.

19.17 The relatively low rates of growth of school populations in the coming decade will provide an opportunity of concentrating on quality rather than quantity, an opportunity denied to the educational authorities since the Second World War. It is of vital importance that this opportunity be seized. Accordingly, we have proposed that by 1978 in government schools the number of teachers should be increased in relation to the number of pupils by nearly one-quarter. This should make possible the elimination of classes above 30 pupils in primary and junior secondary grades and of classes above 20 to 25 pupils in the two senior secondary grades, the provision of relief teachers for casual absences due to such causes as illness or attendance at in-service courses, and the institution of study-leave arrangements for approved purposes. We believe that these targets can be achieved. They will involve a rate of increase in the number of primary teachers over the next decade (about 4 per cent per annum) which is almost the same as that over the past 15 years, and a rate of increase in the number of secondary teachers over the next decade (about 5 per cent per annum) which is less than half that obtaining over the past 15 years.

19.18 We have also made proposals to raise the professional level of teachers, first, through the provision of facilities enabling them to complete their pre-service qualifications, to undertake in-service courses and to obtain postgraduate qualifications; and, secondly, through the registration of teachers with the ultimate objective of restricting employment to those who are registered. In addition, we have proposed very substantial increases in the employment of ancillary staff of all kinds, clerks, library assistants, laboratory assistants, teacher aides and caretakers. We think that there should be a considerable expansion in psychological services and in the planning and research activities in the Education Department. In order to deploy the resources of the Education Department to the best effect we have proposed major changes in its administrative arrangements, chiefly in the sphere of its internal organisation and in its relations with the Public Service Board and the Public Buildings Department. We are recommending that essential school equipment be provided at government expense, that the subsidy system be abolished and that temporary and obsolete buildings be replaced over the next decade.

19.19 We do not expect the number of places provided at non-government schools to rise significantly unless there are substantial increases in State aid. We have not taken a view as to whether or not

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growth in the number of such places should be encouraged, but we have been concerned to observe the poor standards of provision in many Catholic schools and we believe that certain minimum standards in government and non-government schools should be promoted and enforced. To this end we recommend the registration of non-government schools.

19.20 In the fields of further and tertiary education we believe that South Australia should work towards the ideal of providing sufficient places to enable all its citizens to have the opportunity of studying at this level according to their inclination and capacity, but we recognise that, in the short run, educational priorities in the face of limited resources may prevent its perfect attainment. The Committee is unable to predict with any accuracy trends in the rates at which students are likely to carry on from secondary to tertiary education or the demand for further education. However, we think it likely that the demand for education beyond secondary school will require a doubling of the number of places at tertiary institutions and of the provision for further education over the next decade. Although this would involve an annual rate of growth of enrolments of about 8 per cent, it would still be a somewhat lower rate than that experienced in the sixties. A doubling of places in tertiary institutions would imply that by 1981 one young person in three would enrol at a tertiary institution as against the current proportion of one in five.

19.21 In the case of pre-school education, we have proposed an expansion which, while considerable, is unlikely to meet demand, let alone need. However, we think that what we have suggested represents the most that can be achieved in a relatively short time. Our proposals would add another 6,000 places in five years, and would by the mid-seventies raise the provision to about 30 per cent of the relevant age group, an increase of one-half.

19.22 The above proposals will, of course, cost a great deal of money; but we do not think that they are beyond the capacity of a community that attaches importance to education. We have estimated that these proposals imply a rate of increase in government expenditure on education in terms of constant price and wage levels of a little over 7 per cent per annum. This rate is close to that of the recent past, and less than that of the past 15 years. If this rate of increase in expenditure is maintained, the fraction of our national production that we shall be devoting to education by 1981 will be about 60 per cent more than it is at present, but we have achieved this order of increase in the immediate past and the fraction of our national production devoted to education will still not be high by the standards of such countries as the United States and Canada.

19.23 The achieving of the higher levels of expenditure referred to in the preceding paragraph will present the State Government with

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considerable financial problems which are unlikely to be resolved without additional Commonwealth assistance of one kind or another. Broadly speaking, there are four possible ways of financing the increase in the education bill: an increase in the proportion of the State budget spent on education, an increase in taxes levied by the State Government, an increase in Commonwealth assistance to the State, and an increase in the area of education for which the Commonwealth takes direct financial responsibility. We doubt whether the first of these means is possible in the light of the competing claims on the State budget of other social services, including possibly metropolitan transportation, and whether a sufficient increase in rates of State taxation could be achieved to render the second practicable.

19.24 We should like to emphasise our belief that quantity in an educational system is not enough, and that there must be a continuous pressure to improve quality. We think that this is important in assessing priorities. School places must be provided by law for all children under compulsion to attend school; and the community expects that places will be provided for all other children wishing to carry on with their secondary education. Consequently, the provision of these places has come to have an absolute priority. But there is, as yet, no assumption of absolute priority in the provision of places in the other areas of education. While we hold the view that places in pre-school, further and tertiary education ought to be provided to meet the demand for them, we do not think that the expansion of places in these fields should be at the expense of quality in them or, indeed, in the fields of primary and secondary education.

EDUCATIONAL CLIMATE

19.25 In paragraph 19.13 we referred to the climate in which the educational system operates. In Chapter 1 we set out six qualities of an educational system on which we place high value: a non-authoritarian approach to educational matters; a concern for the individual child; the equality of educational opportunities; a diversity of educational institutions; a decentralisation of decision-making; and the opening-up of the educational system to a variety of ideas. Our recommendations for change are intended to reflect these qualities.

19.26 It is not possible to legislate for the inculcation of non-authoritarian attitudes in teachers and administrators. However, we believe that our proposals relating to the decentralisation of decision-making both within the Education Department and from the Department to the schools will produce a climate favourable to these developments. Moreover, the role of the inspector is changing from that of assessor to that of consultant. These changes should increase the degree of professional independence within the Education Department and throughout its schools. We think that educational institu-

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tions ought to reflect open-mindedness, tolerance, respect for others, a desire to consult rather than prescribe and a desire to persuade rather than compel. It would, of course, be a contradiction in terms for the educational authorities to instruct their officers and teachers to behave in a non-authoritarian way; and progress in this matter must depend on the convictions of the body of teachers and educational administrators. However, in our view, less authoritarian relationships between pupils and teachers, teachers and headmasters, and parents and school staff are likely to obtain in schools which are not too large, and for this reason we favour restricting the size of primary schools to about 600 pupils and that of secondary schools to about 800-1,000 pupils.

19.27 We believe that our proposals relating to a greater integration of the Primary and Secondary Divisions of the Education Department under a Deputy Director-General (Schools), to the admission of children to primary school on their fifth birthday, to the phasing-out of separate infant departments, to individual progression, and to the ultimate establishment of a single type of comprehensive secondary school with a full range of options will all conduce to a proper treatment of, and respect for, individual differences between children.

19.28 We have made a number of proposals concerned with equality of opportunity. We believe that handicapped children require special treatment, and we have recommended that the State assume full responsibility for them. Such children will require special staff and special facilities. We think that compensatory provision for socially disadvantaged groups, including Aborigines and some migrant groups, should be made. We have proposed substantial modifications to existing schemes for secondary and tertiary scholarships with a view to reducing the financial barriers to persistence with education. We have suggested that attention should be paid to the establishment of pre-school centres in the poorer socio-economic areas, and that such centres should be specially subsidised by the State. We have made proposals relating to country schools to maintain the quality of education in country areas.

19.29 We hope that a greater diversity of educational institutions will be achieved by giving individual schools wider responsibilities and by encouraging them to experiment with varying forms of organisation, curricula and teaching methods. The Director-General of Education has already given his clear approval to such experimentation. It would be irresponsible to give the schools the right to experiment without providing them with educated teachers, adequate information about the range of possibilities, and means for carrying out a proper assessment of innovations. Consequently, curriculum research and assessment must play a vital role, as well as must resource centres. We have suggested strengthening these activities within the Education Department; and we have advocated the pro-

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vision of funds for action experiments in pre-school education and in the education of socially disadvantaged groups. Our recommendation that the teachers colleges should become independent and our suggestion that additional colleges of advanced education should be created are in the spirit of a greater diversification of educational institutions.

19.30 We believe that decision-making in educational matters ought to be decentralised to encourage diversity and fuller community participation. We have recommended the establishment of a number of advisory bodies which will diffuse decision-making, disseminate information about education and involve a wider spectrum of the community in educational matters. These bodies include the Advisory Council of Education to advise the Minister generally on questions relating to education in the State, the Pre-School Committee to advise on the establishment of pre-school centres, the Institute of Colleges to act as an umbrella over colleges of advanced education, including teachers colleges, and the Tertiary Education Committee to advise on developments in, and on the co-ordination of, tertiary education. We have proposed that colleges of advanced education, including teachers colleges, should be independent bodies with their own governing bodies, and that the councils of government primary and secondary schools should have wider functions and a broader membership, including representation from senior students in the case of secondary schools. We have recommended a broadening of the Advisory Curriculum Boards, with some community representation and with greater cross-representation from primary, secondary and tertiary sectors and from non-government schools; and we have proposed a general inquiry every five years concerning the purposes of the curriculum. We have recommended that the management of pre-school centres should remain with the Kindergarten Union of South Australia, rather than suggest its transfer to the Education Department.

19.31 Within the Education Department itself there ought also to be a devolution of decision-making to the appropriate operational level so as to produce a less hierarchical and less centralised system. We believe that only those matters which cannot reasonably be dealt with at school level should go higher. We think that the headmasters ought to have more responsibility in matters both of administration and of curriculum, and that they should involve their teaching staffs in exercising responsibility. Training in administration should be provided to this end. We have recommended the provision of school budgets to cover maintenance, equipment and the employment of non-professional staff additional to the schools' establishment. Within the central administration of the Education Department, we have recommended the separation of the Division of Technical Education to become a Department of Further Education. We have also recommended the creation of the post of a second Deputy Director-General, with the intention that the two Deputy Directors-General should have defined operational responsibilities. We have made other

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suggestions to broaden the top management of the Education Department.

19.32 The creation of the various advisory bodies referred to in paragraph 19.30 will tend to open up the educational system to a variety of ideas. The Education Department and the schools of the Department cannot avoid being inbred to the extent that most of their staff have been educated in government schools. Consequently, it is of great importance to expose the school system to outside influences so that a proper antidote to self-satisfaction can be applied and the benefits of the experiences and ideas of people brought up in other systems can be gained. We believe that as a general principle all State Governments should work towards greater interchangeability of staff, and we hope that the South Australian Government will give a lead in this matter. We have proposed that headmasterships of the larger schools and senior administrative posts should be filled by open advertisement, which would give opportunities for outstanding young men and women in the government schools, and at the same time open up the positions to people with outside experience. We have suggested that teachers should not be trained in institutions under the control of the Education Department, and that the system of bonding should be phased out. We have advocated exchange of staff with other States and with other countries. We have also proposed the creation of overseas scholarships for staff, and the use of visiting consultants in the Education Department.

19.33 South Australian schools operate within a particular political and social context. Within that context they are expected to fulfil a number of purposes. The context includes such elements as the nature of government, the pace of technological change, the mounting expectations of the community concerning the quality of education and life, the need for re-education, and a recognition that we are a pluralist society. The purposes of the educational system arise from a combination of the implications of living in such a society and of views about the desirable nature of the individual and the skills that he needs to possess. A cardinal purpose is to provide such equality of opportunity to benefit from education that each child's potential will be developed fully. Such development requires not only that he should have recognised skills and abilities which the school will help him to acquire, but that he should be interested in learning, understand his own powers as well as the needs of others, understand the society of which he is a part and possess a set of values which will guide a happy and useful life. It is essential, if schools are to be the dynamic parts of society which we believe that they should be, that their curricula, organisation and methods all be based on such clearly perceived purposes, and lead to their realisation. Of the many elements needing continued examination we consider most important the procedures and facilities for dealing with children in the light of their individual capacities, and the need to prepare them for evolutionary change in the society of which they are a part.

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19.34 The educational system is inextricably woven into the fabric of the society in which it operates. We believe that the community should not merely be interested in it, but that it should be involved in it — in defining its purposes, in determining its priorities, in assessing its performance. One way of achieving this, as far as the schools are concerned, would be to operate the schools within small local regions. However, we do not believe that such arrangements would work effectively in the South Australian context; rather, we have suggested involving the community through various advisory bodies and through broadening the role and membership of school councils. We appreciate that a relatively large number of people will be needed to man the various councils and committees that we have suggested. We are not fearful that it will prove impossible to find sufficient able and interested people. It is true that, in a State as small as South Australia, only a few well-known names spring to mind, but we know from our experiences during the course of this inquiry that there are many suitable people among the less well known.

19.35 The involvement of the community in the educational system has many aspects. Parents frequently participate in school organisations, but it is important that their participation should go beyond fund-raising to the essential nature of the school itself. Teachers have a responsibility not only for communicating what they are attempting in the classroom but also for trying to understand the needs and aspirations of the parents. Schools, technical colleges, colleges of advanced education and universities are valuable community assets. They are assets which could be used much more intensively and extensively. Their libraries, their halls and classrooms and their sports fields might well be more readily accessible to the general public. Apart from the services which could be gained from these facilities, their wider use would bring the school and the community closer together and conduce to the development of those favourable attitudes to education which are essential in a democratic society if the community is to tax itself appropriately to support a high level of education. State-wide organisations of parents and teachers are also able to play important roles in stimulating community interest in education. In all these matters, a prerequisite is an adequate flow of up-to-date and accurate information about the educational system. We believe that it is the responsibility of the educational authorities to ensure that such information is made available to the citizens of the State.

19.36 If educational opportunities are to be expanded and are to be of high quality, an increasing volume of resources — manpower, buildings, equipment — will have to be devoted by the community to education. We believe that South Australia can afford quality education and that whether or not these resources will be forthcoming is a question not of capacity but of will. But the dedication of resources to education is not sufficient to produce a healthy and dynamic educational system, in which tolerance, reason, experiment

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and adventure are valued. In the last analysis these values depend on people, and, above all, on the values and attitudes of the teachers themselves.

RECOMMENDATIONS

19.37 A complete list of the Committee's recommendations in the order in which they appear in the Report is set out below:

Supply and Training of Science Teachers (paragraph 6.43)

The Advisory Council of Education, whose establishment we recommend in paragraph 17.29, should commission a study on the supply and training of science teachers to determine what action would be most effective in attracting and holding well-qualified people in the field of science teaching.

Retiring Age for Women Teachers (paragraph 6.59)

There should be a common retiring age for men and women teachers.

Promotion System (paragraph 6.82)

(a) The attractiveness of teaching to able and well-qualified people should be preserved in the period of reduced promotion prospects which seems to lie ahead by increased loadings for high qualifications, especially for holders of honours degrees and higher degrees.

(b) The loadings paid for qualifications within the primary service should be such as to make primary service sufficiently attractive to highly qualified people.

(c) A number of senior teaching posts with the pay and status of deputy head should be made available to well-qualified subject specialists in the larger schools of the secondary system and to people well qualified over an area of the curriculum in primary schools.

(d) Financial and other benefits should be offered on a more generous scale than at present to make service in areas now regarded as undesirable more attractive so that teachers may more willingly undertake service in them and the rate of transfer out of them may be decreased.

Continuing Education of Teachers (paragraph 6.86)

(a) Teachers should be enabled to apply for leave for full-time study, at the rate of one term for every seven years' service, in courses approved as likely to improve their professional competence.

(b) Teachers should be required to undertake up to a week's in-service study within their schools or elsewhere each year during a vacation period.

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(c) Tertiary institutions should be approached to provide courses carrying cumulative credits for study over a month of the long vacation.

(d) The Education Department should, in collaboration with the teachers colleges, develop special arrangements whereby poorly qualified but experienced teachers are enabled to upgrade their qualifications.

Number of Teachers Required in Government Schools (paragraph 6.114)

(a) The following maximum class sizes should be implemented at the earliest possible date:

Primary — 30 pupils.

Secondary — 30 pupils for classes in the first three years, 20–25 pupils in the fourth and fifth years.

(b) Provision should be made in planning teacher supply for teacher numbers which would cover the following:

(i) An allowance of 7.5 per cent of all teachers to replace those on extended leave or secondment and absent on casual leave through attendance at in-service conferences or for other reasons.

(ii) An allowance of 5 per cent of all teachers to replace those granted leave for approved courses of study, and to provide extra teachers in some schools to compensate for special learning disabilities among a high proportion of their pupils.

(c) Every effort should be made to enable these allowances to become fully operative by 1978, phasing them in gradually as classes of the desired maximum size are attained.

(d) In order to meet the requirements set out in the preceding recommendations, the level of recruitment from re-employment and other sources should be raised by offering greater opportunities for part-time training and part-time employment and by the promotion of recruitment at graduate level. If necessary, the number of places in training institutions should be increased.

Registration of Teachers (paragraph 6.119)

(a) A Teachers Registration Board should be established under Act of Parliament. It should consist of an independent chairman and eight members selected from a panel of names submitted by the groups to be represented. These eight members should be people qualified for registration.

(b) The composition of the Registration Board should be along the following lines:

Two members from the Education Department, one of whom should be a headmaster.

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Two members from non-government schools, one of whom should be drawn from a Catholic school.

Two members from the South Australian Institute of Teachers.

Two members from tertiary institutions engaged in the training of teachers.

(c) The functions of the Registration Board should be:

(i) To compile and keep a register of teachers qualified to teach at pre-school, primary, secondary and trade levels.

(ii) To determine the qualifications and experience, if any, required for admission to the register.

(iii) To arrange where possible for comparability in requirements for registration between the Australian States and for the reciprocal recognition of qualifications both within Australia and between Australia and other countries.

(iv) To hear and determine complaints against teachers relating to their professional conduct, to suspend from the register for a limited period those found guilty of conduct regarded as unprofessional and to apply to the Supreme Court for the deregistration of people whom, for stated reasons, it deems unworthy of continued registration.

Registration of Non-Government Schools (paragraph 7.36)

(a) Non-government schools should be registered.

(b) Conditions of registration should require that certain standards be observed in relation to buildings and class sizes, and that, in due course, only registered teachers be employed.

(c) Except for purposes of raising schools to levels necessary for registration, government financial assistance should be confined to registered schools.

Age of Entry to Primary School (paragraph 8.7)

(a) Entry into school should be continuous on the basis of each child being admitted on the next school Monday following his fifth birthday, or of groups being admitted at monthly intervals according to arrangements worked out by schools.

(b) The gradual introduction of the changed system of entry should be accompanied by appropriate in-service and pre-service preparation of teachers and the provision of materials to enable teaching methods to adapt to the individualised teaching which such an arrangement will require at all primary levels.

Infant Schools (paragraph 8.16)

(a) Infant schools should be gradually integrated into the primary schools with which they are associated, and primary headmasters

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should be assisted in their overall supervision of the schools by consultants who are specialists at the junior primary level.

(b) The present infant and primary promotion lists should be amalgamated, and teachers of older and younger primary children encouraged to see themselves as a single staff.

(c) The preparatory grade and grades I and II should cease to be referred to as "infant classes".

(d) Any necessary changes in the preparation of teachers should be made to enable teachers, while developing competence over the whole primary field, to specialise at either junior or upper primary level.

Transition from Primary to Secondary School (paragraph 8.22)

Further steps should be taken immediately to ease the transfer of pupils from primary to secondary schools by better integration of the two levels. This will involve changes in the content and methods of teaching in the upper primary and lower secondary grades, and the organisation of consultancies, teachers, curriculum and pupil records on a basis which will permit effective overlap between upper primary and lower secondary levels.

Type of Secondary School (paragraph 8.46)

(a) The present system of high and technical high schools should be replaced as soon as practicable by schools of a single type, each providing a full range of courses and allowing a pupil to progress in different subjects at different rates where appropriate. Where it is considered desirable, particular schools should be permitted to specialise in particular subject areas. In the latter case the intake into the school should not be zoned on the basis of residence.

(b) The present track system should be re-examined in the light of the preceding recommendation.

(c) All secondary schools should be co-educational.

Size of Schools (paragraph 8.59)

(a) Planning should proceed on the basis of eliminating primary schools of more than 600 pupils in the total span of their seven grades.

(b) Secondary schools should not exceed 1,000, and their maximum size should be nearer 800 wherever possible.

Country Schools (paragraph 8.70)

(a) Small one-teacher and two-teacher schools should be closed wherever accommodation in larger schools is available within a reasonable travelling time, and transport over good roads is possible.

(b) Wherever possible, secondary students at present in special rural schools should be enrolled at area schools.

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(c) Secondary education to the end of fourth year should be locally available to all pupils, provided that it may be taken through correspondence lessons in schools where fourth-year numbers are insufficient to justify the provision of a full range of staff.

(d) In area schools and any remaining special rural schools where the majority of pupils are in primary grades, secondary classes should be taken by four-year-trained primary teachers (preferably with degrees) who have undertaken a special course to prepare them for such work in addition to having specialised in a broad subject area in their tertiary studies.

(e) Teachers appointed to small and remote country schools should in general have served for at least one year in a larger school where professional assistance is available.

(f) A single headmaster should be responsible for groups of small schools. Visiting consultants should be prepared to spend several days with new teachers, and resource kits should be made available.

(g) Schools in isolated areas and those where climatic conditions are particularly trying should be eligible for special grants to help in overcoming disadvantages due to locality.

(h) The organisation of transport arrangements, beyond the payment of a subsidy, should be the responsibility of parents in the area rather than of the Education Department.

(i) The questions of providing hostels for students and of providing mobile flats for teachers should be investigated.

Ancillary Staff (paragraph 9.17)

(a) The scale of employment of non-teaching staff in the schools should be greatly expanded. A level of two ancillary staff of all kinds to every five teachers employed seems a reasonable target.

(b) Establishments for the employment of different types of non-professional assistance should be worked out flexibly enough to leave to individual schools a margin of choice between types.

(c) Where short training courses are required for ancillary staff, they should be conducted by the Education Department or by an appropriate college.

(d) In-service and pre-service education of teachers should include a study of the changes in teaching patterns which assistance from ancillary staff makes possible.

School Subsidies and Equipment (paragraph 9.30)

The subsidy system should be discontinued. Buildings essential to the operation of the school and the cost of maintenance of grounds should be provided out of public funds, and the budgets to schools which we recommend in paragraph 17.48 should include amounts to cover the cost of all equipment regarded as necessary for modern educational practice.

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Facilities in School Buildings (paragraph 9.38)

Facilities provided in schools should include a quiet work area for staff who have non-teaching periods, interview rooms, a structure which could be used as a hall and gymnasium, and seating accommodation either indoors or in landscaped outdoor areas to enable pupils to eat their lunches in relaxed and attractive surroundings.

Teaching Resources (paragraph 9.65)

(a) The Libraries Branch and the Audio-Visual Education Centre should be amalgamated into a single Teaching Resources Service operating under the Director of Special Services.

(b) The in-service and pre-service education of all teachers should give increased attention to the use of multi-media approaches to learning.

(c) A training course for library aides should be introduced.

(d) Trained school librarians should be employed on a greater scale.

(e) Promotion prospects within library work should be such as would allow trained people engaged in it to gain promotion without returning to classroom teaching, and to receive compensation for the extra training in addition to normal teacher training required.

(f) The Teaching Resources Service should collaborate with the educational research section of the Education Department in the continuous evaluation of multi-media approaches to learning.

(g) Area resource centres, each serving a limited number of schools, should be developed to allow films, loop films, tapes, cameras and other teaching aids to be readily accessible and to enable their shared use.

(h) The supply of expensive equipment should be accompanied by the allocation of money for recurrent expenditure sufficient to enable its effective use, and by ancillary staff to service it.

(i) The Education Department should not at present go ahead with plans to produce films for television on any significant scale, or for their transmission, except through Australian Broadcasting Commission channels.

Physical Education and Music (paragraph 9.71)

Physical Education and Music should cease to be organised in special branches, and be accepted into both the primary and secondary curricula on the same basis as other subjects requiring specialist consultants and inspectors and specialised teacher education.

Psychological Services (paragraph 9.88)

(a) The number of guidance officers employed in the Psychology Branch of the Education Department in relation to pupil numbers

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should be raised over a period of five years to a level at least equal to that of the average of the Australian States at the end of the period.

(b) Promotion prospects and salaries within the Branch should be such as will enable it to attract and hold qualified staff, and to exchange educational psychologists between the Branch, the research section of the Education Department and the teachers colleges.

(c) Teachers responsible for educational and careers information in schools should be relieved of teaching responsibilities to the extent necessary to make their work in this area effective. A clear distinction should be made between their role and that of guidance officers giving personal counselling based on their psychological training.

Organisation of Pre-School Education (paragraph 10.70)

(a) There should be a substantial increase in government financial support for the provision of pre-school education, both to permit an expansion in the number of places and to provide adequate staff at appropriate salaries.

(b) The Kindergarten Union should continue for the present to be the major agency for the running and supervision of government-assisted kindergartens.

(c) The Board of Management of the Kindergarten Union should be augmented by three members appointed by the Minister of Education.

(d) A Pre-School Committee responsible to the Minister of Education should be appointed by the Minister to plan the overall development of pre-school education, to decide on priorities between areas in the allocation of public money for kindergartens, and to determine where kindergartens need to be provided at public expense, where it is reasonable to expect some degree of parental initiative and contribution, and what the level of that contribution should be.

(e) The Pre-School Committee should be constituted along the following lines:

A Chairman.

A senior member of the administration of the Education Department.

A person with experience in the pre-school field selected from a panel proposed by the Kindergarten Union.

A senior staff member of a university department of social administration.

Three other members.

Training of Pre-School Teachers (paragraph 10.78)

(a) The Kindergarten Teachers College should be operated as an autonomous college associated with the Institute of Colleges whose establishment we recommend in paragraph 11.60, and under conditions similar to those suggested for other colleges which are members of the Institute.

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(b) Students should be paid allowances on the same basis and under the same conditions as those recommended in paragraph 16.133 for students sponsored by the Education Department, and the payment of allowances should be arranged by that Department from a special allocation made to it for the purpose.

Future Provision of Pre-School Centres (paragraph 10.83)

(a) The number of government-assisted kindergartens should be expanded at an initial annual rate of 20 centres, each accommodating 60 children in two groups of 30. Plans should be made to sustain this rate of expansion for five years, the Pre-School Committee recommending an appropriate rate of growth in the subsequent period.

(b) The Pre-School Committee should as a matter of urgency consider arrangements which would increase the output of pre-school teachers to the level necessary to sustain the rate of growth recommended above.

Co-ordination of Colleges of Advanced Education (paragraph 11.60)

(a) An Institute of Colleges should be established, with the following functions:

(i) To make recommendations to the Government or Governments concerned as to desirable developments in tertiary education in institutions other than universities.

(ii) To award degrees and diplomas to students of member institutions who have completed approved courses.

(iii) To co-ordinate the courses offered by member institutions.

(iv) To make recommendations to the Government or Governments concerned as to the allocation of funds, both recurrent and capital, for the maintenance of member institutions.

(v) To approve the recurrent budgets and the staff establishments of member institutions.

(vi) To approve the capital budgets and individual building projects of member institutions.

(b) The Council of the Institute of Colleges should be constituted along the following lines:

A President appointed by the Government.

A Vice-President appointed by the Council, who shall be the chief executive officer of the Institute.

The Director-General of Education, or a Deputy Director-General nominated by him as his representative.

The Director of Further Education.

Four principals of member institutions, elected by the principals of member institutions to represent an appropriate spread of institutions.

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Four members of the academic staffs of member institutions, elected by the academic staffs of member institutions to represent an appropriate spread of institutions.

One member nominated by the Council of the University of Adelaide, who shall be a member of the academic staff of that university.

One member nominated by the Council of the Flinders University of South Australia, who shall be a member of the academic staff of that university.

Six members informed of the educational needs of the relevant professions and vocations, appointed by the Government.

Two Members of Parliament, appointed by Parliament.

(c) Boards of Studies in specialised fields should be established to advise the Council of the Institute on academic matters.

Government of Non-University Tertiary Institutions (paragraph 11.63)

(a) Non-university tertiary institutions of sufficient strength should be incorporated, and be controlled by their own governing bodies.

(b) The governing body of an incorporated institution of this type should be constituted along the following lines:

A Chairman, who shall not be an employee or a student of the institution, to be elected by members of the governing body but not necessarily from among their number.

The Principal of the institution.

Three members of the academic staff elected by the academic staff.

Three students elected by the students.

Three members of the academic staff of other tertiary institutions, appointed by the Government.

Ten members associated with or interested in the professions and industries for which students are being prepared, appointed by the Government.

Co-ordination of Tertiary Education (paragraph 11.74)

(a) A Tertiary Education Committee should be established as an advisory committee, with the following functions:

(i) To advise the South Australian Government on developments in the field of tertiary education, the needs of the State in this field, and how best these needs can be met.

(ii) To advise the tertiary institutions of South Australia with a view to promoting co-ordination and mutual assistance and diversity, where appropriate, in the field of tertiary education.

(b) The Tertiary Education Committee should be constituted along the following lines:

A Chairman appointed by the Government.

The Vice-Chancellor of the University of Adelaide.

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The Vice-Chancellor of the Flinders University of South Australia.

The Vice-President of the Institute of Colleges.

The Director-General of Education.

The Director of Further Education.

The Secretary-General of the Advisory Council of Education.

Five members appointed by the Government, of whom not more than two should be members of the staff of tertiary institutions.

Teacher Training for Further Education (paragraph 12.45)

(a) Trade teachers should undertake full-time study, which we suggest should be of two months' duration, before commencing duties, followed by more extensive part-time study where necessary, and annual in-service refresher courses.

(b) The Department of Further Education, whose establishment we recommend in paragraph 12.51, should undertake a complete review of training required for trade teachers and for teachers of adult classes; and special courses, organised by people experienced in these fields, should be provided at a teachers college.

Administration of Further Education (paragraph 12.51)

(a) The Division of Technical Education at present within the Education Department should be established as a separate Department of Further Education under a Director of Further Education, responsible to the Minister of Education.

(b) During the transition period suitable arrangements should be made for the sharing between the Education Department and the Department of Further Education of such facilities as are considered desirable.

Teacher Training for Special Education (paragraph 13.24)

(a) All teachers engaged in special education should have undergone a full course of teacher training including electives appropriate to the nature of the classes they teach.

(b) Teachers of the blind or deaf should hold appropriate certificates.

(c) Advanced or specialist diplomas in the teaching of handicapped children should be available at teachers colleges and universities, and should be a prerequisite for senior appointments in this field.

(d) Provision should be made for selected teachers to take higher degrees in special education to enable them to fill positions as lecturers in teachers colleges or as consultants.

(e) Both primary and secondary diplomas in teaching should include a compulsory section on the education of handicapped children.

Promotion Prospects Within Special Education (paragraph 13.27)

Promotion prospects within special education should be such as would allow trained people engaged in it to gain promotion without

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returning to normal classroom teaching, and to receive compensation for the extra training in addition to normal teacher training required.

Teacher Aides for Special Classes (paragraph 13.29)

Teacher aides should be appointed to special schools and classes on a scale providing one aide for every two special teachers.

Compulsory School Attendance of Handicapped Children (paragraph 13.32)

Section 47 of the Education Act should be amended so that the provisions of the Act relating to compulsory attendance apply to handicapped children as they now do to all other children, with appropriate powers of exemption.

Transport of Handicapped Children (paragraph 13.34)

The cost of conveying between home and school handicapped children who are approved by the Psychology Branch as unable to use public transport should be met in full by the Education Department.

Equality of Opportunity at Pre-School Level (paragraph 14.36)

The Pre-School Committee, whose establishment we recommend in paragraph 10.70, should receive an annual research grant of the order of \$50,000 to allocate to selected projects specifically aimed at providing information on various ways of improving equality of opportunity at the pre-school stage.

Equality of Opportunity at School Level (paragraph 14.46)

(a) More attention should be given, both in teacher education and in schools, to the practical implementation of teaching programmes which allow each pupil to progress at his own rate within teaching groups of varying levels of achievement.

(b) Schools identified as having a higher than average proportion of children facing learning or social difficulties, or both, should be more liberally staffed to allow of smaller teaching groups, and should be provided with aides and equipment on a more generous scale than other schools.

(c) Special courses to prepare teachers for work in remedial classes and as consultants to teachers in normal classes should be made available at training institutions.

(d) The State should meet the full cost of examining secondary students through the Public Examinations Board.

Secondary Scholarships (paragraph 14.49)

(a) The State Government should approach the Commonwealth Government seeking a change in the basis of Commonwealth Secondary

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Scholarships which would allow the total amount allocated for this purpose to be spread over more students by the imposition of a means test so that students capable of further education who might otherwise leave are able to remain at school beyond grade X.

(b) If Commonwealth policy regarding secondary scholarships remains unchanged, the State Government should supplement Commonwealth provision by awards of its own, based on a means test.

Socially Disadvantaged Children (paragraph 14.51)

The Education Department should establish a small committee selected from appropriate staff in the Department and by co-option from beyond it to undertake pilot projects for the education of Aboriginal children and other socially disadvantaged children; and the necessary funds should be provided to develop and evaluate these projects.

Tertiary Scholarships (paragraph 14.55)

(a) The State Government should approach the Commonwealth Government seeking a change in the basis of Commonwealth University and Advanced Education scholarships to allow all students accepted into the quotas of tertiary institutions to be eligible for assistance, subject to a means test, in the payment of fees and of living expenses.

(b) If Commonwealth policy regarding university and tertiary scholarships remains unchanged, the State Government should supplement Commonwealth provision by awards of its own, based on a means test.

Qualifications Gained by Teachers College Students (paragraph 16.43)

(a) Teachers college students should not be employed at the end of their period of training unless they hold the full qualifications required for registration by the Teachers Registration Board, whose establishment we recommend in paragraph 6.119.

(b) Students who fail subjects should be helped to make up lost ground during the long vacation through the provision of intensive courses in teachers colleges, where appropriate.

(c) Students requiring more than the minimum time to obtain full qualifications for registration should repeat, normally at their own expense but with the assistance of loans where necessary, to allow them to qualify for registration before they enter the schools.

Teachers College Facilities (paragraph 16.53)

The Institute of Colleges, whose establishment we recommend in paragraph 11.60, should pay special attention to

(a) the capacity of the colleges engaged in the training of teachers in relation to teacher requirements;

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- (b) the appropriate size for such institutions;
- (c) the facilities available for the teaching of science, giving particular attention to the possibility of concentrating the preparation of secondary science teachers within a limited number of institutions, if the training of such teachers within the colleges is to be continued;
- (d) the appropriate standards of library provision and services;
- (e) the facilities for evening meals and evening study within the colleges.

Organisation of Further Education of Teachers (paragraph 16.78)

(a) The Tertiary Education Committee, whose establishment we recommend in paragraph 11.74, should encourage the development of arrangements for articulation of courses in the teachers colleges and the universities.

(b) The composition of the In-Service Advisory Committee of the Education Department should be broadened by adding, say:

Two representatives from non-government schools.

A second representative of the South Australian Institute of Teachers.

Two representatives from university departments of education.

A second representative of the teachers colleges.

Two representatives from the section of the Education Department responsible for research.

Internships for Teachers (paragraph 16.80)

A committee representative of training institutions and the schools should inquire into, and advise the Teachers Registration Board about, the desirability of including a period of internship as a requirement of registration as a qualified teacher.

Government of Teachers Colleges (paragraph 16.100)

(a) The teachers colleges should cease to be the responsibility of the Education Department.

(b) All five government teachers colleges at present in operation should be incorporated under Act of Parliament as independent institutions subject to the general supervision of the Institute of Colleges and operating along the lines set out in paragraph 11.60.

(c) The governing body of each college should be constituted along the lines recommended in paragraph 11.63, as follows:

A Chairman, who shall not be an employee of the college or of the Education Department or a student of the college, to be elected by members of the governing body but not necessarily from among its members.

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The Principal of the college.

Three members of the academic staff, elected by the academic staff.

Three students elected by the students.

Three members of the academic staffs of other tertiary institutions, of whom not more than one shall be from a college which has teacher education as its main concern, appointed by the Government.

Three members of the Education Department, of whom at least one shall be an inspector or consultant, appointed by the Director-General of Education.

Three members of the teaching staffs of South Australian schools, one of whom shall be employed in a non-government school, appointed by the Government.

Four members with a special interest in, or knowledge of, teacher education, appointed by the Government.

Teacher Education in the Structure of Tertiary Education (paragraph 16.122)

(a) The teachers colleges at present in operation, including the Kindergarten Teachers College, should be associated, each as a corporate body, with colleges of advanced education in an Institute of Colleges whose functions and composition are recommended in paragraph 11.60.

(b) A separate Board of Studies in Education under the Institute of Colleges, as outlined in paragraph 11.59, should be responsible for the academic supervision of teacher education courses outside the universities.

(c) Member colleges of the Institute of Colleges where courses in teacher education are offered should be free to associate with university schools of education in the planning and accreditation of their courses.

(d) No further single-purpose institutions should be developed for the education of teachers, and any necessary expansion of facilities should take place in an institution established as a multi-purpose institution by the Institute of Colleges.

(e) The proportion of teachers in training enrolled in the universities should not be permitted to decline further, and should be raised to the highest level possible.

(f) Where a sufficient number of relevant subjects in specialised fields is offered in a college of advanced education whose sole purpose is not the training of teachers, intending teachers should be encouraged to take part of their training there.

Teaching Scholarships and Bonding (paragraph 16.133)

(a) Bonding and the special allowances for teachers in training should be discontinued as soon as conditions permit. Meanwhile the

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Advisory Council of Education, whose establishment we recommend in paragraph 17.29, should periodically review bonding arrangements to determine when they could safely be discontinued.

(b) Teaching scholars should have the option of accepting lower allowances sufficient to enable them in the circumstances in which they are placed to take university or college courses, but requiring lower repayments if they decide not to teach, or a shorter bonded period. A scale of allowances should be introduced, giving students the possibility of moving from one level to another during their courses.

(c) Full-time tutoring or lecturing at universities or colleges of advanced education, including teachers colleges, should be accepted as teaching service in the working-out of the bond.

(d) The giving of allowances to students at school on the understanding that they will enter teacher training should be discontinued.

(e) The allowances paid to graduate students recruited immediately before the year of their Diploma in Education should be raised to the level of Commonwealth Postgraduate Awards.

(f) Teaching scholars taking full courses at universities should no longer be attached to a teachers college.

(g) Allowances to teachers in training should be paid directly by the Education Department, and not through the teachers colleges.

(h) Allowances paid to teachers in training should be progressively reduced to Commonwealth scholarship levels as the supply position improves, and the bonded period adjusted accordingly.

(i) Tertiary teaching scholarships should be discontinued.

Advisory Council of Education (paragraph 17.29)

(a) An Advisory Council of Education should be established with the following powers and duties:

(i) To advise the Minister about desirable developments in education.

(ii) To advise the Minister upon any matters relating to education which may be referred to it by him, or upon which it may deem it expedient to advise him.

(iii) To report to the Minister each year on the operations of the Council during the preceding year, and generally on questions relating to the development and due co-ordination of education in the State; this report to be annexed to the annual report of the Minister and tabled in Parliament.

(iv) To conduct inquiries itself or through expert committees, to commission studies and to publish reports.

(b) The Advisory Council should consist of:

A Chairman appointed by the Government.

The Director-General of Education.

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The Director of Further Education.

The Chairman of the Tertiary Education Committee.

The Chairman of the Pre-School Committee.

Four persons directly concerned in pre-school, primary or secondary education, but not employed in government schools, appointed by the Government.

Four members appointed by the South Australian Institute of Teachers.

Eight lay members, two of whom might be nominated by parents' organisations, appointed by the Government.

The Secretary-General, who shall be the chief executive officer of the Advisory Council.

Regulations Made Under the Education Act (paragraph 17.45)

All the Regulations made under the Education Act should be reviewed in order to eliminate those which are not essential to the smooth running of the schools and which may limit the exercise of initiative at school level. The revised Regulations should state explicitly the range of responsibility and initiative required of the individual teacher.

Allocation of Annual Budgets to Schools (paragraph 17.48)

(a) Each school above a certain size should be allocated an annual budget assessed on the basis of its pupil numbers, the age of the buildings and any other factors considered relevant, including the degree of experimentation with new teaching methods and the welfare needs of the area.

(b) Special arrangements should be made for budgeting and expenditure on an area basis in the case of schools with an enrolment below a specified level.

(c) Within the budget the headmaster, in consultation with the staff and school council, should be free to allocate moneys between generally approved purposes, and to arrange all such expenditure directly.

School Committees and School Councils (paragraph 17.58)

(a) Primary school committees should be called councils and their composition changed to allow of the introduction of members other than those elected by parents.

(b) The membership of school councils should include:

The headmaster *ex officio* and members of staff elected by the staff, the number varying with the size of the school.

Parents of present scholars, elected by the parents. Where the size of the school warrants it, at least one member should be elected from among the parents of each year of students.

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Two student representatives on each secondary school council, one from final-year students and one from students of the penultimate year, such representatives to be elected by their fellow students.

Members of the community outside the school, their number being smaller than the number of members who are parents.

(c) The powers of primary and secondary school councils should be extended to enable them to discuss matters of general educational policy within the school, and headmasters should make available to councils such information as will help in their deliberations.

Education Department and the Public Service Board (paragraph 17.69)

The Director-General, the Deputy Directors-General, the Director of Administration and Finance and the officers under him, and those holding clerical positions within the administration should be appointed under the provisions of the Public Service Act; all others, whether in the administration or in the schools, should be appointed under the Minister of Education.

Organisation of the Building and Maintenance of Schools (paragraph 17.78)

(a) Funds for school buildings and the maintenance and modification of buildings should be allocated direct to the Minister of Education.

(b) A Division of Buildings and Plant should be established within the Education Department to take responsibility for the construction and maintenance of buildings and the purchase and maintenance of plant, and for planning to meet future requirements for land, buildings and plant.

(c) An architects branch should be established within the Division of Buildings and Plant, the function of which would be to advise the Department on architectural matters generally and to act as the Department's agent in dealings with the Public Buildings Department or with private architects.

Administration of the Education Department (paragraph 17.93)

(a) A second appointment at the level of Deputy Director-General should be made; each Deputy Director-General should have specified operational responsibility, one for activities concerned with the schools co-ordinated through him and through a schools committee of senior officers, the other for those concerned with the supply of resources.

(b) A Director of Research should be appointed who would be responsible to the Director-General. Research under him should be carried out in two sections, one in the area of educational research, the other in research relating to the planning of resources.

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(c) A separate section, responsible for recruiting, welfare and personnel policies except those relating to the deployment and promotion of staff, should be established under the Deputy Director-General (Resources).

Mobility and Development of Staff (paragraph 17.104)

(a) Exchanges between the positions of inspector and headmaster should be made possible, and any necessary adjustments in salary scales should be made to allow of this.

(b) Experience outside South Australian government schools should be recognised on a generous basis in recruiting and re-employing staff.

(c) The South Australian Government should co-operate with other State Governments to establish arrangements which would facilitate the interstate movement of teachers and administrators.

(d) The Education Department should annually award 20 scholarships open to its teachers and administrators for study overseas. The scholarships should be tenable for from one to three years.

(e) People highly qualified in particular fields should be employed by the Education Department as short-term consultants.

(f) The position of headmaster in larger schools, and all positions above this level, should be publicly advertised and open to people who are not employees of the Education Department.

Information on Educational System (paragraph 17.107)

The Education Department should take steps to improve the range, quality and flow of up-to-date information on the educational system, and to make this information freely available to the public.

Staffing of Division of Research for Curriculum Purposes (paragraph 18.40)

(a) The Division of Research should be so staffed that those staff members of the Educational Research Branch who are on the Advisory Boards and the subject committees have at least inspectorial status and are able to make contributions as equals rather than act in a service role.

(b) The respective responsibilities for initiating and developing change in curricula and teaching methods should be specified, with particular regard to the role of the Educational Research Branch.

(c) When officers are seconded to the Division of Research the secondment should be normally on a full-time basis and the seconded officer should be replaced in his "home" institution.

Membership of Advisory Curriculum Boards (paragraph 18.47)

(a) There should be at least two representatives on each of the two Advisory Curriculum Boards, appointed by the Minister from panels

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of names submitted by the South Australian Public Schools Committees' Association and by the High and Technical High Schools Councils Association.

(b) The Primary Schools Advisory Curriculum Board, in addition to its existing membership (see paragraph 18.15) and the two lay members referred to above, should include a representative of the Secondary Division of the Department, two more teachers from departmental schools (one from primary and one from secondary schools), two representatives from other tertiary institutions, one representative of pre-school education and two representatives from non-government schools.

(c) The Secondary Schools Advisory Curriculum Board, in addition to its existing membership (see paragraph 18.16) and the two lay members referred to above, should include the chairman or secretary of the Public Examinations Board and a nominee of the Tertiary Education Committee whose establishment we have recommended in paragraph 11.74, the latter to be from tertiary institutions other than the teachers colleges.

Membership of Curriculum Subject Committees (paragraph 18.49)

(a) Subject committees at both primary and secondary levels should include scholars from all kinds of tertiary institutions to ensure that advanced scholarship and changing views on the subjects may be rapidly drawn on.

(b) More representatives of non-government schools should be invited to participate in the work of both primary and secondary subject committees.

(c) Experienced primary teachers should participate in the work of the secondary subject committees.

Periodic Review of the Whole Curriculum (paragraph 18.52)

Every five years, the Advisory Council of Education, whose establishment we recommend in paragraph 17.29, should report to the Minister of Education on the purposes, curriculum and methods of the schools of South Australia, and this report should be published immediately after its completion.

Moderation of Internal Examinations (paragraph 18.72)

The Public Examinations Board and the Education Department should together establish an effective scheme for moderating internal examinations in all schools.

Review of External Examinations (paragraph 18.77)

The Minister of Education should authorise an inquiry into the nature and functions of examinations and certificates at the end of secondary schooling, and into the methods most appropriate for the assessment of student achievement at this level.

APPENDIX A

Projections of the South Australian School Population 1969-1981

THE PROBLEM

A.1 The purpose of the calculations in this Appendix is to project the numbers of pupils in South Australia by grade and sex for each year up to 1981.

A.2 The projections of the numbers of pupils by grade and sex proceeded by stages which are summarised in this paragraph:

(a) Estimates were made of the population of school-going ages by age and sex for each year of the forecast.

(b) Participation rates, which measure the proportion of an age group attending school, were projected in similar detail for the same period.

(c) The product of the estimates of the population and the participation rates gave estimates of the numbers of pupils by age and sex for each year of the projection.

(d) The estimates of the population by ages were converted to grades to make an age-grade table by sex for each year. These data were used for grades up to grade X only, because of problems arising from structural changes in the educational system.

(e) Grades XI and XII were estimated by projecting retention rates, which measure the proportion which continues with schooling from one grade to the next.

A.3 Three basic projections have been prepared. The assumptions underlying their construction are as follows:

Projection	Annual Net Migration Rate per Annum	Estimates of Numbers in Senior Secondary Classes based on:
A	5,000	Medium Retention
B	10,000	Medium Retention
C	10,000	High Retention

A.4 For some years the Education Department has been preparing forecasts of the expected numbers of pupils in its primary and secondary schools for the ensuing decade. These estimates were available to the Committee but it was decided that an independent projection of student numbers should be made. In the first place the official estimates include Northern Territory schools, for which the South Australian Education Department is responsible, whereas the Committee's terms of reference exclude the Northern Territory but include non-government as well as government schools within South Australia. Further, much information is gained from preparing projections and, if projections of student numbers are prepared from the basic data determining school populations, it is possible to gain

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a better appreciation of the likely margins of error in the projections by testing the sensitivity of the estimates to possible variations in the parameters.

A.5 Education is compulsory in South Australia from the age of six years until the end of the term in which the pupil turns 15 years, so that, for these ages, there is little difference between the school population and the population of the State. Thus school populations in this range of ages will be controlled by the demographic conditions of fertility, mortality and net migration which determine the population of the State at these ages. Outside the compulsory ages, however, parents and children have a choice when to begin and to terminate schooling. Marked changes in these decisions are apparent over time, generating large differences in school populations of these ages. Differences in school populations arising from this cause are often larger than those created by changes in the demographic conditions, which determine the State population from which the school population is drawn. The propensity of children to remain at school may be expressed as a retention rate which measures the proportion of pupils of one age or grade who continue their education for another year. Retention rates for those ages when attendance is compulsory will approximate 100 per cent; for older age groups retention rates will be less than this and will vary inversely with age.

A.6 Changes in school populations at the primary and junior secondary levels largely reflect the demographic conditions of the population from which they are drawn, but, at senior levels in the secondary school, recent experience illustrates that changes in retention rates are more likely to dominate the numbers in senior classes. Table A.1 illustrates this point. The number of students aged 16–18 years inclusive in the State increased over the period 1956–1965 by 9,900; if the 1956 retention rates had been maintained over this period the increase would have been only 3,700 students. Thus over this period population growth contributed only 37·5 per cent of the

Table A.1
ACTUAL NUMBERS OF PUPILS AGED 16–18 YEARS AND ESTIMATED NUMBERS
FOR RETENTION RATES CONSTANT AT THE 1956 LEVEL
SOUTH AUSTRALIA 1956–1965

	Actual	Estimated
1956	3,450	3,450
1957	4,215	3,694
1958	4,714	4,227
1959	5,746	4,621
1960	6,855	5,132
1961	7,726	5,637
1962	9,325	5,978
1963	12,027	7,142
1964	12,995	7,160
1965	13,394	7,183

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increase in student numbers of these ages, and rising retention rates the balance.

POPULATION PROJECTION 1969-1981

A.7 The first decisions to be made in preparing the projections of the South Australian school population were to select a terminal date for the projections and to estimate the South Australian population of school-going age for each year of the chosen period. The selection of the census year 1981 as the terminal date of the projection gives a time horizon of 13 years from 1968, the latest year for which data were available at the time that the projections were prepared. Moreover it limits the period for which it is necessary to estimate births to the eight years 1969-1976, because the last cohort to enter the school system as five-year-old children in the terminal year 1981 will be born in 1976. The Commonwealth Bureau of Census and Statistics has prepared official population projections for South Australia for the period 1967-1986. These estimates have been prepared in two parts consisting of a projection of the 1967 base population without migration, and a separate calculation of the effects of migration. The latter is based on a unit of net migration of 1,000 persons per annum, with a sex and age distribution similar to the Australian migration experience for the five years 1963-64 to 1967-68, and the same fertility, masculinity of births and mortality conditions as are assumed for the base population. The projections of the base population assume a continuation of the 1965-1967 South Australian experience of fertility at each age and of the masculinity of live births; the mortality assumptions are projected age-specific mortality rates for Australia prepared by the Commonwealth Actuary.

A.8 The number of live births in South Australia increased each year throughout the 1950's but declined in the 1960's as Table A.2

Table A.2

MEASURES OF FERTILITY

SOUTH AUSTRALIA AND AUSTRALIA 1946-1968

South Australia		Australia	
	Annual No. of Live Births		Gross Reproduction Rates
1946-1950	16,270	1947	1.493
1951-1955	18,045	1954	1.558
1956-1960	19,977	1959	1.678
1960	20,966	1960	1.677
1961	22,399	1961	1.728
1962	21,361	1962	1.666
1963	21,367	1963	1.625
1964	20,866	1964	1.529
1965	20,891	1965	1.447
1966	20,319	1966	1.400
1967	20,386	1967	1.387
1968	21,207	1968	1.406

Source: *Statistical Register of South Australia*, Commonwealth Bureau of Census and Statistics.

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reveals. The year 1961 provided the watershed between rising and falling numbers of births up to 1966. In later years the 1961 cohort provides a peak in the projected numbers of pupils, classified by age, in the schools. This change of trend is also evident in movements in the gross reproduction rate which is a summary measure of the rate at which women are reproducing. In view of the turning point in fertility in 1961 as measured by the gross reproduction rate, the trend of fertility in the 1970's is very largely a matter of speculation. It was assumed by the Commonwealth Bureau of Census and Statistics, in its population projections, that the 1965-1967 average fertility experience will continue into the future but it is not implausible that fertility may rise again. In order to test how sensitive the projections of numbers of students were to variations in fertility, the population estimates were recalculated on the assumption that fertility rates rise by 2 per cent above the 1965-1967 average each year from 1969 and attain a 10 per cent increase over this average in 1973, remaining stable at that level thereafter. For our time horizon, this upward revision of fertility altered the number of pupils in the primary schools only, because the oldest children affected by this revision would be born in 1969 and would be twelve years old in the terminal year 1981. Table A.3 shows that the maximum effect, for the period of the projection, was to raise the primary school enrolments by approximately 7 per cent above the original estimates of student numbers in 1981. The increasing discrepancy between the original and the amended estimates of school populations during this period was the consequence of graduating the annual increase in fertility from 2 to 10 per cent. Our assumed rate of increase in fertility was faster than the post-war rise between 1947 and 1961 but considerably less than the rate of decline since.

Table A.3

CHANGE IN THE PRIMARY SCHOOL POPULATION RESULTING FROM HIGHER FERTILITY ASSUMPTIONS (a)

SOUTH AUSTRALIA 1974-1981

	Net Migration Rates	
	10,000 p.a. per cent	5,000 p.a. per cent
1974	0.24	0.25
1975	0.73	0.76
1976	1.49	1.54
1977	2.49	2.58
1978	3.73	3.87
1979	4.92	5.05
1980	6.03	6.25
1981	7.11	7.38

(a) It was assumed that the age-specific fertility rates increased above the 1965-1967 average by 2, 4, 6, 8 and 10 per cent in each of the years 1969-1973 respectively, and stabilised at the 1973 level thereafter.

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A.9 Population grows from natural increase and net migration which, in this context, is the net gain of people from overseas and other States. Net migration contributed more than 40 per cent of the increase in the State's population in the 1960's, and in the 1950's its contribution was even greater, exceeding on average the level of natural increase. The rate of net migration has fluctuated widely in the 1960's, ranging between 18,700 in 1965 and 2,600 in 1967, with an overall yearly average of 9,700, which is significantly less than the average of 13,000 for the later 1950's. Forecasting the level of the net migration intake is a hazardous exercise since it depends on a complex of influences at home and abroad. However, there seems to be little reason to expect this State's high net migration rate in the 1950's and the early 1960's to be repeated in the next decade as the relative attractions of other States have improved in the meantime. An average rate of 10,000 net migrants per annum is more likely to be the upper bound to the average rate of net migration for the projected period, with 5,000 per annum as the lower limit. Two estimates of the State's population, based on South Australian population projections of the Commonwealth Bureau of Census and Statistics, have been prepared. They assume net migration rates of 5,000 and 10,000 per annum respectively. The detailed population projections are set out in Tables A.17–A.22 at the end of this Appendix, and a summary of the results is set out in Table A.4.

Table A.4
PROJECTED POPULATION OF SCHOOL-GOING AGE, 5–18 YEARS

SOUTH AUSTRALIA 1969-1981							
	Migration of 5,000 per Annum			Migration of 10,000 per Annum			Difference in Totals per cent
	5-12	13-18	Total	5-12	13-18	Total	
	'000	'000	'000	'000	'000	'000	
1969	183.9	129.7	313.5	185.8	131.0	316.8	1.1
1975	179.5	141.8	321.3	187.5	146.5	334.0	4.0
1981	209.5	136.0	345.5	224.2	145.2	369.4	6.9

STUDENT POPULATION BY AGE 1969-1981

A.10 The projections of the future State population by age and sex for each year until 1981 are the basis for the calculation of the number of pupils which the State population will generate. Each school-going age has been treated separately. Participation rates, which measure the proportion of the population of a particular age at school, were projected for boys and girls separately, for each school-going age outside the compulsory school ages. The participation rate of a particular age and year was applied to the projected population of the same age and year to obtain a projection of the number of pupils of that age for the year. Participation rates for the non-compulsory ages are invariably higher for boys than for girls, except for the five-year-olds, where they are marginally higher for girls.

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Participation rates for the compulsory ages 6–14 years approximate 100 per cent but, for the other school-going ages, they have been estimated for each year of the period of the projection by extrapolating trends derived from the observed data of the recent past at August school censuses.

A.11 Two methods of extrapolating these data have been used to obtain projected participation rates for the future. In the case of the five-year-olds linear regression equations were calculated for both sexes, using the observed participation rates for the 11 years 1955, 1958, 1960–1968, in order to obtain an estimate of the trend in the data and to extrapolate the participation rates for future years. The following equations and their coefficients of determination (r^2)¹ were derived for boys and girls separately:

$$P_{5m} = 78.7 + 0.62t \text{ (origin 1961)} \quad r^2 = 0.92$$

$$P_{5f} = 78.8 + 0.66t \text{ (origin 1961)} \quad r^2 = 0.90$$

where P_{5m} and P_{5f} are the participation rates for five-year-old males and females respectively for year t , expressed as percentages. A selection of the observed and calculated values of participation rates for five-year-olds, derived from these relationships, is given in Table A.5.

Table A.5
PARTICIPATION RATES OF FIVE-YEAR-OLD CHILDREN (a)
SOUTH AUSTRALIA 1955–1981

	Males		Females	
	Actual per cent	Calculated per cent	Actual per cent	Calculated per cent
1955	76.71	74.98	75.97	74.85
1961	76.19	78.70	78.49	78.81
1963	79.65	79.94	78.78	80.13
1965	81.81	81.18	82.27	82.11
1967	81.85	82.40	83.17	82.77
1968	83.38	83.04	84.16	83.43
1975	—	87.38	—	88.05
1981	—	91.10	—	92.01

(a) The participation rate, P_n^* , is the ratio of five-year-old pupils attending school at the August census in year n to the estimated population of five-year-old children in June of the same year, expressed as a percentage.

A.12 A different estimation procedure was adopted to project participation rates for the older groups, aged 15–18 years. These were derived from projected age retention rates in order to obtain internal consistency between successive ages in successive years. Age retention rates measure the proportion of students of one age who continue their education for another year. Thus the retention rate for 16-year-old boys measures the proportion of boys aged 16 surviving at school from the previous year's 15-year-old students. Retention and partici-

¹ The coefficient of determination (r^2) measures the closeness of the fit of the trend to the observed points. A coefficient of unity indicates a perfect fit.

participation rates are interrelated. The independent projection of participation rates for each of the ages 15–18 years by the method used for the five-year-olds could create inconsistencies in the retention rates between these ages for successive years. For example, independent projections of the participation rates for successive ages could give results which make the derived retention rates between these ages decline over time. This would conflict with the observed data which show a rising trend in retention rates. The relationship between participation and retention rates may be derived as follows:

Let s_i^n = the actual number of students in year n of age i

p_i^n = the population in year n of age i

P_i^n = the participation rate in year n of age i

R_i^n = the retention rate in year n of age i

$\hat{s}_i^n$ = the number of students in the group s_{i-1}^{n-1} who will continue their education in year n at age i .

By definition

$$R_i^n = \frac{\hat{s}_i^n}{s_{i-1}^{n-1}}, P_i^n = \frac{s_i^n}{p_i^n}, \text{ and } P_{i-1}^{n-1} = \frac{s_{i-1}^{n-1}}{p_{i-1}^{n-1}}$$

Dividing P_i^n by P_{i-1}^{n-1}

$$\frac{P_i^n}{P_{i-1}^{n-1}} = \frac{s_i^n \times \frac{p_{i-1}^{n-1}}{p_i^n}}{s_{i-1}^{n-1}}$$

$$\text{But } s_i^n \div \frac{p_i^n}{p_{i-1}^{n-1}} \simeq \hat{s}_i^n$$

This is so because the difference between the actual number of students aged i at school in year n and the number from the group aged $(i-1)$ in the preceding year who will continue their education in year n is due to migration and mortality of i -year-olds. The effect of migration and mortality on the number of i -year-olds in year n is measured by the comparison of the actual population of i -year-olds in year n with the actual population of $(i-1)$ -year-olds in year $(n-1)$. Mortality will make the former smaller than the latter, net immigration will make it greater. Consequently the division of s_i^n by the factor p_i^n/p_{i-1}^{n-1} produces an estimate of $\hat{s}_i^n$. The closer the propensity to attend school of those elements of the population affected by migration and mortality becomes to that of the rest of the population, the greater is the accuracy of the estimate.

Accordingly

$$\frac{P_i^n}{P_{i-1}^{n-1}} \simeq R_i^n \quad (1)$$

$$\therefore P_i^n \simeq R_i^n \times P_{i-1}^{n-1} \quad (2)$$

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A.13 It can be seen from formula (2) in the preceding paragraph that the participation rate of a particular age and year can be calculated as the product of the retention rate of the age for that year and the participation rate of the cohort one year earlier. In order to use this formula it is necessary to project retention rates. The projections were based on movements in observed rates since 1955, which were calculated from the observed participation rates for each sex and age in the ages 15–18 years in accordance with formula (1) above. These data are set out in Table A.6.²

Table A.6

PARTICIPATION RATES AND DERIVED RETENTION RATES, BY SEX, FOR AGES 15–18 YEARS

SOUTH AUSTRALIA 1954-1968

	Participation Rates					Retention Rates			
	Ages					Ages			
	14	15	16	17	18	15	16	17	18
<i>Males</i> per cent	per cent	per cent	per cent	per cent	per cent	per cent	per cent	per cent	per cent
1954	73.35	45.57	24.36	7.89	4.02	—	—	—	—
1955	72.36	49.12	25.11	10.68	5.07	66.97	55.10	43.84	64.26
1957	79.21	56.16	28.89	10.92	3.93	—	—	—	—
1958	82.96	59.67	31.48	11.88	3.05	75.33	56.05	41.12	27.93
1960	89.48	66.93	38.86	16.51	5.93	—	—	—	—
1961	87.89	69.61	40.53	15.77	5.81	77.79	60.56	40.58	35.19
1962	100.52	73.15	48.60	18.20	5.29	83.23	69.82	44.91	33.54
1963	93.62	77.74	48.85	22.82	5.37	77.34	66.78	46.95	29.51
1964	98.14	78.10	51.56	21.43	7.10	83.42	66.32	43.87	31.11
1965	98.86	81.13	51.57	23.48	7.34	82.67	66.03	45.54	34.25
1966	98.48	82.03	54.26	21.39	6.34	82.98	66.88	41.48	27.00
1967	99.25	83.93	58.31	26.80	8.23	85.23	71.08	49.39	38.48
1968	99.28	86.68	61.72	29.57	9.70	87.34	73.54	50.71	36.19
<i>Females</i>									
1954	69.68	38.77	18.48	6.42	1.66	—	—	—	—
1955	69.69	39.82	17.68	6.71	1.64	57.15	45.60	36.31	25.55
1957	74.14	44.27	20.60	7.28	1.52	—	—	—	—
1958	76.33	48.99	20.72	6.69	1.62	66.08	46.80	32.48	22.26
1960	82.86	53.74	24.44	7.17	1.40	—	—	—	—
1961	82.16	58.40	26.73	7.24	1.21	70.48	49.74	29.62	16.88
1962	84.67	62.40	32.87	8.52	1.13	75.95	56.28	31.87	15.61
1963	90.82	66.36	34.61	10.53	1.05	78.37	55.46	32.04	12.32
1964	97.54	71.31	38.22	11.37	2.16	78.52	57.59	32.85	20.51
1965	98.70	73.91	38.02	12.22	1.79	75.77	53.32	31.97	15.74
1966	99.87	75.13	41.11	11.14	1.66	76.12	55.62	29.30	13.58
1967	98.94	79.28	44.66	14.59	2.10	79.38	59.44	35.49	18.85
1968	97.97	81.02	48.55	16.79	3.12	81.89	61.24	37.60	21.38

* Retention rates are frequently calculated directly as the proportion of students of a particular age in a particular year relative to those one year younger in the preceding year, i.e.,

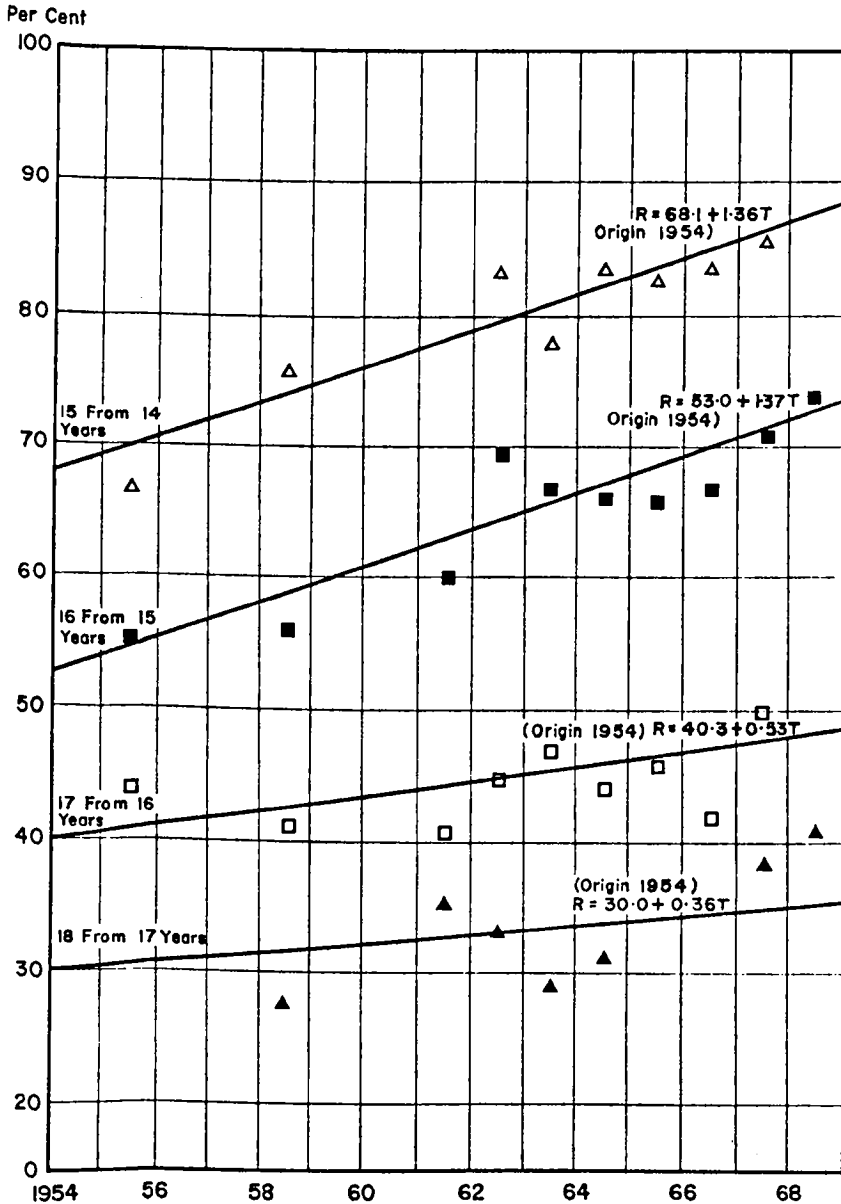
$$\frac{s_t^n}{s_{t-1}^{n-1}}$$

However, net immigration will create an upward bias in this calculation because migrant students will be added to the term s_t^n in the numerator of this expression during the year. (See paragraph A.12.)

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A.14 Retention rates, especially the retention rates for the younger ages, show a marked upward trend. These trends were estimated for each age-sex group from the regression equations which are listed in Table A.7 and are illustrated in Charts A.1 and A.2. These equa-

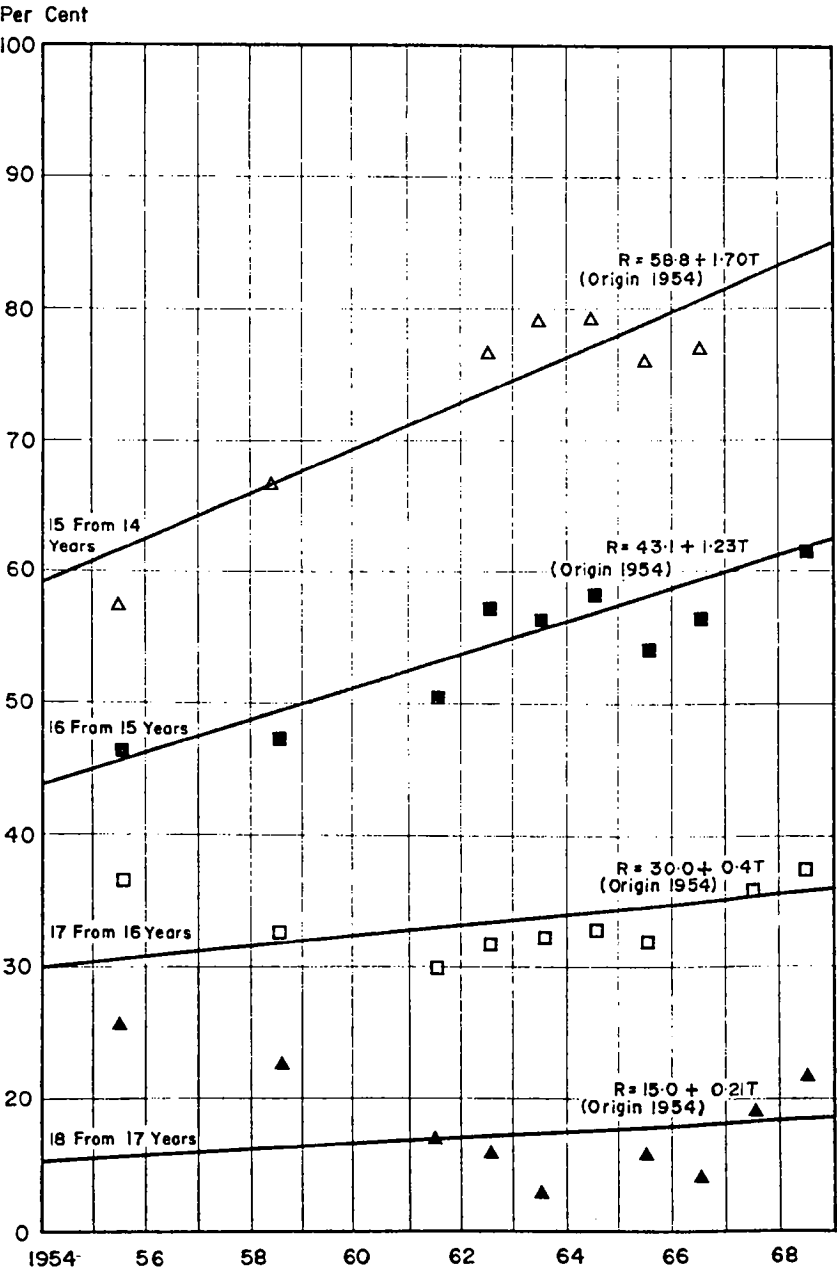
Chart A.1
RETENTION RATES OF MALES AT SCHOOL
SOUTH AUSTRALIA 1954-1968



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tions, calculated by the method of least squares, fit the data for the younger ages very well, but the trend is less apparent for the 17- and 18-year-olds, where the coefficients of determination are low, and, in

Chart A.2
RETENTION RATES OF FEMALES AT SCHOOL
SOUTH AUSTRALIA 1954-1968



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the case of females aged 18 years, the calculated regressions produce a negative trend for the retention rate. Except for the 17-year-old males, the least-squares trends of both sexes were rejected for the ages 17 and 18 years and they were replaced by hand-fitted relationships, which conformed almost as well to the data, but seemed more plausible. These hand-fitted relationships were derived from the scatter of the ten observations for the years 1955, 1958 and 1961-1968, and adjusted to be consistent with each other, and especially with the calculated trend for 17-year-old males, which provided a bridge between the calculated and the hand-fitted relationships. In addition, the slopes of the trends for the 17- and 18-year-old groups were chosen so that the female retention rates would rise slowly relative to the male retention rates, in order to continue the observed trend in the ratio of males to females at school evident in recent years.

Table A.7

LINEAR REGRESSION EQUATIONS OF RETENTION RATES

SOUTH AUSTRALIA 1955-1968

Age	Equation	r ²
<i>Males</i>	(Origin 1954)	
15	$R = 68.1 + 1.36t$	0.87
16	$R = 53.0 + 1.37t$	0.82
17	$R = 40.3 + 0.53t$	0.59
18	$R = 30.0 + 0.36t$	(hand-fit)
<i>Females</i>		
15	$R = 58.8 + 1.70t$	0.86
16	$R = 43.1 + 1.23t$	0.92
17	$R = 30.0 + 0.40t$	(hand-fit)
18	$R = 15.0 + 0.21t$	(hand-fit)

A.15 The values of the above regression equations were extrapolated to give projections of the retention rates by age and sex for each year of the projection. The product of these values and the appropriate participation rates of the preceding year for students one year younger gives an estimate of the participation rate in accordance with formula (2) of paragraph A.12.³ By this method, separate participation rates were calculated by sex for each year of the projection for the non-compulsory ages, 15-18 years. The appropriate projected populations were multiplied by these participation rates to give projections of the numbers of students in these ages, classified by sex, for each year of the projection.

STUDENT POPULATION BY GRADE 1969-1981

A.16 After projecting the numbers of students classified by age, sex and migration for each year until 1981, the next stage in the

³ The trends of participation rates derived from linear trends of retention rates are not themselves linear but are functions of a higher order. Where participation rates reach 100 per cent, kinks are produced in the participation rates for older age groups.

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forecasting was to convert these figures to numbers of pupils in grades. This was done by assuming that for each age the percentage distribution by grades remained constant in the 1968 pattern for the whole period. A computer programme for this conversion was written and the print-out gave a separate age-grade matrix for each year, by sex, and for the two migration rates assumed.

A.17 It is apparent from an examination of the data relating to South Australian pupils that the age-grade distribution has not been static in the immediate past. The educational trend in recent years has been to adopt more liberal promotion policies in the schools and to introduce more courses and tracks better suited to the pupils' needs and abilities. Consequently the proportion of pupils of a particular age who are in the higher grades is rising, which necessarily implies that there will be relatively fewer "retarded" children. Table A.8 illustrates this trend in the age-grade structure in recent years. In addition, the relative numbers of each age will change for demographic reasons, and as a consequence the age-grade structure will also change. Consequently, while projected numbers of students in groups of grades can be used with reasonable confidence, caution should be exercised in interpreting numbers for individual grades.

Table A.8
DISTRIBUTION OF PUPILS BY AGE AND GRADE

Grade	Year	SOUTH AUSTRALIA 1963, 1965, 1968					
		13	14	15	16	17	18
		per cent	per cent	per cent	per cent	per cent	per cent
V	1963	1.2	—	—	—	—	—
	1965	0.8	—	—	—	—	—
	1968	0.2	—	—	—	—	—
VI	1963	7.0	1.7	—	—	—	—
	1965	4.7	0.8	—	—	—	—
	1968	2.4	0.4	—	—	—	—
VII	1963	19.3	5.9	1.0	—	—	—
	1965	16.8	5.2	0.7	—	—	—
	1968	14.3	3.1	0.3	—	—	—
VIII	1963	53.0	21.1	5.6	0.8	—	—
	1965	56.1	23.3	6.4	0.7	—	—
	1968	55.8	18.9	4.3	0.5	—	—
IX	1963	19.5	52.5	23.4	6.6	1.8	—
	1965	21.4	51.6	23.3	6.6	1.7	—
	1968	27.0	54.7	20.5	4.7	0.7	—
X	1963	—	18.8	56.7	35.4	15.4	3.6
	1965	—	19.1	55.7	34.9	15.2	5.9
	1968	—	23.0	57.3	29.7	11.1	4.1
XI	1963	—	—	13.2	47.4	41.4	44.6
	1965	—	—	14.0	48.2	43.9	40.7
	1968	—	—	17.7	53.9	39.7	25.2
XII	1963	—	—	—	9.8	41.4	51.8
	1965	—	—	—	9.6	39.1	53.4
	1968	—	—	—	11.2	48.4	70.7

A.18 In recent years there have been three major structural changes in the educational system in South Australia, which the Committee felt had not been adequately reflected in the trends in retention rates derived in paragraph A.14. The first of these was the alteration in university matriculation requirements, which since 1966 have stipulated five years of secondary education instead of the previous four. This change had a temporary negative effect on the retention rates of the older age groups in 1966 by hastening movement into the universities from the fourth year in that year, although it subsequently raised them to a higher level. The second major change was the abolition of the Intermediate examination in 1969, which is likely to increase greatly retention into the fourth year of secondary schooling as those students in the third year will no longer have to hurdle the external examination to enter fourth-year classes but will require a fourth year to obtain an examination certificate. The third change is associated with the second one, and involves the development of alternative tracks of secondary education leading to certificates based on internal assessment instead of external examination. This will undoubtedly encourage the less academically inclined to persist at school.

A.19 The Committee believed that in the light of these considerations the method for estimating the distribution of students by grades might have under-estimated numbers in the two senior grades — grades XI and XII. An examination of grade retention rates in the projections for grade XI from grade X and grade XII from grade XI confirmed this. Accordingly the projections prepared by the method set out in paragraph A.16 were accepted for grades I–X only, and a more detailed approach was used for projecting numbers in grades XI and XII.

A.20 Actual retention rates for grade XI from grade X and for grade XII from grade XI were examined for relatively homogeneous groups of the school population, viz., Catholic, non-Catholic non-government, and government schools, for the few years for which statistics are available. From these data, supplemented by more information respecting government schools, two sets of projected retention rates were derived. Data relating to these three sectors of the education system are summarised in Table A.9.

A.21 A pattern of high retention rates for senior students was derived by projecting to 1981 the average annual increase in rates for 1964-1968. As these dates straddle the structural changes in the educational system they produce large rates of change of retention rates and consequently may exaggerate the future trend. The various structural changes which occurred in the educational system in this period have had differing impact on the numbers of students in senior secondary classes. The establishment of new tracks, for example, has little immediate effect on retention rates but will become more important in later years. Over the period 1964-1968, the new matriculation

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requirements had the strongest influence on retention rates by making a fifth year of secondary education compulsory for intending matriculants. But the consequences of the new matriculation requirements on the retention rates were largely confined to 1967, the year the new regulations became operative. Thus projections of changes in retention rates based on the observed increases in 1964-1968 are likely to over-estimate the trend in retention rates for future years and provide a high estimate. On the other hand the full impact of the abolition of the Intermediate examination is not included in the

Table A.9

RETENTION RATES OF GRADES XI AND XII BY SECTOR AND BY SEX

SOUTH AUSTRALIA 1964-1969

	Grade XI from Grade X			Grade XII from Grade XI		
	Non-Catholic		Government	Non-Catholic		Government
	Catholic	Non-Government		Catholic	Non-Government	
	per cent	per cent	per cent	per cent	per cent	per cent
<i>Males</i>						
1964	N.A.	N.A.	53.8	N.A.	N.A.	36.0
1965	59.7	105.0(a)	53.3	47.0	62.9	34.5
1966	67.6	88.8	53.8	41.5	59.7	34.8
1967	70.4	98.7	58.2	66.2	78.3	40.6
1968	68.5	104.4(a)	63.5	59.5	81.8	43.9
1969	70.9	109.2(a)	68.3	68.2	94.1	44.7
<i>Females</i>						
1964	N.A.	N.A.	45.0	N.A.	N.A.	23.3
1965	42.5	85.4	41.8	30.4	30.7	26.2
1966	48.5	72.7	44.4	24.1	42.3	35.1
1967	53.6	84.5	50.5	35.1	52.7	30.4
1968	56.5	83.9	54.9	35.2	61.9	33.3
1969	67.1	99.2	58.9	41.2	73.0	35.3

(a) These rates are explained by movements into non-Catholic non-government schools from other schools.

data. Moreover, with the increasing pressure for students to proceed to tertiary institutions, there has developed a growing tendency for students to repeat the final year of secondary school in order to improve their prospects for higher education. An alternative estimate was prepared by using, for the period of the projection, retention rates which grew less rapidly. Basically, this medium pattern of retention rates was devised to grow half as fast as the high rates, but this relationship was qualified by various constraints. For example, the observed retention rates for the non-Catholic non-government schools exceeded the rates for the Catholic and the government schools but this ordering could only be maintained in the projections by varying the basic trends. Similarly the change in retention rates tends to taper as the saturation level of 100 per cent is approached. Moreover, the retention rates for the non-Catholic non-government sector were already so high at the beginning of the projection that there was little scope for their growth. These additional specifications modified the original

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intention that the changes in the medium retention rates should be half those of the high estimates, and narrowed the differences between the projected high and medium retention rates with the passage of time. Table A.10 contains high and medium estimates of retention rates for selected years.

Table A.10
PROJECTED RETENTION RATES FOR GRADES XI AND XII
MEDIUM AND HIGH ASSUMPTIONS
SOUTH AUSTRALIA 1970-1981

	Medium Retention			High Retention		
	Catholic	Non-Catholic	Government	Catholic	Non-Catholic	Government
	per cent	per cent	per cent	per cent	per cent	per cent
<i>Grade XI from Grade X</i>						
<i>Males</i>						
1970	75	100	68	75	104	73
1975	87	100	78	87	104	89
1981	94	100	87	94	104	95
<i>Females</i>						
1970	62	85	60	62	85	65
1975	74	87	73	77	90	79
1981	86	89	85	91	92	91
<i>Grade XII from Grade XI</i>						
<i>Males</i>						
1970	68	92	47	68	92	50
1975	82	95	54	86	95	65
1981	87	96	63	96	96	83
<i>Females</i>						
1970	36	63	36	39	63	38
1975	42	68	44	47	68	47
1981	51	74	51	57	74	57

A.22 The significance of the assumptions about retention rates can best be understood by examining their implications for the proportions of students entering secondary schools who persist to grades XI and XII. Table A.11 gives estimates of these proportions for males and females, with medium and high retention rates, entering secondary schools in the years 1964, 1971 and 1977. These estimates have been computed by comparing, for example, the number of children in grade VIII in 1964 with the number in grades XI and XII in 1967 and 1968 respectively; and they will overstate persistence to the extent that migrants enter the secondary schools at levels higher than grade VIII and that pupils are held back to repeat the year in grades XI and XII more than they are in grade VIII. However, this is not a serious limitation of the figures when used for comparative purposes.

A.23 It can be seen from the Table, taking males and females together, that, whereas on current experience only about one-half of the entry to secondary schools persist to grade XI and one-fifth to

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grade XII, by the end of the period of the projection these proportions will have increased to about nine-tenths and one-half respectively on the assumption of medium retention rates. On the assumption of higher retention rates, persistence to grade XII will be considerably higher.

Table A.11

ACTUAL AND PROJECTED PROPORTIONS OF SECONDARY SCHOOL ENTRY PERSISTING TO GRADES XI AND XII

SOUTH AUSTRALIA 1964-1977

Year of Entry	Medium Retention		High Retention	
	To Grade XI per cent	To Grade XII per cent	To Grade XI per cent	To Grade XII per cent
<i>Males</i>				
1964(a)	53	26	53	26
1971	75	44	84	58
1977	90	60	98	83
<i>Females</i>				
1964(a)	44	16	44	16
1971	67	31	73	36
1977	85	45	91	53

(a) Actual.

A.24 These two sets of retention rates were applied to the numbers of students in the three sectors of the State's education system, namely Catholic, non-Catholic non-government and government. Beginning with the grade X estimates for each sector derived as in paragraph A.16, the cohorts of students in grades XI and XII were progressively constructed.

A.25 Table A.12 summarises the final results of the distribution of pupils by primary and secondary sectors according to the various assumptions used. The distribution of pupils by ages, derived by the method set out in paragraph A.15, was adjusted by adding in the numbers of extra students in grades XI and XII derived by the method set out in paragraph A.24. This is summarised in Table A.13. Detailed Tables are to be found at the end of this Appendix. Table A.23 sets out actual pupil numbers by grades for 1963-1968. Tables A.24-A.26 set out projected numbers by grades for 1969-1981 for a migration rate of 5,000 per annum and medium retention rates in the higher grades (Projection A). Tables A.27-A.29 relate to a migration rate of 10,000 per annum and medium retention rates (Projection B), and Tables A.30-A.32 relate to a migration rate of 10,000 per annum and high retention rates (Projection C). The Committee believes that the most plausible of the projections is the one based on an average net migration rate of 10,000 per annum and the medium pattern of retention rates in the senior classes (Projection B); its accuracy as a forecast will, of course, depend on the actual course of net migration over the next decade. Tables A.33-A.35 give details of the projections for grades XI and XII.

Table A.12
ACTUAL AND PROJECTED NUMBER OF PUPILS
SOUTH AUSTRALIA 1963-1981

Annual Net Migration: Retention:	Primary			Junior Secondary			Senior Secondary			Total (a)		
	5,000	10,000		5,000	10,000		5,000	10,000	10,000	5,000	10,000	10,000
	'000			'000			'000			'000		
<i>Actual</i>												
1963		162.7			50.9						223.2	
1964		167.2			54.7			9.5			232.3	
1965		171.5			57.9			10.4			240.5	
1966		175.9			60.4			11.1			247.9	
1967		177.8			62.6			11.6			254.3	
1968		178.4			63.8			13.9			258.6	
<i>Projected</i>												
1969	176.7	178.6		65.3	65.9		17.7	17.7	18.3	262.4	264.8	265.4
1970	176.8	179.6		67.2	68.0		19.1	19.2	20.6	265.8	269.5	270.8
1971	176.0	179.7		68.8	70.1		20.6	20.8	22.9	268.2	273.4	275.6
1972	174.1	178.8		70.8	72.3		22.2	22.7	25.5	269.9	276.6	279.4
1973	172.9	178.6		72.7	74.5		23.9	24.4	27.8	272.3	280.4	283.8
1974	172.5	179.2		74.4	76.6		25.7	26.2	30.2	274.3	284.9	288.8
1975	173.2	180.9		75.3	77.9		27.6	28.3	32.8	278.9	290.1	294.6
1976	175.2	184.0		75.5	78.4		29.6	30.1	35.1	282.8	295.5	300.6
1977	178.7	188.5		74.8	78.3		31.5	32.1	37.3	287.4	301.8	307.0
1978	183.5	194.3		73.6	77.5		33.1	33.7	39.1	292.5	308.6	314.0
1979	189.6	201.6		72.2	76.5		34.0	34.9	40.4	298.1	316.0	321.5
1980	196.5	209.6		71.2	75.8		34.5	35.7	41.4	304.6	324.3	330.0
1981	203.2	217.4		71.5	76.6		34.9	36.3	42.2	312.1	333.6	339.5

(a) Includes ungraded pupils.

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Table A.13
ACTUAL AND PROJECTED NUMBER OF PUPILS BY AGE AND SEX
SOUTH AUSTRALIA 1963-1981

	Net Migration 5,000 p.a.; Medium Retention Rates				Net Migration 10,000 p.a.; Medium Retention Rates			
	Age 5-12		13-18		Age 5-12		13-18	
	Males '000	Females '000	Total '000	Total '000	Males '000	Females '000	Total '000	Total '000
<i>Actual</i>								
1963	81.4	78.1	159.5	223.2	—	—	—	—
1964	83.9	80.4	164.3	232.3	—	—	—	—
1965	86.6	83.3	170.0	240.5	—	—	—	—
1966	89.3	85.6	174.9	247.9	—	—	—	—
1967	90.6	87.2	177.8	254.3	—	—	—	—
1968	91.3	88.2	179.5	258.6	—	—	—	—
<i>Projected</i>								
1969	92.1	88.2	180.3	262.4	93.1	89.0	182.1	264.8
1970	92.4	88.0	180.4	265.8	93.8	89.2	183.0	269.5
1971	92.0	87.7	179.7	268.2	94.0	89.5	183.5	273.4
1972	91.2	86.5	177.7	270.1	93.7	88.8	182.5	276.5
1973	90.8	85.8	176.6	272.3	93.8	88.6	182.4	280.4
1974	90.4	85.5	175.9	275.4	93.9	88.8	182.7	284.9
1975	90.9	85.7	176.6	279.1	95.0	89.5	184.5	290.1
1976	91.9	86.6	178.5	283.2	96.5	91.0	187.5	301.8
1977	93.5	88.3	181.8	287.9	98.7	93.2	191.9	305.5
1978	95.8	90.9	186.7	293.1	101.6	96.2	197.8	308.6
1979	99.0	93.7	192.7	298.6	105.3	99.7	205.0	316.0
1980	102.8	97.5	200.3	305.2	109.7	104.8	214.5	324.3
1981	106.3	100.8	207.1	312.6	113.8	107.8	221.6	333.6

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A.26 The projected numbers of pupils by grades in Projection B have been converted to pupil numbers by ages for selected years,

Table A.14

ACTUAL AND PROJECTED PARTICIPATION RATES BY SEX (a)

SOUTH AUSTRALIA 1958-1981

	Age 15		Age 16		Age 17		Age 18	
	Males	Females	Males	Females	Males	Females	Males	Females
	per cent		per cent		per cent		per cent	
<i>Actual</i>								
1958	59.7	49.0	31.5	20.7	11.9	6.7	3.1	1.6
1963	77.7	66.4	48.9	34.6	22.8	10.5	5.4	1.1
1968	86.4	80.8	61.8	48.3	30.2	16.7	11.0	3.1
<i>Projected</i>								
1973	95.9	96.6	78.2	66.0	42.0	25.9	17.5	5.0
1978	100.0	100.0	95.6	85.5	54.5	35.6	22.4	6.9
1981	100.0	100.0	100.0	94.9	61.5	43.8	25.6	8.9

(a) For Projection B.

Table A.15

ACTUAL AND PROJECTED MASCULINITY RATIOS IN THE SENIOR GRADES (a)

SOUTH AUSTRALIA 1963-1981

	Grade X	Grade XI	Grade XII
	per cent	per cent	per cent
<i>Actual</i>			
1963	112.5	139.7	200.0
1964	109.5	133.4	207.3
1965	105.4	131.9	194.1
1966	108.9	128.5	185.6
1967	107.9	126.1	181.3
1968	109.5	125.5	169.4
<i>Projected</i>			
1969	107.9	127.1	169.5
1970	108.6	123.0	173.7
1971	107.7	122.3	166.8
1972	107.6	120.4	166.4
1973	107.6	118.9	161.0
1974	106.2	117.9	157.1
1975	106.4	115.5	154.1
1976	107.5	117.9	153.8
1977	107.0	118.0	155.2
1978	108.4	116.8	153.2
1979	110.1	115.8	151.0
1980	110.6	115.5	148.0
1981	109.5	114.2	146.7

(a) For Projection B. Masculinity ratios are defined as the number of males per 100 females.

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using the proportions of the 1968 age-grade distribution for this purpose. Estimated participation rates for the older students aged 15–18 years have been derived for these years by relating the projected age distribution of students to the projected population for these ages. Table A.14 shows the past participation rates at five-yearly periods from 1958 to 1968 and the estimated participation rates, implicit in the projections of numbers of students, for three years of the projection.

A.27 The masculinity ratios of pupil numbers in the three highest grades implicit in Projection B are presented in Table A.15. The falling trend in masculinity in the non-compulsory ages of recent years is continued in these projections, although at a slower pace. This is the consequence of the differential retention rates which were used in estimating pupil numbers.

A.28 Table A.16 and Chart A.3 show these results as annual rates of growth of the number of pupils for the whole State. Rates of growth

Table A.16

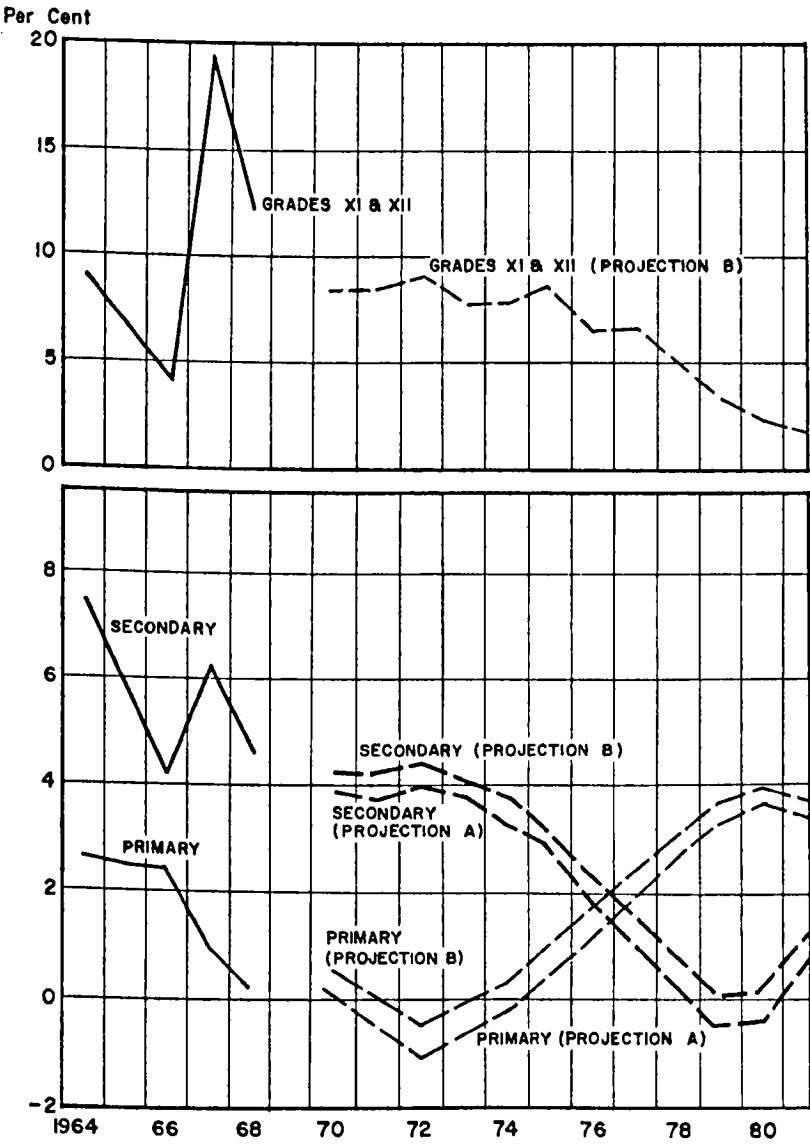
ACTUAL AND PROJECTED ANNUAL RATES OF GROWTH OF NUMBER OF PUPILS
BY GRADES (a)

SOUTH AUSTRALIA 1964-1981

Primary		Secondary		
	per cent	Grades VII–X per cent	Grades XI–XII per cent	Total per cent
<i>Actual</i>				
1964	2.64	7.49	9.18	7.75
1965	2.53	5.79	6.64	5.92
1966	2.45	4.29	4.26	4.28
1967	1.03	3.79	19.57	6.32
1968	0.27	1.92	11.73	4.70
<i>Projected</i>				
1970	0.56	3.19	8.23	4.26
1971	0.10	3.10	8.44	4.28
1972	—0.53	3.11	8.65	4.46
1973	—0.12	3.10	7.83	4.15
1974	0.33	2.74	7.59	3.93
1975	0.99	1.72	7.85	3.29
1976	1.69	0.73	6.43	2.25
1977	2.43	—0.24	6.51	1.63
1978	3.12	—0.98	5.18	0.81
1979	3.72	—1.30	3.44	0.13
1980	3.97	—0.86	2.41	0.16
1981	3.76	1.03	1.65	1.23

(a) For Projection B.

Chart A3
ACTUAL AND PROJECTED ANNUAL RATES OF GROWTH OF NUMBER OF PUPILS
SOUTH AUSTRALIA 1964-1981



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have been declining in the primary sector in recent years, and our projections suggest they will continue to decline into the early 1970's, even becoming negative. Beyond 1972 they will begin to increase again, and by the end of the 1970's they will exceed the more recent rates of growth in the primary sector. This is an "echo" effect from the large number of females born in the early post-war years whose children will enter schools in rising numbers in the late 1970's. If fertility increases in the next decade, rates of growth of the primary sector will increase even faster in the late 1970's. The secondary sector will be affected by the decline in the rate of growth of the population aged 13-18 years in the middle 1970's; indeed, in the late 1970's the expected rate of change of the population in these ages is negative (see Table A.19). As a consequence the rates of growth of numbers of pupils in the secondary sector are estimated to decline for most of the 1970's under the most expansive assumptions, viz., high retention rates in the senior grades combined with a net migration rate of 10,000 per annum, as well as for the least expansive assumptions, viz., low retention rates in senior grades and an average net migration of 5,000 per annum.

Addendum

A.29 The projections set out in this Appendix were prepared late in 1969. Data for school enrolments for 1969 and 1970 have now become available; and they are set out below for comparative purposes. All figures exclude ungraded pupils. It is clear that, for 1969 and 1970, Projection A has been nearest the mark. This is not

	Actual '000	Projection A '000	Projection B '000	Projection C '000
1969				
Primary	176.7	176.7	178.6	178.6
Secondary	83.2	83.0	83.6	84.2
1970				
Primary	176.7	176.8	179.6	179.6
Secondary	86.2	86.2	87.2	88.5

Source: Commonwealth Bureau of Census and Statistics.

surprising, as annual migration over this period has been nearer 5,000 than 10,000. On the other hand, the aggregate of secondary enrolments conceals divergent movements in the junior and senior grades, the numbers in the two senior grades being, in fact, close to Projection C. However, retention to grade XII, while being near the high rate in 1969, appears to be closer to the medium rate in 1970. The choice between Projection A and Projection B depends on migration prospects over the next decade, but the Committee still inclines towards the medium rather than the high assumption for retention rates in the senior grades.

Table A17
PROJECTED MALE POPULATION AGED 5-18 YEARS, ASSUMING A NET IMMIGRATION OF 5,000 PERSONS PER ANNUM
SOUTH AUSTRALIA 1969-1981

	5	6	7	8	9	10	11	12	Total 5-12	13	14	15	16	17	18	Total 13-18	Total 5-18
	'000	'000	'000	'000	'000	'000	'000	'000	'000	'000	'000	'000	'000	'000	'000	'000	'000
1969	11.5	11.7	11.8	12.2	11.9	11.7	11.6	11.4	94.0	11.3	11.2	11.1	11.2	10.9	10.7	66.4	160.4
1970	11.2	11.6	11.8	11.8	12.3	12.0	11.8	11.7	94.1	11.5	11.3	11.2	11.2	11.2	11.0	67.4	161.5
1971	10.8	11.3	11.6	11.9	11.9	12.3	12.0	11.8	95.6	11.7	11.5	11.3	11.2	11.2	11.3	68.3	162.0
1972	10.5	10.9	11.3	11.7	11.9	11.9	12.4	12.1	92.7	11.9	11.8	11.6	11.4	11.3	11.3	69.1	161.9
1973	11.3	10.6	10.9	11.4	11.7	12.0	12.0	12.4	92.3	12.1	11.9	11.8	11.6	11.4	11.3	70.2	162.5
1974	11.7	11.4	10.7	11.0	11.4	11.8	12.0	12.0	92.0	12.5	12.1	11.9	11.8	11.7	11.5	71.5	163.5
1975	12.2	11.8	11.4	10.7	11.0	11.5	11.8	12.1	92.5	12.1	12.5	12.2	12.0	11.9	11.7	72.3	164.8
1976	12.6	12.2	11.8	11.4	10.8	11.1	11.5	11.9	93.4	12.1	12.1	12.5	12.2	12.0	11.9	72.9	166.3
1977	13.1	12.7	12.3	11.9	11.5	10.8	11.1	11.6	95.0	11.9	12.1	12.1	12.6	12.3	12.1	73.1	168.1
1978	13.5	13.2	12.7	12.3	11.9	11.6	10.9	11.2	97.3	11.6	12.0	12.2	12.2	12.6	12.3	72.9	170.2
1979	13.9	13.6	13.2	12.8	12.4	12.0	11.6	10.9	100.4	11.2	11.7	12.0	12.2	12.7	12.7	72.5	172.9
1980	14.3	14.0	13.6	13.3	12.8	12.4	12.0	11.6	104.2	11.0	11.3	11.7	12.3	12.2	12.3	70.8	174.9
1981	14.7	14.4	14.1	13.7	13.3	12.9	12.5	12.1	107.6	11.7	11.0	11.3	11.7	12.1	12.3	70.1	177.7

Source: *Projection of Population, South Australia, 1967-1986*, Commonwealth Bureau of Census and Statistics.

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Table A18
PROJECTED FEMALE POPULATION AGED 5-18 YEARS, ASSUMING A NET IMMIGRATION OF 5,000 PERSONS PER ANNUM
SOUTH AUSTRALIA 1969-1981

	5	6	7	8	9	10	11	12	Total 5-12	13	14	15	16	17	18	Total 13-18	Total 5-18
	'000	'000	'000	'000	'000	'000	'000	'000	'000	'000	'000	'000	'000	'000	'000	'000	'000
1969	10.7	11.1	11.5	11.6	11.6	11.4	11.0	11.0	89.9	10.8	10.5	10.5	10.7	10.3	10.4	63.3	153.1
1970	10.3	10.8	11.1	11.5	11.6	11.6	11.5	11.0	89.5	11.0	10.8	10.5	10.6	10.8	10.4	64.1	153.6
1971	10.3	10.4	10.9	11.2	11.6	11.7	11.7	11.5	89.2	11.1	11.1	10.9	10.6	10.6	10.8	65.0	154.2
1972	9.9	10.4	10.4	10.9	11.2	11.6	11.7	11.7	87.9	11.6	11.1	11.1	10.9	10.6	10.7	66.0	153.9
1973	10.7	10.0	10.4	10.5	11.0	11.3	11.6	11.8	87.2	11.8	11.6	11.2	11.1	10.9	10.7	67.2	154.5
1974	11.1	10.7	10.0	10.5	10.5	11.0	11.3	11.7	86.9	11.8	11.8	11.6	11.2	11.2	11.0	68.6	155.5
1975	11.5	11.1	10.8	10.1	10.5	10.6	11.0	11.4	87.1	11.7	11.8	11.8	11.7	11.2	11.2	69.5	156.6
1976	12.0	11.6	11.2	10.8	10.1	10.6	10.6	11.1	88.0	11.4	11.8	11.9	11.9	11.7	11.3	69.9	157.9
1977	12.4	12.0	11.6	11.2	10.9	10.2	10.6	10.7	89.7	11.1	11.4	11.8	11.9	11.9	11.8	69.9	159.6
1978	12.8	12.5	12.1	11.7	11.3	10.9	10.2	10.7	92.1	10.7	11.2	11.5	11.8	11.9	11.9	69.0	161.2
1979	13.2	12.9	12.5	12.1	11.7	11.3	11.0	10.3	95.0	10.7	10.7	11.2	11.5	11.9	12.0	68.0	163.0
1980	13.6	13.2	12.9	12.6	12.2	11.8	11.4	11.0	98.6	10.3	10.8	10.8	11.2	11.5	11.9	66.5	165.2
1981	13.9	13.6	13.3	13.0	12.6	12.2	11.8	11.4	101.9	11.1	10.4	10.8	10.8	11.3	11.6	65.9	167.7

Source: *Projection of Population, South Australia, 1967-1986*, Commonwealth Bureau of Census and Statistics.

Table A19
PROJECTED TOTAL POPULATION AGED 5-18 YEARS, ASSUMING A NET IMMIGRATION OF 5,000 PERSONS PER ANNUM
SOUTH AUSTRALIA 1969-1981

	5	6	7	8	9	10	11	12	Total 5-12	13	14	15	16	17	18	Total 13-18	Total 5-18
	'000	'000	'000	'000	'000	'000	'000	'000	'000	'000	'000	'000	'000	'000	'000	'000	'000
1969	22.3	22.8	23.2	23.8	23.5	23.2	22.6	22.4	183.9	22.1	21.7	21.7	21.9	21.2	21.1	129.7	313.5
1970	21.5	22.4	22.9	23.3	23.9	23.6	23.3	22.7	183.7	22.6	22.1	21.7	21.7	22.0	21.4	131.5	315.2
1971	21.1	21.7	22.5	23.0	23.4	24.0	23.7	23.4	182.8	22.8	22.6	22.1	21.8	21.8	22.1	133.3	316.1
1972	20.5	21.3	21.8	22.6	23.1	23.5	24.1	23.8	180.6	23.4	22.9	22.7	22.3	21.9	21.9	135.1	315.7
1973	22.0	20.6	21.4	21.9	22.7	23.2	23.6	24.2	179.5	23.9	23.5	22.9	22.8	22.4	22.0	137.4	316.3
1974	22.8	22.1	20.7	21.5	22.0	22.8	23.3	23.7	178.9	24.3	23.9	23.6	23.0	22.8	22.5	140.1	318.0
1975	23.7	22.9	22.2	20.8	21.6	22.1	22.9	23.4	179.5	23.8	24.4	24.0	23.6	23.1	23.0	141.8	321.3
1976	24.6	23.8	23.0	22.3	20.9	21.7	22.2	23.0	181.4	23.5	23.9	24.4	24.1	23.6	23.2	142.8	324.2
1977	25.5	24.7	23.9	23.1	22.4	21.0	21.8	22.3	184.6	23.1	23.6	23.9	24.5	23.9	23.8	143.0	327.7
1978	26.3	25.6	24.8	24.0	23.2	22.5	21.1	21.9	189.4	22.3	23.1	23.6	24.0	24.6	24.3	141.9	331.3
1979	27.1	26.4	25.7	24.9	24.1	23.3	22.6	21.2	195.4	21.9	22.4	23.2	23.7	24.5	24.7	140.5	335.8
1980	27.9	27.2	26.6	25.8	25.0	24.2	23.4	22.7	202.8	21.3	22.0	22.5	23.5	23.8	24.2	137.3	340.1
1981	28.6	28.0	27.4	26.7	25.9	25.1	24.3	23.5	209.5	22.8	21.4	22.1	22.5	23.3	23.9	136.0	345.5

Source: *Projection of Population, South Australia, 1967-1986*, Commonwealth Bureau of Census and Statistics.

APPENDIX A — PROJECTIONS

Table A.20
PROJECTED MALE POPULATION AGED 5-18 YEARS, ASSUMING A NET IMMIGRATION OF 10,000 PERSONS PER ANNUM
SOUTH AUSTRALIA 1969-1981

	5	6	7	8	9	10	11	12	Total 5-12	13	14	15	16	17	18	Total 13-18	Total 5-18
	'000	'000	'000	'000	'000	'000	'000	'000	'000	'000	'000	'000	'000	'000	'000	'000	'000
1969	11.7	11.9	11.9	12.4	12.0	11.8	11.7	11.6	95.0	11.4	11.3	11.2	11.2	11.0	10.9	67.0	162.0
1970	11.4	11.8	12.0	12.0	12.5	12.1	11.9	11.8	95.6	11.7	11.5	11.3	11.3	11.3	11.2	68.3	163.9
1971	11.1	11.6	11.9	12.1	12.1	12.6	12.2	12.0	95.7	11.9	11.7	11.5	11.4	11.4	11.5	69.5	165.2
1972	10.9	11.2	11.7	12.0	12.2	12.2	12.7	12.3	95.3	12.1	12.0	11.8	11.6	11.5	11.5	70.6	165.9
1973	11.7	11.0	11.4	11.8	12.1	12.3	12.3	12.8	95.4	12.4	12.2	12.1	11.9	11.7	11.7	72.0	167.4
1974	12.2	11.8	11.1	11.5	11.9	12.2	12.4	12.4	95.6	12.9	12.5	12.3	12.2	12.0	11.9	73.6	169.2
1975	12.7	12.3	11.9	11.2	11.6	12.0	12.3	12.5	96.6	12.5	12.9	12.6	12.4	12.3	12.1	74.8	171.4
1976	13.2	12.8	12.4	12.0	11.4	11.7	12.1	12.4	98.1	12.6	12.6	13.0	12.7	12.5	12.4	75.7	173.8
1977	13.8	13.4	13.0	12.5	12.1	11.5	11.8	12.2	100.2	12.5	12.7	12.7	13.1	12.8	12.6	76.3	176.6
1978	14.3	13.9	13.5	13.1	12.6	12.2	11.6	11.9	103.1	12.3	12.6	12.8	12.7	13.2	12.9	76.5	179.6
1979	14.8	14.4	14.0	13.6	13.2	12.7	12.3	11.7	106.8	12.0	12.4	12.7	12.8	12.8	13.3	76.1	182.8
1980	15.3	14.9	14.5	14.2	13.7	13.3	12.8	12.4	111.1	11.7	12.1	12.5	12.8	12.9	13.0	74.9	186.1
1981	15.7	15.4	15.0	14.7	14.3	13.8	13.4	12.9	115.2	12.5	11.8	12.1	12.5	12.9	13.1	75.0	190.1

Source: *Projection of Population, South Australia, 1967-1986*, Commonwealth Bureau of Census and Statistics.

Table A.21
PROJECTED FEMALE POPULATION AGED 5-18 YEARS, ASSUMING A NET IMMIGRATION OF 10,000 PERSONS PER ANNUM
SOUTH AUSTRALIA 1969-1981

	5	6	7	8	9	10	11	12	Total 5-12	13	14	15	16	17	18	Total 13-18	Total 5-18
	'000	'000	'000	'000	'000	'000	'000	'000	'000	'000	'000	'000	'000	'000	'000	'000	'000
1969	10.9	11.2	11.6	11.7	11.7	11.5	11.1	11.1	90.8	10.9	10.6	10.6	10.7	10.4	10.5	63.8	154.8
1970	10.5	11.0	11.3	11.7	11.8	11.8	11.6	11.2	90.9	11.2	11.0	10.7	10.7	10.9	10.5	64.8	155.7
1971	10.6	10.6	11.1	11.4	11.8	11.9	11.9	11.7	91.0	11.3	11.3	11.0	10.7	10.7	11.0	66.0	157.0
1972	10.2	10.7	10.7	11.2	11.5	11.9	12.0	12.0	90.3	11.8	11.3	11.3	11.1	10.8	10.9	67.2	157.5
1973	11.0	10.4	10.8	10.9	11.3	11.6	12.0	12.1	90.1	12.0	11.9	11.4	11.4	11.2	10.9	68.8	158.9
1974	11.5	11.2	10.5	10.9	11.0	11.4	11.7	12.1	90.2	12.2	12.1	11.9	11.5	11.5	11.3	70.5	160.7
1975	12.0	11.6	11.3	10.6	11.0	11.1	11.5	11.8	90.9	12.1	12.2	12.2	12.0	11.5	11.6	71.7	162.6
1976	12.5	12.1	11.8	11.4	10.7	11.1	11.1	11.6	92.4	11.9	12.2	12.3	12.3	12.1	11.7	72.4	164.8
1977	13.1	12.7	12.3	11.9	11.5	10.8	11.2	11.2	94.5	11.7	11.9	12.3	12.4	12.3	12.2	72.8	167.3
1978	13.5	13.2	12.8	12.4	12.0	11.6	10.9	11.3	97.6	11.3	11.7	12.0	12.4	12.4	12.5	72.3	169.9
1979	14.0	13.7	13.3	12.9	12.5	12.1	11.7	11.0	101.0	11.4	11.4	11.8	12.1	12.4	12.6	71.7	172.6
1980	14.4	14.1	13.8	13.4	13.0	12.6	12.1	11.8	105.2	11.0	11.5	11.5	11.9	12.2	12.6	70.6	175.7
1981	14.9	14.6	14.2	13.9	13.5	13.1	12.7	12.2	109.0	11.8	11.1	11.5	11.5	12.0	12.3	70.3	179.2

Source: *Projection of Population, South Australia, 1967-1986*, Commonwealth Bureau of Census and Statistics.

APPENDIX A — PROJECTIONS

Table A22

PROJECTED TOTAL POPULATION AGED 5-18 YEARS, ASSUMING A NET IMMIGRATION OF 10,000 PERSONS PER ANNUM
SOUTH AUSTRALIA 1969-1981

	5	6	7	8	9	10	11	12	Total 5-12	13	14	15	16	17	18	Total 19-18	Total 5-18
	'000	'000	'000	'000	'000	'000	'000	'000	'000	'000	'000	'000	'000	'000	'000	'000	'000
1969	22.5	23.1	23.5	24.1	23.7	23.4	22.8	22.7	185.8	22.3	21.8	21.8	22.0	21.4	21.4	130.7	316.8
1970	22.0	22.8	23.3	23.7	24.3	23.9	23.6	23.0	186.5	22.8	22.4	22.0	22.0	22.2	21.7	133.1	319.6
1971	21.7	22.2	23.0	23.5	23.9	24.5	24.1	23.8	186.7	23.2	23.0	22.6	22.1	22.1	22.5	135.5	322.2
1972	21.1	21.9	22.4	23.2	23.7	24.1	24.7	24.3	185.6	23.9	23.3	23.1	22.7	22.3	22.4	137.8	323.4
1973	22.7	21.4	22.2	22.7	23.5	23.9	24.3	24.8	185.4	24.5	24.1	23.5	23.3	22.9	22.6	140.8	326.2
1974	23.7	23.0	21.6	22.4	22.9	23.7	24.1	24.5	185.8	25.0	24.6	24.2	23.6	23.4	23.1	144.1	329.9
1975	24.7	23.9	23.2	21.8	22.6	23.1	23.8	24.3	187.5	24.6	25.2	24.8	24.4	23.8	23.7	146.5	334.0
1976	25.8	25.0	24.2	23.4	22.0	22.8	23.3	24.0	190.5	24.5	24.8	25.3	24.9	24.5	24.1	148.1	338.6
1977	26.8	26.0	25.2	24.4	23.6	22.2	23.0	23.4	194.8	24.2	24.6	24.9	25.5	25.1	24.8	149.1	343.9
1978	27.8	27.1	26.3	25.4	24.6	23.8	22.4	23.2	200.7	23.6	24.4	24.8	25.1	25.6	25.4	148.8	349.5
1979	28.8	28.1	27.3	26.5	25.6	24.8	24.0	22.6	207.7	23.4	23.8	24.5	24.9	25.3	25.9	147.7	355.5
1980	29.7	29.0	28.3	27.5	26.7	25.8	25.0	24.2	216.3	22.8	23.5	23.9	24.6	25.1	25.5	145.5	361.8
1981	30.6	29.9	29.3	28.5	27.8	26.9	26.0	25.2	224.2	24.4	22.9	23.7	24.1	24.8	25.4	145.2	369.4

Source: *Projection of Population, South Australia, 1967-1986*, Commonwealth Bureau of Census and Statistics.

Table A23
NUMBER OF PUPILS BY GRADE AND SEX
SOUTH AUSTRALIA 1963-1968

	Primary							Secondary					Total (a) '000			
	Kinder- garten '000	I '000	II '000	III '000	IV '000	V '000	VI '000	VII '000	Total (a) '000	VIII '000	IX '000	X '000		XI '000	XII '000	
<i>Males</i>																
1963	2.1	13.6	11.6	11.7	11.5	11.2	11.3	10.2	84.1	10.0	8.7	7.7	4.2	1.5	32.1	116.3
1964	2.2	13.9	11.8	11.6	11.8	11.5	11.3	11.0	86.2	10.8	9.2	8.1	4.5	1.7	34.3	120.5
1965	2.4	14.4	12.0	12.1	11.8	11.9	11.6	11.1	88.3	11.6	9.7	8.4	4.8	1.8	36.3	124.6
1966	2.5	14.9	12.4	12.2	12.1	11.9	11.9	11.4	90.6	11.7	10.4	9.0	4.9	1.9	38.0	128.5
1967	2.4	14.9	12.8	12.4	12.1	12.1	11.8	11.6	91.4	11.8	10.8	9.7	5.7	2.4	40.4	131.8
1968	3.3	13.4	12.9	12.7	12.2	12.1	11.9	11.6	91.4	11.9	11.0	10.1	6.5	2.8	42.5	133.9
<i>Females</i>																
1963	1.9	12.5	11.1	10.8	10.8	10.5	10.7	9.8	78.6	9.5	8.1	6.9	3.0	0.7	28.3	106.9
1964	2.0	12.9	11.2	11.3	10.9	10.9	10.6	10.5	81.0	10.3	8.9	7.4	3.4	0.8	30.8	111.8
1965	2.3	13.4	11.4	11.4	11.4	11.1	11.0	10.4	83.2	10.9	9.3	7.9	3.6	0.9	32.7	115.9
1966	2.3	13.7	12.0	11.4	11.5	11.5	11.1	10.8	85.4	10.8	10.0	8.3	3.8	1.0	34.0	119.3
1967	2.3	13.8	12.0	11.9	11.5	11.6	11.5	10.9	86.4	11.2	10.2	9.0	4.5	1.3	36.2	122.5
1968	3.2	12.4	12.2	12.1	11.9	11.4	11.5	11.3	86.9	11.2	10.5	9.2	5.2	1.7	37.8	124.7
<i>Persons</i>																
1963	4.0	26.1	22.7	22.4	22.2	21.7	22.0	20.0	161.2	19.4	16.9	14.6	7.3	2.2	60.4	223.2
1964	4.2	26.7	23.1	22.9	22.7	22.4	21.9	21.5	165.4	21.0	18.1	15.9	7.8	2.6	65.1	232.3
1965	4.7	27.8	23.4	23.5	23.2	22.9	22.5	21.5	169.6	22.5	19.1	16.3	8.4	2.7	69.0	240.5
1966	4.8	28.6	24.4	23.7	23.6	23.5	23.0	22.2	173.7	22.6	20.4	17.4	8.7	2.9	71.9	247.9
1967	4.7	28.7	24.8	24.3	23.6	23.6	23.2	22.6	175.5	23.0	20.9	18.7	10.2	3.7	76.5	254.3
1968	6.5	25.8	25.1	24.8	24.0	23.5	23.5	22.9	176.0	23.1	21.5	19.2	11.7	4.5	80.1	258.6

Source: *Schools, Commonwealth Bureau of Census and Statistics.*

(a) Includes ungraded pupils.

APPENDIX A — PROJECTIONS

Table A24

PROJECTED NUMBER OF MALE PUPILS BY GRADE, ASSUMING A NET IMMIGRATION RATE
OF 5,000 PERSONS PER ANNUM AND MEDIUM RETENTION RATES
IN THE SENIOR GRADES

(PROJECTION A)

SOUTH AUSTRALIA 1969-1981

	Primary				Secondary			Total (a)
	Kind. I & II	III, IV & V	VI & VII	Total	Junior	Senior	Total	
	'000	'000	'000	'000	'000	'000	'000	
1969	29.4	37.5	24.0	90.8	33.6	10.3	43.9	136.3
1970	29.1	37.6	24.4	91.1	34.5	11.0	45.6	138.3
1971	28.4	37.5	24.9	90.7	35.3	11.8	47.1	139.6
1972	27.6	37.0	25.2	89.9	36.3	12.9	49.2	140.8
1973	27.8	36.4	25.2	89.4	37.2	13.5	50.8	141.9
1974	28.8	35.5	25.0	89.3	38.1	14.5	52.6	143.6
1975	30.1	34.9	24.7	89.7	38.6	15.5	54.2	145.6
1976	31.3	35.2	24.2	90.7	38.9	16.5	55.3	147.8
1977	32.6	36.2	23.6	92.4	38.7	17.5	56.2	150.3
1978	33.9	37.7	23.2	94.7	38.2	18.2	56.5	153.0
1979	35.1	39.1	23.7	97.9	37.5	18.7	56.3	155.9
1980	36.2	40.6	24.6	101.4	37.0	19.0	56.0	159.2
1981	37.3	42.0	25.6	104.8	37.0	19.2	56.1	162.8

(a) Includes ungraded pupils.

Table A25

PROJECTED NUMBER OF FEMALE PUPILS BY GRADE, ASSUMING A NET IMMIGRATION RATE
OF 5,000 PERSONS PER ANNUM AND MEDIUM RETENTION RATES
IN THE SENIOR GRADES

(PROJECTION A)

SOUTH AUSTRALIA 1969-1981

	Primary				Secondary			Total (a)
	Kind. I & II	III, IV & V	VI & VII	Total	Junior	Senior	Total	
	'000	'000	'000	'000	'000	'000	'000	
1969	27.1	35.6	23.1	85.9	31.7	7.4	39.1	126.1
1970	26.4	35.6	23.7	85.7	32.6	8.1	40.7	127.4
1971	25.8	35.2	24.2	85.3	33.5	8.8	42.3	128.7
1972	25.3	34.4	24.4	84.2	34.5	9.6	44.1	129.3
1973	25.6	33.5	24.3	83.5	35.5	10.4	45.9	130.4
1974	26.6	32.7	23.9	83.2	36.3	11.2	47.5	131.8
1975	27.8	32.4	23.3	83.5	36.7	12.2	48.8	133.5
1976	29.0	32.8	22.7	84.5	36.6	13.2	49.7	135.3
1977	30.2	33.9	22.2	86.3	36.1	14.0	50.1	137.6
1978	31.3	35.3	22.1	88.7	35.4	14.9	50.2	140.1
1979	32.4	36.6	22.6	91.7	34.6	15.3	49.9	142.7
1980	33.5	38.0	23.6	95.1	34.2	15.5	49.7	146.0
1981	34.5	39.3	24.5	98.4	34.5	15.7	50.2	149.8

(a) Includes ungraded pupils.

APPENDIX A—PROJECTIONS

Table A.26

PROJECTED NUMBER OF PUPILS BY GRADE, ASSUMING A NET IMMIGRATION RATE
OF 5,000 PERSONS PER ANNUM AND MEDIUM RETENTION RATES
IN THE SENIOR GRADES

(PROJECTION A)

SOUTH AUSTRALIA 1969-1981

	Primary				Secondary			Total (a)
	Kind. I & II	III, IV & V	VI & VII	Total	Junior	Senior	Total	
	'000	'000	'000	'000	'000	'000	'000	
1969	56.5	73.1	47.1	176.7	65.3	17.7	83.0	262.4
1970	55.4	73.3	48.1	176.8	67.2	19.1	86.2	265.7
1971	54.2	72.6	49.1	176.0	68.8	20.6	89.5	268.2
1972	53.0	71.4	49.7	174.1	70.8	22.2	93.0	270.1
1973	53.4	69.9	49.5	172.9	72.7	23.9	96.6	272.3
1974	55.4	68.2	48.8	172.5	74.4	25.7	100.1	275.4
1975	57.9	67.3	48.0	173.2	75.3	27.6	102.9	279.1
1976	60.3	68.0	46.9	175.2	75.5	29.6	105.1	283.2
1977	62.8	70.1	45.7	178.7	74.8	31.5	106.3	287.9
1978	65.2	73.0	45.3	183.8	73.6	33.1	106.7	293.1
1979	67.5	75.7	46.3	189.6	72.2	34.0	106.1	298.1
1980	69.7	78.6	48.2	196.5	71.2	34.5	105.7	305.2
1981	71.8	81.3	50.0	203.2	71.5	34.9	106.4	312.6

(a) Includes ungraded pupils.

Table A.27

PROJECTED NUMBER OF MALE PUPILS BY GRADE, ASSUMING A NET IMMIGRATION RATE
OF 10,000 PERSONS PER ANNUM AND MEDIUM RETENTION RATES
IN THE SENIOR GRADES

(PROJECTION B)

SOUTH AUSTRALIA 1969-1981

	Primary				Secondary			Total (a)
	Kind. I & II	III, IV & V	VI & VII	Total	Junior	Senior	Total	
	'000	'000	'000	'000	'000	'000	'000	
1969	29.8	37.8	24.2	91.8	33.9	10.3	44.2	137.6
1970	29.6	38.2	24.7	92.5	35.0	11.1	46.0	140.2
1971	29.1	38.3	25.3	92.7	36.0	11.9	48.0	142.4
1972	28.5	38.0	25.8	92.4	37.1	12.9	50.0	144.1
1973	28.8	37.6	25.9	92.4	38.2	13.8	52.0	146.1
1974	29.9	37.0	25.8	92.8	39.2	14.8	54.0	148.6
1975	31.5	36.6	25.7	93.8	40.0	15.8	55.8	151.4
1976	32.9	37.0	25.4	95.3	40.5	17.0	57.4	154.5
1977	34.4	38.2	24.9	97.5	40.5	18.1	58.6	157.9
1978	35.8	39.9	24.6	100.4	40.3	19.0	59.2	161.5
1979	37.2	41.6	25.2	104.1	39.8	19.5	59.3	165.3
1980	38.6	43.3	26.3	108.2	39.4	20.0	59.3	169.4
1981	39.9	44.9	27.4	112.2	39.7	20.2	59.9	173.4

(a) Includes ungraded pupils.

APPENDIX A — PROJECTIONS

Table A.28

PROJECTED NUMBER OF FEMALE PUPILS BY GRADE, ASSUMING A NET IMMIGRATION RATE
OF 10,000 PERSONS PER ANNUM AND MEDIUM RETENTION RATES
IN THE SENIOR GRADES

(PROJECTION B)

SOUTH AUSTRALIA 1969-1981

	Primary				Secondary			Total (a)
	Kind. I & II '000	III, IV & V '000	VI & VII '000	Total '000	Junior '000	Senior '000	Total '000	
1969	27.4	36.0	23.3	86.8	32.0	7.4	39.4	127.2
1970	26.8	36.1	24.0	87.0	33.0	8.1	41.1	129.2
1971	26.5	35.9	24.6	87.1	34.1	8.9	43.0	131.1
1972	26.1	35.3	25.0	86.4	35.2	9.7	44.9	132.4
1973	26.6	34.6	25.0	86.2	36.4	10.6	46.9	134.2
1974	27.6	34.1	24.7	86.4	37.3	11.4	48.8	136.3
1975	29.1	33.9	24.2	87.2	37.9	12.5	50.4	138.7
1976	30.4	34.5	23.7	88.7	38.0	13.2	51.2	141.0
1977	31.8	35.8	23.4	91.0	37.8	14.0	51.7	143.9
1978	33.1	37.4	23.4	93.9	37.2	14.8	52.0	147.1
1979	34.4	39.0	24.1	97.5	36.7	15.4	52.0	150.8
1980	35.7	40.5	25.1	101.4	36.4	15.8	52.2	154.9
1981	36.9	42.1	26.2	105.2	36.9	16.1	53.1	160.3

(a) Includes ungraded pupils.

Table A.29

PROJECTED NUMBER OF PUPILS BY GRADE, ASSUMING A NET IMMIGRATION RATE
OF 10,000 PERSONS PER ANNUM AND MEDIUM RETENTION RATES
IN THE SENIOR GRADES

(PROJECTION B)

SOUTH AUSTRALIA 1969-1981

	Primary				Secondary			Total (a)
	Kind. I & II '000	III, IV & V '000	VI & VII '000	Total '000	Junior '000	Senior '000	Total '000	
1969	57.2	73.8	47.5	178.6	65.9	17.7	83.6	264.8
1970	56.4	74.3	48.7	179.6	68.0	19.2	87.2	269.5
1971	55.6	74.1	50.0	179.7	70.1	20.8	90.9	273.4
1972	54.6	73.3	50.8	178.8	72.3	22.6	94.9	276.5
1973	55.4	72.3	50.9	178.6	74.5	24.4	98.9	280.4
1974	57.6	71.0	50.5	179.2	76.6	26.2	102.8	284.9
1975	60.5	70.5	49.9	180.9	77.9	28.3	106.2	290.1
1976	63.3	71.5	49.1	184.0	78.4	30.1	108.6	295.5
1977	66.1	74.0	48.3	188.5	78.3	32.1	110.3	301.8
1978	68.9	77.3	48.0	194.3	77.5	33.7	111.2	308.6
1979	71.6	80.6	49.3	201.6	76.5	34.9	111.4	316.0
1980	74.3	83.8	51.4	209.6	75.8	35.7	111.5	324.3
1981	76.8	87.0	53.6	217.4	76.6	36.3	112.9	333.6

(a) Includes ungraded pupils.

APPENDIX A — PROJECTIONS

Table A30

PROJECTED NUMBER OF MALE PUPILS BY GRADE, ASSUMING A NET IMMIGRATION RATE
OF 10,000 PERSONS PER ANNUM AND HIGH RETENTION RATES
IN THE SENIOR GRADES

(PROJECTION C)

SOUTH AUSTRALIA 1969-1981

	Primary				Secondary			Total (a)
	Kind. I & II '000	III, IV & V '000	VI & VII '000	Total '000	Junior '000	Senior '000	Total '000	
1969	29.8	37.8	24.2	91.8	33.9	10.6	44.5	137.9
1970	29.6	38.2	24.7	92.5	35.0	11.9	46.8	141.0
1971	29.1	38.3	25.3	92.7	36.0	13.3	49.3	143.7
1972	28.5	38.0	25.8	92.4	37.1	14.9	51.9	146.0
1973	28.8	37.6	25.9	92.4	38.2	16.2	54.4	148.5
1974	29.9	37.0	25.8	92.8	39.2	17.5	56.7	151.3
1975	31.5	36.6	25.7	93.8	40.0	18.8	58.8	154.3
1976	32.9	37.0	25.4	95.3	40.5	20.1	60.6	157.7
1977	34.4	38.2	24.9	97.5	40.5	21.4	61.9	161.2
1978	35.8	39.9	24.6	100.4	40.3	22.4	62.7	164.9
1979	37.2	41.6	25.2	104.1	39.8	23.1	62.9	168.9
1980	38.6	43.3	26.3	108.2	39.4	23.8	63.2	173.3
1981	39.9	44.9	27.4	112.2	39.7	24.2	63.9	177.4

(a) Includes ungraded pupils.

Table A31

PROJECTED NUMBER OF FEMALE PUPILS BY GRADE, ASSUMING A NET IMMIGRATION RATE
OF 10,000 PERSONS PER ANNUM AND HIGH RETENTION RATES
IN THE SENIOR GRADES

(PROJECTION C)

SOUTH AUSTRALIA 1969-1981

	Primary				Secondary			Total (a)
	Kind. I & II '000	III, IV & V '000	VI & VII '000	Total '000	Junior '000	Senior '000	Total '000	
1969	27.4	36.0	23.3	86.8	32.0	7.7	39.7	127.5
1970	26.8	36.1	24.0	87.0	33.0	8.7	41.7	129.8
1971	26.5	35.9	24.6	87.1	34.1	9.6	43.7	131.9
1972	26.1	35.3	25.0	86.4	35.2	10.6	45.9	133.4
1973	26.6	34.6	25.0	86.2	36.4	11.6	48.0	135.3
1974	27.6	34.1	24.7	86.4	37.3	12.7	50.0	137.6
1975	29.1	33.9	24.2	87.2	37.9	14.0	51.9	140.3
1976	30.4	34.5	23.7	88.7	38.0	15.0	53.0	142.9
1977	31.8	35.8	23.4	91.0	37.8	15.9	53.7	145.8
1978	33.1	37.4	23.4	93.9	37.2	16.7	53.9	149.1
1979	34.4	39.0	24.1	97.5	36.7	17.3	54.0	152.7
1980	35.7	40.5	25.1	101.4	36.4	17.6	54.1	156.7
1981	36.9	42.1	26.2	105.2	36.9	17.9	54.9	162.1

(a) Includes ungraded pupils.

APPENDIX A—PROJECTIONS

Table A32

PROJECTED NUMBER OF PUPILS BY GRADE, ASSUMING A NET IMMIGRATION RATE
OF 10,000 PERSONS PER ANNUM AND HIGH RETENTION RATES
IN THE SENIOR GRADES

(PROJECTION C)

SOUTH AUSTRALIA 1969-1981

	Primary				Secondary			Total (a)
	Kind. I & II '000	III, IV & V '000	VI & VII '000	Total '000	Junior '000	Senior '000	Total '000	
1969	57.2	73.8	47.5	178.6	65.9	18.3	84.2	265.4
1970	56.4	74.3	48.7	179.6	68.0	20.6	88.5	270.8
1971	55.6	74.1	50.0	179.7	70.1	22.9	93.0	275.6
1972	54.6	73.3	50.8	178.8	72.3	25.5	97.8	279.4
1973	55.3	72.3	50.9	178.6	74.5	27.8	102.4	283.8
1974	57.6	71.0	50.5	179.2	76.6	30.2	106.7	288.8
1975	60.5	70.5	49.9	180.9	77.9	32.8	110.7	294.6
1976	63.3	71.5	49.1	184.0	78.4	35.1	113.6	300.6
1977	66.1	74.0	48.3	188.5	78.3	37.3	115.6	307.0
1978	68.9	77.3	48.0	194.3	77.5	39.1	116.6	314.0
1979	71.6	80.6	49.3	201.6	76.5	40.4	116.9	321.5
1980	74.3	83.8	51.4	209.6	75.8	41.4	117.2	330.0
1981	76.8	87.0	53.6	217.4	76.6	42.2	118.7	339.5

(a) Includes ungraded pupils.

Table A33

PROJECTED NUMBER OF MALE PUPILS IN GRADES XI AND XII

SOUTH AUSTRALIA 1969-1981

	Projection A			Projection B			Projection C		
	XI '000	XII '000	Total '000	XI '000	XII '000	Total '000	XI '000	XII '000	Total '000
1969	7.0	3.4	10.3	7.0	3.3	10.3	7.2	3.5	10.6
1970	7.3	3.7	11.0	7.4	3.7	11.1	7.9	4.0	11.9
1971	7.8	4.0	11.8	7.9	4.0	11.9	8.7	4.6	13.3
1972	8.3	4.4	12.6	8.5	4.5	12.9	9.6	5.3	14.9
1973	8.8	4.7	13.5	9.0	4.8	13.8	10.1	6.1	16.2
1974	9.3	5.1	14.5	9.6	5.2	14.8	10.8	6.7	17.5
1975	9.9	5.6	15.4	10.2	5.7	15.8	11.4	7.4	18.8
1976	10.5	6.0	16.5	10.8	6.2	17.0	12.0	8.1	20.1
1977	11.0	6.5	17.5	11.4	6.7	18.1	12.6	8.9	21.4
1978	11.3	6.9	18.2	11.8	7.2	19.0	12.8	9.6	22.4
1979	11.4	7.3	18.7	12.0	7.6	19.5	13.0	10.1	23.1
1980	11.5	7.5	19.0	12.1	7.8	20.0	13.1	10.7	23.8
1981	11.5	7.7	19.2	12.1	8.1	20.2	13.1	11.1	24.2

APPENDIX A— PROJECTIONS

Table A34

PROJECTED NUMBER OF FEMALE PUPILS IN GRADES XI AND XII

SOUTH AUSTRALIA 1969-1981

	Projection A			Projection B			Projection C		
	XI '000	XII '000	Total '000	XI '000	XII '000	Total '000	XI '000	XII '000	Total '000
1969	5.5	2.0	7.4	5.5	2.0	7.4	5.7	2.0	7.7
1970	5.9	2.1	8.1	6.0	2.1	8.1	6.4	2.3	8.7
1971	6.4	2.4	8.8	6.5	2.4	8.9	6.9	2.7	9.6
1972	6.9	2.7	9.6	7.0	2.7	9.7	7.6	3.1	10.6
1973	7.4	3.0	10.4	7.6	3.0	10.6	8.2	3.5	11.6
1974	7.9	3.3	11.2	8.1	3.3	11.4	8.8	3.9	12.7
1975	8.6	3.6	12.2	8.8	3.7	12.5	9.7	4.3	14.0
1976	9.1	4.0	13.2	9.2	4.0	13.2	10.1	4.9	15.0
1977	9.6	4.4	14.0	9.7	4.3	14.0	10.6	5.3	15.9
1978	10.1	4.8	14.9	10.1	4.7	14.8	11.0	5.7	16.7
1979	10.2	5.1	15.3	10.4	5.0	15.4	11.2	6.1	17.3
1980	10.2	5.3	15.5	10.5	5.3	15.8	11.3	6.4	17.6
1981	10.2	5.5	15.7	10.6	5.5	16.1	11.3	6.6	17.9

Table A35

PROJECTED NUMBER OF PUPILS IN GRADES XI AND XII

SOUTH AUSTRALIA 1969-1981

	Projection A			Projection B			Projection C		
	XI '000	XII '000	Total '000	XI '000	XII '000	Total '000	XI '000	XII '000	Total '000
1969	12.4	5.3	17.7	12.4	5.3	17.7	12.8	5.5	18.3
1970	13.2	5.8	19.1	13.4	5.8	19.2	14.2	6.3	20.6
1971	14.2	6.4	20.6	14.4	6.4	20.8	15.6	7.3	22.9
1972	15.2	7.0	22.2	15.5	7.1	22.6	17.1	8.4	25.5
1973	16.2	7.7	23.9	16.6	7.8	24.4	18.3	9.5	27.8
1974	17.3	8.4	25.7	17.7	8.6	26.2	19.6	10.6	30.2
1975	18.4	9.2	27.6	18.9	9.4	28.3	21.1	11.7	32.8
1976	19.6	10.0	29.6	20.0	10.2	30.1	22.1	13.0	35.1
1977	20.6	10.9	31.5	21.1	11.0	32.1	23.2	14.1	37.3
1978	21.4	11.7	33.1	21.9	11.9	33.7	23.8	15.3	39.1
1979	21.6	12.4	34.0	22.3	12.6	34.9	24.2	16.2	40.4
1980	21.7	12.8	34.5	22.6	13.1	35.7	24.4	17.0	41.4
1981	21.7	13.2	34.9	22.8	13.6	36.3	24.5	17.7	42.2

APPENDIX B

Questionnaire used in Survey of Non-Government Non-Catholic Schools, 1969

1. Name of school.....
2. Number of pupils:
 Pre-primary.....
 Primary (kindergarten, grades I-VII).....
 Secondary.....
3. What percentage of your total students are boarders at the school?.....
4. Number of teachers (including the head) for the last three years. (Include part-time teachers as full-time equivalents to nearest fifth of a full-time teacher. When the same teacher is involved in primary and secondary teaching, allocate appropriate fraction to each level.)

Number of teachers (full-time equivalents)

	Primary	Secondary	
		Teaching General, i.e., Academic Subjects and Music, Phys.Ed.	Specialist Art and Craft
1969			
1968			
1967			

(Do not include visiting music staff or laboratory assistants.)

5. Number of classes, classified by size, at the three education levels, pre-primary, primary and secondary. Use English classes as proxies for the size of home classes in the secondary school where there is ambiguity because of fragmenting.

No. of Pupils per Class	Pre-Primary	Primary	Secondary
Under 21			
21-25			
26-30			
31-35			
36-40			
41-45			
46-50			
Over 50			
Total			

6. Academic and professional qualifications of teachers of general academic subjects (full- and part-time). Each teacher should be recorded once in each of the following two tables.

Academic Qualifications

	Primary	Secondary
No. of teachers with:		
University degree(s)		
University subgraduate (e.g., A.U.A.)		
Other tertiary (excluding teacher training)*		
No tertiary qualifications (excluding teacher training)		
Total teaching staff		

*e.g., Diploma or other tertiary qualifications in technology, fine arts, home science, etc.

Professional Qualifications

	Primary	Secondary
No. of teachers with teacher training:		
None		
Less than one year		
One year (e.g., Dip.Ed.)		
Two years or more		
Total teaching staff		

(The total teaching staff in these two tables should be the same.)

7. No. of teachers who left the staff during:

1969 (to date)
1968
1967

Teaching Staff (Full- and Part-Time)	
Primary	Secondary

8. The length of service of the present staff in their present school.

	Teaching Staff (Full- and Part-Time)	
	Primary	Secondary
Less than 1 year		
1 year and less than 2		
2 years and less than 3		
3 years and less than 6		
6 years and over		
Total teaching staff		

APPENDIX B

9. Planned maximum student numbers:

	Primary	Secondary
(a) Next year		
(b) In five years' time		

10. Salary scales:

	Primary	Secondary
Minimum assistant rate for qualified teaching staff		
Maximum assistant range		
No. of steps in the range		
Any promotion positions such as senior master for subject heads	Yes ☐ No ☐	Yes ☐ No ☐

11. Current salaries of full-time teachers (these include allowances).

	Primary	Secondary
Less than \$3,000		
\$3,000 and less than \$3,500		
\$3,500 " " " \$4,000		
\$4,000 " " " \$4,500		
\$4,500 " " " \$5,000		
\$5,000 " " " \$5,500		
\$5,500 " " " \$6,000		
\$6,000 " " " \$7,000		
\$7,000 " " " \$8,000		
\$8,000 and more		
Total		

12. Give any examples of important educational experiments or innovations in your school in recent years. (Attach separate sheet.)

13. The proportion of secondary students staying until the fifth year is increasing. Give your opinion whether you think a constant, declining or increasing proportion of fifth-year students will seek tertiary education? (This information is important in determining the number of places to be provided at the tertiary level.)

Constant ☐ Declining ☐ Increasing ☐

14. Annual fees for day students:

Primary classes, grades I-IV....., grades V-VII.....
Secondary classes.....

APPENDIX B

15. Percentage of school income (i.e., recurrent receipts exclusive of capital such as receipts for buildings) derived from various sources:

	per cent
Tuition fees (excluding boarding)	
State aid	
Parents' Association	
Other sources	
	100

16. Total capital expenditure for the period 1965-68 inclusive.

- (a) Whole school \$.....
- (b) Boarding facilities \$.....

17. If funds were made available on a dollar-for-dollar basis for capital expenditure would you replace (or enlarge) any facilities, and what proportion (approximately) of your existing space would these new facilities constitute?

	Yes	No	New Facilities as a Proportion of Existing Space
(a) Science laboratories	☐	☐	
(b) Classrooms	☐	☐	
(c) Library (in excess of present Commonwealth Grants)	☐	☐	
(d) Other (e.g., staff-rooms, gym- nasia, halls; please specify)	☐	☐	
(e) Boarding facilities	☐	☐	

18. Analysis of annual recurrent expenditure (excluding capital outlays) for 1968.

	Percentage of Total 1968 Recurrent Expenditure
Salaries of teachers	
Other salaries and wages (librarian, clerical, etc.)	
Servicing capital, viz., Interest payments	
Repayment of borrowed funds	
Other expenditure	
	100

APPENDIX B

19. Particulars of fifth-year secondary classes, June 1969. (Subject qualifications to university level I, II, III, Hons. mean, for example, English I, II, III, Hons. respectively.)
(Each teacher should be recorded in both columns (2) and (3).)

Subject	(1) No. of Pupils in each Class (if more than one Class, enter each separately)					(2) Taught by		(3) Taught by Teacher(s) with Subject Quali- fications to University level					
						Graduate(s)	Non- Graduate(s)	0	I	II	III	Hons.	
English													
Latin													
French													
German													
Other Languages													
Ancient History													
Modern History													
Classical Studies													
Economics													
Geography													
Maths. I													
Maths. II													
Physics													
Chemistry													
Geology													
Biology													
Music													

APPENDIX C

Questionnaire used in Survey of Staff Turnover and Income of Government Schools in South Australia, 1968

1. (a) School name..... (b) School number.....
- (c) Type of school: High ☐ Technical High ☐
 Primary ☐ Special Rural ☐ Rural ☐
 Area ☐ Infant ☐ Special ☐
- (d) Has school been established for less than three years?
 (Please tick) Yes ☐ No ☐
- (e) Total number of students enrolled as at 1st August 1968.

Staff Turnover 1968

	Male	Female
1. Total staff at beginning of 1968 school year		
2. Number of staff who left school for any reason (including secondment, national service, etc.)		
(a) at end of 1968		
(b) at any other time during 1968		
Total (1)		
3. Of staff who left school, how many		
(a) left the Education Department		
(b) moved to another school to obtain promotion		
(c) moved for other reasons?		
Total (2)		
4. Of staff who left school, how many		
(a) had been at school for less than three years		
(b) had been at school for three years or more?		
Total (3)		

N.B. — Totals (1), (2), (3) should all agree.

*Income Available to School and Parent Bodies for Calendar Year 1st January 1968 to 31st December 1968**

1. Books and Stationery:

	Totals
(a) Sale of books, stationery, etc. \$.....	
(b) Less cost \$.....	
(c) Net profit \$.....	

APPENDIX C

2. Canteen operation:
- | | | |
|---------------------------|---------|---------|
| (a) Canteen receipts | \$..... | |
| (b) Less cost | \$..... | |
| (c) Net profit on trading | | \$..... |
3. Fees: (Sports, library, amenities, etc. (excluding subject levies and subsidy))
- | | | |
|--|--|---------|
| | | \$..... |
|--|--|---------|
4. Other receipts: (Voluntary contributions, fund raising, etc.)
- | | | |
|---------------------|--|---------|
| (a) School fund | | \$..... |
| (b) Parental bodies | | \$..... |
5. Subsidy for financial year 1968-69:
- | | | |
|---|---------|---------|
| (a) Amount applied for to cover period
1/7/68-30/6/69 | \$..... | |
| (b) Amount actually received for period
1/7/68-30/6/69 | | \$..... |
6. Total income for period
- | | | |
|--|--|---------|
| | | \$..... |
|--|--|---------|
- Round all values to nearest whole dollar.

APPENDIX D

Classification of Electoral Districts in the Adelaide Metropolitan Area by Socio-Economic Class at the 1966 Census

The Committee used a ranking of electoral districts prepared by Dr. Neal Blewett to divide the metropolitan area into five socio-economic levels, as shown below. The criterion used was the proportion of the male work force in occupational categories 0 (Professional, Technical and Related Workers) and 1 (Administrative, Executive and Managerial Workers) in the 1966 Census.

SOCIO-ECONOMIC RANKING OF ELECTORAL DISTRICTS

	Electoral District	Proportion of Male Work Force in Occupational Categories 0 and 1 1966 Census
Group I	Ferryden Park	5.6
	Kilburn	6.2
	Port Adelaide	7.6
	Albert Park	7.7
	Semaphore	7.8
	Brompton	8.5
	Thebarton	8.5
	Hindmarsh	11.0
	Woodville	11.1
Group II	Northfield	13.3
	Adelaide	14.0
	Payneham	14.6
	Parkside	14.8
	Norwood	14.9
	Ascot Park	15.5
	Woodville South	15.5
	Trinity Gardens	15.9
	Prospect	16.6
	Klemzig	16.7
Group III	Goodwood	17.7
	St. Peters	17.7
	Plympton	18.2
	Edwardstown	18.5
	Unley	19.0
	Clarence Gardens	19.5
	Henley Beach	19.5
	Magill	20.4
Group IV	Brighton	24.5
	Glenelg North	24.6
	Glenelg	25.3
	Glandore	25.3
	Nailsworth	25.6
	Lockleys	26.8
	Fullarton	27.4
Group V	Rose Park	31.3
	North Adelaide	31.4
	Mitcham	33.4
	Blackwood	38.8
	Walkerville	41.2
	Burnside	52.5
	Mean	19.6

APPENDIX E

Questionnaire used in Survey of Pre-School Institutions not affiliated with the Kindergarten Union of South Australia, 1969

1. Name of centre.....
2. Address.....
3. Number of children attending.....
4. Hours of attendance.....
5. Number of staff.....
6. Number of staff included above who:
Hold a diploma of a kindergarten teachers college
Have had some pre-school training in a recognised
college but do not hold a diploma
Have taken primary or infant training in a teachers
college
7. Is your centre: (Tick appropriate answer)
A private business venture? ☐
Run by a committee? ☐
8. Is the building you use structurally designed as a kindergarten?
Yes/No.
Designed for another purpose and used by you during certain
times? Yes/No.
9. Fees charged per term \$.....
10. Have you applied for affiliation with the Kindergarten Union?
Yes/No.
11. Make any general comments you feel might be useful to the
Committee here:

APPENDIX F

Questionnaire used in Survey of New Tertiary Students, 1970

Four forms of a similar character were used relating to students entering universities (other than those enrolling at teachers colleges), teachers colleges, the South Australian Institute of Technology, and the Kindergarten Teachers College respectively. The questionnaire relating to universities is set out below.

1. Sex: Male ☐ Female ☐
2. (a) School last attended.....
 (b) Years (inclusive) 19.....-19.....
3. (a) Occupation of father (or mother if father deceased):
 If father deceased, enter a tick in square,
 and give mother's occupation below ☐
 If father retired, enter a tick in square,
 and give former occupation below ☐
 Describe occupation in precise terms, using two or more words, e.g.,
 "Insurance salesman", "Builder's labourer", "Medical Practitioner",
 "Motor mechanic". If employed by Government Department or
 Authority, give official designation, such as "District Employment
 Officer", "Research Chemist", and do not use such general terms as
 "Public Servant".

 (b) Occupational role of father (or mother if father deceased):
 (Tick appropriate square)
 Working for wages or salary ☐
 Conducting own business or profession and not ☐
 employing others ☐
 Conducting own business or profession and employ- ☐
 ing others ☐
 Not in work force ☐
4. (a) If holding a scholarship, indicate type:
 Commonwealth University ☐
 Assistance from employer ☐
 Other ☐
 (b) If being paid a living allowance as part of your scholarship,
 indicate whether:
 Full allowance ☐
 Part allowance ☐
5. Course entered:

Agricultural Science	☐	Economics	☐	Science	☐
Architecture	☐	Engineering	☐	Music	☐
Arts	☐	Law	☐	Other	☐
Dentistry	☐	Medicine	☐		
6. Are you a full-time student: Yes ☐ No ☐

APPENDIX G

Questionnaire used in Survey of Private Technical Schools, 1970

1. Name of institution.....
2. Address of institution.....
3. Total enrolment at 1st August 1970: Males..... Females.....
4. Above enrolments divided into full-time and part-time:
Full-time..... Part-time.....
5. Total teaching staff at 1st August 1970:
Full-time..... Part-time.....
6. *Secondary-Level Courses:*
 - (a) Do some of your students sit for Public Examinations
Board Leaving Examinations? Yes/No
If yes, number of students who sat in 1969
 - (b) Do some of your students sit for Public Examinations
Board Matriculation Examinations? Yes/No
If yes, number of students who sat in 1969
7. *Post-Secondary-Level Courses:*
Do some of your students sit for examinations held
by outside examining bodies (e.g., Australian Society
of Accountants)? Yes/No
If yes, the examining body and the number of
students in the courses in 1969:

Name of Examining Body	Number of Students
.....	
.....	
.....	
.....	

8. List the nature of wholly *internal* courses, and state the length of each course if taken full-time:

Nature of Wholly Internal Course*	Length of Course for Full-Time Students
.....	
.....	
.....	
.....	

* State here the name of the course, for example, dressmaking, book-keeping, millinery, etc., provided students in these courses do not sit for an external examination.

APPENDIX H

Some Proposals Raised in Submissions Relating to the Curricula of Specific School Subjects

AGRICULTURE

An integrated course that includes management as well as science should be provided.

ART

Greater variety of materials should be provided at pre-school level and at infant level.

Infant schools should have a specialised room or annexe.

Consultant and supervisory staff should be provided at all levels. At primary school, much more cultural education should be included, with trained teachers. At secondary school, status of studies of art should be raised.

Art should be a Matriculation subject. Art and Technical Drawing should be separated.

Fine Arts and Art History and Appreciation should be subjects at secondary level.

COMMERCIAL STUDIES

Below the fifth secondary year, studies should be general and not immediately vocational. At fifth year, Accounting should be available, together with Shorthand, Typewriting and Communication.

COMPUTERS

All children should study the social effects of computers on man, and methods of analysing problems fundamental to programming should be taught at senior levels.

ENGINEERING OR TECHNOLOGY STUDIES

Experiments should be conducted with courses in upper secondary school in which projects in technology are used to interest pupils, encourage divergent thinking and develop scientific knowledge.

ENGLISH — SECONDARY

Competence in English makes possible the efficient study of all other subjects. Therefore all students at all levels should study it.

There should be no divorce between teaching literature and teaching language.

APPENDIX H

English at Matriculation level should be two subjects, Expression and Literature, with the former compulsory.

FIELD STUDIES

Studies of environment should be included in primary and secondary schools.

GEOGRAPHY

To become more effective the study of geography requires better communication of up-to-date ideas.

HEALTH

Formal Health Education courses should be introduced. Curriculum should be brought up to date in primary schools, and the subject introduced to secondary schools for the first, second and third years. More attention should be given to the subject by teachers colleges.

HISTORY

History should be the basic subject on which an integrative approach to the curriculum should be made.

Better teaching and more facilities (texts, reference books, etc.) should be provided.

Aboriginal history should be an important area for curriculum development.

INTERNATIONAL UNDERSTANDING

Schools should develop attitudes and teach knowledge essential for international understanding. Specific subjects should be included in curriculum.

LANGUAGES

All children should have an opportunity to study languages and to use the best modern facilities. Language study should commence in the primary school, and secondary school studies should be integrated. A second foreign language should be introduced early in secondary school. Asian languages should be included at primary and secondary levels, along with the study of Asian cultures.

Equal opportunities should be available to study all languages for which there is a reasonable demand.

Language and cultural studies should be an integral part of social studies courses.

A rudimentary course in linguistics should be provided to serve both English and foreign languages.

MATHEMATICS

A one-subject mathematics course at Matriculation level should be included.

MUSIC

All primary children should have an introductory course.

A general course at first-year secondary level, and a course as an elective in other years should be available.

A critical survey should be made of curricula, facilities, practices and teaching resources.

A Director of Music with adequate staff should be appointed.

PHYSICAL EDUCATION

Physical education should be an essential feature at all levels, and should be given more time and more specialised treatment.

Schools should have a better range and quality of equipment; teachers should receive more in-service education; and secondary schools in particular should have specialist teachers.

More consulting and advisory staff should be provided.

RELIGIOUS INSTRUCTION

All pupils should have an opportunity to study the origin, history and development of the Christian faith, as a general study in primary school, and as an elective at Leaving or Matriculation level.

Comparative religion should be a topic of study. Main tenets of all major religions of the world should be studied, including Christianity. The study should not begin before grade VI in primary schools. Instructors should be competent in religion and in teaching, and should use a suitable syllabus.

Religious teaching should be treated in a spirit of inquiry without dogma. Corporate acts of worship by schools should be omitted.

SAFETY EDUCATION

Provision should be made for systematic forms of safety education. A committee should be appointed to inquire into present scope and context of safety education in the school curriculum. A safety co-ordinator should be appointed in all schools.

APPENDIX H

SCIENCE — SECONDARY

There should be a continuation of the policy of having a variety of courses designed for students of varying abilities.

Broad objectives and behavioural objectives should be stated for science courses.

SOCIAL STUDIES

Asian studies should be a Matriculation subject.

Studies should be included of political process in Australia.

There should be a more disciplined study of international relations.

APPENDIX I

List of Organisations and Individuals who made Written Submissions to the Committee

ORGANISATIONS

Academic Staff Association of the South Australian Institute of Technology
Adelaide Chamber of Commerce, Inc.
Adelaide Teachers College Students Representative Council
Advancement of Education Association (Australia)
Advisory Panel for Deaf and Hard of Hearing Children
Arthurton School Welfare Club
Association for Children Requiring Special Education
Association of Independent Schools in South Australia
Association of Lay Teachers in Catholic Schools in South Australia
Australian Institute of Health Surveyors, South Australian Division
Australian Institute of Management, South Australian Division
Australian Physical Education Association, South Australian Branch
Australian Psychological Society, South Australian Branch
Australian Railways Union, South Australian Branch
Australian Society for Education through Art
Australian Society of Accountants, South Australian Division, and the
Institute of Chartered Accountants in Australia, South Australian Branch
Autistic Children's Association of South Australia, Inc.
Brighton High School Parents and Friends Association
Catholic Education Office
Catholic Women's League, Streaky Bay Branch
Central Eyre Peninsula School Welfare Association
Chemical Technology Students' Society
College of Radiologists of Australia and Australian Institute of Radiography, South Australian Conjoint Committee
Committee of Principals of South Australian Teachers Colleges
Commonwealth Public Service Board
Communist Party of Australia, South Australian State Committee
Council of Governors of the Collegiate School of St. Peter
Crippled Children's Association of South Australia, Inc.
Croydon Boys Technical High School Council
Darke Peak Special Rural School Committee
Director-General of Education
Federation of Parents and Friends Associations of South Australian Catholic Schools
Flinders University of South Australia
Flinders University of South Australia Staff Association
Geography Teachers' Association of South Australia
High and Technical High School Councils Association of South Australia

APPENDIX I

History Teachers Association of South Australia

Humanist Society of South Australia

Independent Schools Headmasters Association of South Australia and
the Association of Headmistresses of Girls' Independent Schools
in South Australia

Institute of Personnel Management (Australia), South Australian
Division

Institute of South Australian Foundrymen, Inc.

Institution of Engineers, Australia, South Australian Division

Kindergarten Union of South Australia, Inc.

Kings Park Occupation Centre School Committee

Le Hunte and District Teachers Association

Library Association of Australia, South Australian Branch

Mathematical Association of South Australia

Mid-Yorke Peninsula Teachers Association

Minlaton High School Council and Parents and Friends Association

Modbury High School Staff Social Club

Modern Languages Teachers Association of South Australia

Murray Bridge High School Council, Primary School Committee, and
Murray Bridge South Primary School Committee

National Council of Women of South Australia, Inc.

National Fitness Council of South Australia

National Safety Council of Australia, South Australian Division

National Union of Australian University Students in conjunction
with the Students Representative Councils of Adelaide and
Flinders Universities

Nature Conservation Society of South Australia

Prospect Demonstration School Committee

Public Examinations Board of South Australia

Public Service Association of South Australia, Inc.

Public Service Board of South Australia

Salisbury Teachers College Students Representative Council

Science Research Associates Pty. Ltd.

S.P.E.L.D. (S.A.) Steering Committee

Society for Education in International Understanding

South Australian Agricultural Science Teachers Association

South Australian Art Teachers Association

South Australian Association for Mental Health, Inc. — Co-ordinating
Committee for Mental Retardation in South Australia

South Australian Association of Social Studies Teachers

South Australian Chamber of Manufactures, Inc.

South Australian Council of Social Service

South Australian English Teachers' Association, Inc.

South Australian Institute for Educational Research

South Australian Institute of Inspectors of Schools

South Australian Institute of Teachers

South Australian Institute of Technology

South Australian Institute of Technology Union

South Australian Public Schools Committees' Association, Inc.

South Australian Science Teachers Association, Inc.
 South Australian State Association of School Welfare Clubs
Streaky Bay Area School Welfare Club
 University of Adelaide
 University of Adelaide Staff Association
 Upper Murray Adult Education Centre Council
 Urrbrae Agricultural High School Council
 Wattle Park Teachers College Students Representative Council
 Western Teachers College Students Representative Council
Women's International League for Peace and Freedom, South Australian Branch
Workers' Educational Association of South Australia, Inc.
Wudinna Area School Committee

INDIVIDUALS

Mr. R. L. Alsop
 Mrs. T. R. Anderson
 Mr. B. F. G. Apps and Dr. J. Moncrieff
 Mr. K. J. Batt
 Mr. J. Bradlee
 Mr. A. H. Clothier
 Mr. J. C. Coombs
 Mrs. C. Crowder
 Rev. J. B. Edwards, Rev. M. F. Sawyer and Rev. C. T. Symons
 Mr. F. W. Faulkner
 Mr. R. Fitzsimmons
 Mr. L. G. Green
 Mr. I. Hanna
 Mr. A. D. Hickinbotham
 Mrs. F. M. Hone
 Mrs. D. M. Howles
 Dr. R. Illing
 Mr. L. E. Kiek
 Miss C. E. Macnaughton
 Dr. E. H. Medlin
 Mr. R. B. Molloy
 Mr. R. W. Nettle
 Miss E. F. Page
 Mr. L. S. Piddington
 Professor J. A. Richardson
 Mr. C. Schacht
 Mr. J. H. Smith
 Mr. T. J. Strehlow
 Mr. K. M. J. Tiller
 Mr. I. S. Tolley
 Dr. I. S. Turner
 Mr. B. Van Daal
 Mr. R. H. Wallace and Mrs. Joan Hancock
 Mr. R. J. Walsh
 Professor F. K. Wright

APPENDIX J

List of Organisations and Individuals who appeared before the Committee

ORGANISATIONS

- Adelaide Chamber of Commerce, Inc.: *Mr. D. R. Jaunay, Mr. A. M. Simpson*
- Association of Independent Schools in South Australia: *Mrs. A. M. Davis, Mr. C. D. Fisher, Professor D. O. Jordan, Rev. J. S. C. Miller, Mr. J. Rundle*
- Association of Lay Teachers in Catholic Schools in South Australia: *Mr. B. H. Donnelly, Mr. P. J. O'Connor*
- Auditor-General's Department: *Mr. D. E. Byrne*
- Australian Broadcasting Commission: *Mr. F. Watts*
- Catholic Education Office: *Sister M. Campion, Brother K. Harris, Father J. Mulvihill*
- Committee of Principals of South Australian Teachers Colleges: *Mr. R. S. Coggins, Mr. E. N. Pfitzner, Professor J. A. Richardson, Mr. C. M. Thiele, Mr. G. E. K. Williams*
- Education Department:
- Director-General of Education: *Mr. J. S. Walker (retired 28/2/70)*
 - Director-General of Education: *Mr. A. W. Jones*
 - Deputy Director-General of Education: *Mr. M. H. Bone*
 - Director of Primary Education: *Mr. L. Dodd*
 - Director of Secondary Education: *Mr. K. E. Barter*
 - Director of Teacher Education and Services: *Mr. D. A. Harris*
 - Director of Administration and Finance: *Mr. E. G. Tattersall*
 - Assistant Superintendent of Teacher Education: *Dr. H. Beare*
 - Chief Psychologist, Psychology Branch: *Mr. E. D. Lasscock*
 - Representatives of the Infant Schools Administration: *Miss M. Sando, Miss E. Bright, Miss L. Harris*
 - Supervisor of Audio-Visual Education Centre: *Mr. G. L. F. Klein*
 - Supervisor of Music: *Mr. J. S. Slee*
 - Supervisor of Physical Education: *Mr. H. J. Mutton*
 - Supervisor of School Libraries: *Mr. J. G. Dwyer*
- Federation of Parents and Friends Associations of South Australian Catholic Schools: *Mr. N. Canny, Dr. D. P. Dineen, Mr. J. Hayball***
- Flinders University of South Australia: *Professor J. R. Anderson, Professor W. J. Cherry, Professor A. M. Clark, Professor K. J. Hancock*
- High and Technical High Schools Councils Association of South Australia: *Mr. J. Maddern, Mr. G. Pickhaver, Mr. H. Searle, Mr. D. Simmons*
- Independent Schools Headmasters Association of South Australia, and the Association of Headmistresses of Girls' Independent Schools in South Australia: *Miss V. Baddams, Mr. D. Forder, Brother K. Harris, Mr. R. Watts*

- Infant Schools Headmistresses Association: *Miss V. M. Brand, Mrs. L. B. Donaldson, Miss N. J. Mitchell*
- Kindergarten Union of South Australia, Inc.: *Miss B. Davis, Mrs. S. B. Denton, Miss D. Hughes, Mrs. D. D. Jeffries, Mr. D. A. G. Lillicrapp, Miss K. M. Mellor*
- Public Buildings Department: *Mr. R. K. Dunn, Mr. R. W. Johns, Mr. S. Ralph*
- Public Examinations Board of South Australia: *Professor J. R. Trevaskis*
- Public Service Association of S.A. Inc.: *Mr. J. K. Collett*
- Public Service Board of South Australia: *Mr. M. L. Dennis, Mr. R. D. Bakewell, Mr. I. J. Lees, Mr. K. C. Taeuber, Mr. W. Voyzey*
- South Australian Chamber of Manufactures, Inc.: *Mr. C. W. Branson, Mr. M. Perry, Mr. A. Scriven, Mr. A. M. Simpson*
- South Australian Council of Social Service: *Mr. D. Crawford, Mrs. A. V. Eszenyi, Mrs. E. Fearnside, Mrs. J. Harvey, Mr. G. Hunter, Mr. G. Killington, Miss M. Mune*
- South Australian English Teachers' Association, Inc.: *Mr. G. Boomer, Brother C. Howley, Mr. P. McDonald, Miss B. Wall*
- South Australian Institute of Inspectors of Schools: *Mr. D. J. Anders, Mr. C. C. Pearce, Mr. L. W. Whalan*
- South Australian Institute of Teachers: *Mr. B. Cosgrove, Mr. P. Coward, Mr. D. A. Dent, Mr. M. Hunkin, Mr. L. E. Kiek, Mrs. L. Loffler, Mr. R. Patterson, Mr. W. A. White*
- South Australian Institute of Technology: *Dr. S. I. Evans, Mr. R. T. Kleeman, Dr. E. W. Mills*
- South Australian Institute of Technology Union: *Mr. J. Flynn, Mr. R. Koch, Mr. M. Lennan, Mr. P. Love*
- South Australian Public Schools Committees' Association, Inc. *Dr. J. R. Coulter, Mr. F. Kammer, Mr. R. E. King, Mr. C. W. Reed*
- South Australian Science Teachers Association, Inc.: *Dr. N. Broadbent, Mr. V. G. Eyers, Mr. D. H. Kuhl, Mr. I. Palmer, Brother C. Pratt, Mr. G. Ramsay-Matthews, Mr. P. Schodder, Mr. A. G. Tindall*
- South Australian State Association of School Welfare Clubs: *Mrs. B. Haseldene, Mrs. W. Johnson, Mrs. R. Kelly, Mrs. F. Nolan, Mrs. J. Quinlan, Mrs. J. Rowe*
- South Australian Treasury Department: *Mr. R. D. Barnes, Mr. G. F. Seaman*
- Students Representative Council, Flinders University: *Mr. J. Barbalet, Mr. K. P. Gillis, Mr. P. Keal*
- Students Representative Council, University of Adelaide: *Mr. P. Balan, Mr. R. Gordon, Miss A. McMenamin, Mr. W. Marwood*
- Students Representative Council of Adelaide Teachers College, Bedford Park Teachers College, Salisbury Teachers College, Wattle Park Teachers College and Western Teachers College: *Mr. P. Adey, Mr. I. Chester, Mr. J. Davis, Mr. W. Pearce, Mr. P. Sharrad, Miss R. Trigg*

APPENDIX J

University of Adelaide: *Professor G. M. Badger, Professor E. S. Barnes, Professor F. B. Bull, Professor D. Galliver, Professor C. J. Horne, Professor D. O. Jordan, Professor L. F. Neal, Professor D. R. Stranks*

Workers' Educational Association of South Australia, Inc.: *Mr. M. Hutton, Mr. J. W. Warburton, Mr. E. Williams*

INDIVIDUALS

Mr. R. Fitzsimmons
Mr. L. S. Piddington
Professor R. Selby Smith

APPENDIX K

List of Schools and Institutions Visited by the Committee

GOVERNMENT

Burnside Demonstration School
Clapham Demonstration School
Elizabeth Park Primary School and Infant School
Kilburn Primary School
Mount Wedge Rural School
Nailsworth Primary and Infant Schools
Surrey Downs Primary School
Thebarton Primary and Demonstration Infant Schools
Weetulta Rural School

Angle Park Girls Technical High School
Birdwood High School
Darke Peak Special Rural School
Eyre Technical High School, Whyalla
Glengowrie High School
Heathfield High School
Maitland Area School
Marion High School
Minnipa Area School
Mitchell Park Boys Technical High School
Mount Barker High School
Oakbank Area School
Port Augusta High School
Port Lincoln High School
Streaky Bay Area School
Taperoo High School
Unley High School

Bedford Park Teachers College
Brighton Speech and Hearing Centre
Croydon Park Technical College
Eyre Peninsula Adult Education Centre
Flinders Street Adult Education Centre
Minda Home
Point Pearce Aboriginal School
Raywood In-Service Centre
South Australian Institute of Technology, Whyalla
Western Region Education Office, Whyalla
Western Teachers College
Whyalla Technical College

APPENDIX K

NON-GOVERNMENT

Collegiate School of St. Peter
Methodist Ladies College
Sacred Heart College
St. Anthony's School, Edwardstown
St. John's Christian Brothers College, Whyalla
St. Joseph's School, Hectorville
St. Joseph's School, Port Lincoln

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