



ENVIRONMENTAL EDUCATION PROJECT

NEWSLETTER No.3

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OCTOBER, 1978 DNEY

"Cheshire Puss," she began rather timidly ...

"Would you tell me, please, which way I ought to go from here?"

"That depends a good deal on where you want to get to," said the cat.

"I don't much care where," said Alice.

"Then it doesn't matter which way you go," said the cat.

Lewis Carroll, *Alice's Adventures in Wonderland*

Are we like Alice? Who will be Cheshire Puss?

In these constrained times of movement away from science and back-to-the-basics, there is need for a consensus in environmental education for pragmatic as well as educational reasons. There is no formal mechanism for achieving such although a National E.E. Council was proposed in CDC's 1977 Study Group Report. The purpose of this Newsletter, national conferences such as the forthcoming Gould League Conference, and improved communication between (and within!) states is to help establish at least an informal consensus.

The unorchestrated concordance in the articles below suggests that we may be moving towards such a consensus. Educators are no longer arguing over which subject should claim E.E., at which level it should begin and the undesirability of dealing with emotions and controversy. They seem to have accepted that:

- : E.E. ought to exist within all subjects at all levels
- : E.E. must involve attitude development ... at least
- : E.E. could involve values, intentions and behaviours
- : E.E.'s domain includes not only the living but also non-living and socio-cultural components

The following articles are not offered as "the position" for E.E.; all are shorter than the authors would have liked. However they are offered as a basis for further debate. I hope you will take up the challenge in this Newsletter and/or pass its ideas onto others in the environmentally quiescent fields of English, Languages, Mathematics, Physical Education, Pre-school and Junior Primary.

LETTERS TO THE EDITOR

Dear Sir,

In teaching a course called *Methods of Teaching Environmental Sciences*, I have found the following difficulties:

- : Finding E.E. models which are intellectually satisfying and have some hope of being applied. Currently I have some enthusiasm for a model by Stapp and Cox which looks as if it has real potential.
- : Finding adequate philosophical models used by teachers.
- : Finding adequate schools with a considered environmental philosophy.
- : My students find trouble with : "At what levels do we teach what?"
- : Values education - which seems to be given little thought by those in E.E.

I'd love to hear any comments on the above.

National Project Director: John H. Smith

WHAT IS ENVIRONMENTAL EDUCATION?

1. ARTHUR LUCAS - currently chairman of School of Education at Flinders University. Arthur's 1972 doctorate thesis analysed both E. and E.E.

(Picture taken before E.E. Thesis!)



The term "environmental education" makes literal sense when used in a number of different ways. These uses can be contained under the following main headings and combinations of any two or all three:

Education about the environment
Education for (the preservation or enhancement) of the environment
Education in the environment

The first two are characterized by their aims and the third by a pedagogic technique. In almost all real cases, the entity whose environment is being considered is human, and there are important logical and practical differences between programmes concerned with the environment of human groups (from the species to smaller groups such as states or families) and individuals.

Examples of most possible logically sensible uses of environmental education exist, but I believe that any E.E. programme should include at least the for and about components and that it should be concerned about the environment of individual humans. This does not mean that the in aspects should be ignored, or that the programme should be individualistically hedonistic: an extreme human species referent leads to undesirable ethical implications.

I believe that "environmentally educated" persons should be concerned about the impact of their actions on themselves and on others, including future generations; should be able to understand the interactions between physical, biological and social components of their environment, and between them and these components of their environment; and should be able to make informal predictions of the consequences of their actions, while recognising that there is no simple touchstone of "environmental impact" to judge a proposal. (Note that

"other people" are part of an individual's environment and under my proposals the effect of a proposal on the health, livelihood and enjoyment of others would need to be considered along with the possible effects of an action on air, water and the land.)

I do not believe that it is necessary to reach the aim of an "environmentally educated" person through specific courses in "environmental education". Indeed I believe that there are potential dangers in early courses that combine elements of the natural and social sciences with aesthetic issues, just at there are dangers of the uncoordinated use of "relevant" topics in existing courses. What is needed are conscious decisions at the system (*i.e.* school, state and/or national) level on the importance to be placed on E.E. among the broad goals of schooling and on the coordinated activities that satisfy these goals.

The arguments that lead to these beliefs are elaborated in my forthcoming book, *Environment and Environmental Education: Conceptual Issues and Curriculum Implications*, Melbourne, Australian International Press and Publications, 1978. Additional argument concerning interdisciplinary study in E.E. appears in my chapter in *Education and the Human Environment*, ed. R.D. Linke, Canberra, Curriculum Development Centre, 1977 (pp. 179-192).

2. DON PERRIN - currently officer-in-charge of the Stanley River Field Study Centre, Qld., has to be an environmental educator to the teachers who visit daily.



What is and what is not E.E. are questions to which we as environmental educators should refer daily - if we are to produce results. How we answer them should determine what we do tomorrow. We don't have to wait a decade for results to show; behaviour can change overnight. Mary can decide to buy reusable bottles rather than cartons. General aims can be subserved by particularized, evaluable aims. If, however, our answers are obscure or if we avoid them we will never be able to

evaluate our programmes and so guide to-morrow's decisions.

What the words "environmental education" should mean among us (for those like myself interested in some unity) is what we agree they will mean. Here is what they mean to me.

On my shelf are booklets on Smoking Education, Meat Education, Music Education, Environmental Education. Accepting that the word "education" has to do with life-long experience and social self-development, what is the identifiable essence of each kind of "education"? We know what the Meat Board wants, we know what Smoking Education is for, but what of the adjective "environmental"? Is it simply education about the environment so as to legitimize say, field studies in purely geology, art, or anthropology? Only the ingenuous would think so. No, the history of E.E. shows its essence to be safeguarding and improvement of the environment. Just what those words mean, and just what the problems are, have to be determined in the course of this new kind of education by each nation, state, and group, according to its culture, according to its heart-searched values. The head only reproduces what the heart creates. The Belgrade Charter said in 1976: "Identify which actions will ensure the preservation and improvement of humanity's potentials and develop social and individual well-being in harmony with the biophysical and man-made environment".

So I am saying that E.E. is indispensable in the rounded education of the 20th century human animal. Its object should be the motivation of the will to act for solution of environmental problems, local and global. All programmes in the name of E.E. which are not clearly contributory to this central notion are, in my opinion, not valid.

3. RUSSELL LINKE - currently Senior Lecturer in the Educational Research Unit at Flinders University; he was chairman of CDC's E.E. Committee in 1975. His surveys *Environmental Education in Australia, Parts I and II* have been submitted to Ed. Research Dev. Com.



Write to E.R.D.C., Box 826, Woden, 2606

Environmental education refers to the development of a state of mind; it is not an academic discipline in that it does not seek to impart any particular body of knowledge or technical skills, nor does it refer to an educational technique or teaching approach, although it may involve, as mediating processes only, both of these things. What it really involves - characteristically, invariably, uniquely - is the development of a conservationist ethic, that is, a concern for the long-term future of mankind and for the quality of man's existence. In this sense it is anthropocentric (not even an ardent conservationist would be too upset at the extinction of malaria-carrying mosquitoes or anthrax-inducing bacteria), but only as a focus of direct concern, for the quality of man's existence is influenced by every aspect of the world around him - of the universe, for that matter - and for an individual to spoil any part of it reduces the potential enjoyment of that part for others.

Clearly this is not an operational definition for classroom teachers other than in providing a perspective from which to examine particular issues. Which issues, is not important - it is the perspective which determines whether an issue is discussed within a context of environmental education or not. Thus to talk of aluminium production from bauxite makes no contribution in itself to E.E., but in the interest of the huge energy requirements for this process or of a limited mineral supply, the discussion becomes inevitably concerned with long-term conservational issues and hence assumes the fundamental characteristic of E.E.

A final word of caution is relevant here: there is nothing intrinsically good or bad about any particular conservational issue or conservationist action. While there may be objective measures of beneficial or detrimental outcomes these are often difficult, even impossible, to predict over long time periods (an example is the present international debate about the culling of seals in the North Sea - should they be allowed to overpopulate and waste valuable food resources, or is the potential loss of food insignificant or irrelevant?) and like religion the "ethic" of conservation is prone to be used for selfish purposes in promising universal and/or eternal salvation.

4. DAVID STOKES - currently head of the Department of Environmental Studies at State College of Victoria, Rusden, he has been commissioned (with J.Womersley) to write a conceptual framework for E.E. for this Project, which should be available early in 1979.

The literature in education, science and geography abounds with definitions of environmental education. For years scholars have said what E.E. is and what it isn't. At conferences on E.E. most of the time is spent arguing about what E.E. is rather than how it should be put into practice.

There seem to me to be two basic problems. One is to get people to read what has already been written about E.E. and the second is to translate what has been written into a workable model for E.E. in schools.

The account of Environmental Education and Training, prepared for the UN Environment Programme and published in UNEP Report No. 1, 1978¹ summarizes what needs to be said about the nature of environmental education and the definitions, objectives and guiding principles. It also points out the distinction between Environmental Education and Environmental Training, a point of clarification which has been long overdue.

Stenhouse² has said that there appear to be three ways of teaching E.E., though there are major variations on all of these.

- (a) Treat E.E. as a topic in a general or liberal studies course.
- (b) Locate the heart of E.E. in the teaching of the sciences.
- (c) Regard E.E. as an emphasis which might express itself throughout each subject of the curriculum.

I believe none of these is adequate but any one of them is better than no approach at all. The first has the disadvantage that it may only reach the students outside the professional streams. There is also the danger that the students who are presented with this material are a fairly "anti-school" group and a large number of them may reject E.E. because it is associated with school. The third disadvantage is that it packages E.E. into a separate compartment for a particular time to be forgotten like many other topics taught in school. The second approach although attempting to integrate the sciences, suffers in that it

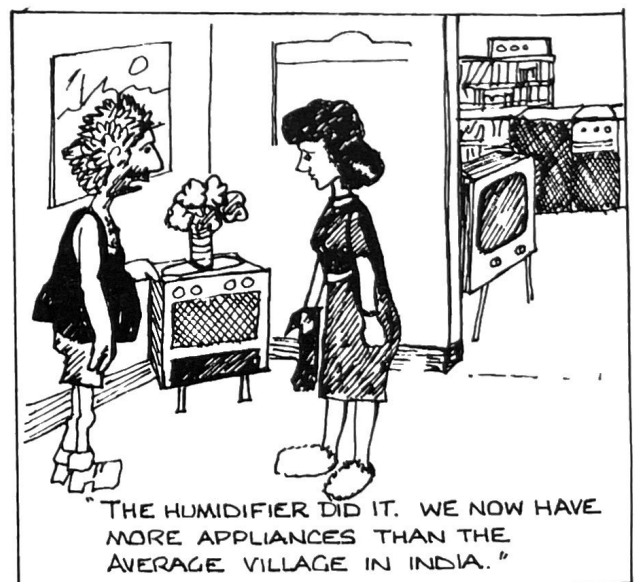
may only expose the science stream to E.E. It is also possible that the better science students have opted for Biology, Chemistry, and Physics because of tertiary aspirations.

The third approach may lead to the dangerous conclusion that there is no skill or knowledge base to E.E. and that it is just a series of attitudes which can be achieved through any subject area. This approach may vastly improve the subjects themselves in making them more relevant but this is not E.E.

What is required for E.E. is a fourth approach which is really a synthesis of all the approaches suggested so far. This approach influences the subjects across the curriculum, both vertically and horizontally, and integrates them as part of a total curriculum plan. A key feature of this curriculum plan is that some proportion of the curriculum is devoted to a real world study in the local community. This approach will not require a watering-down of the skills and knowledge acquired by disciplines, rather the reverse will be true. It will not require that teachers teach attitudes about controversial issues although it will involve a value clarification exercise for both students and staff. However it will require that teachers and education will have to examine real world issues.

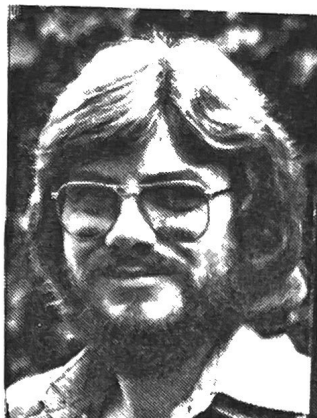
¹ UNEP Report No.1, 1978 - available from Dept. of Environment, Housing and Community Development, Box 1890, P.O., Canberra, A.C.T. 2601.

² Stenhouse, L. p.38 in Linke, R.D. *Education and the Human Environment*, UNESCO Seminar Report, CDC 1977.



"REAL WORLD" APPROACHES TO E.E.?

1. NOEL GOUGH - currently Senior Lecturer in Curriculum and Teaching at State College of Victoria, Rusden, he is interested in the contribution E.E. can make to Home Economics.



An elaboration of his theme can be found in "Affective Learning: Environmental Ethics and Human Ecology" in *Illinois Teacher*, May/June, 1977.

When the Environmental Teachers Association (Vic.) was first established, it was claimed that it would be "of interest to teachers of every subject related to the environment - ..geography, economics, science, biology, chemistry, physics and earth sciences" (*ETA Newsletter* No.1, 1977, p.2).

Apart from the disciplinary chauvinism in the suggestion that E.E. is chiefly the concern of natural scientists, the statement ignores what may be the most significant school subject for E.E. namely, home economics. Unfortunately, the ETA statement is not an isolated case. Equally unfortunately, home economics teachers may only have themselves to blame if they are overlooked in E.E. for, until recently, environmental awareness has been conspicuous by its absence in home economics education. This is partly the fault of home economists in industry and commerce who have been concerned with the short-term costs and benefits for families of technological innovations and the products which arise from these innovations, virtually ignoring the environmental impact of the resources spent in saving a little human labour.

Home economics teachers are scarce in the ranks of E.E., and I would urge readers of this Newsletter to do all they can to reverse this situation. E.E. needs home economics, because home economics deals with many everyday decisions and actions which have environmental impact. It is, after all, the housewife who not only consumes for herself, but buys a large proportion of the family's items of consumption, washes most of their clothes, and disposes of most of their rubbish. It is she who collectively can do the most

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to reduce the deleterious effects of the production, use, and disposal of consumer goods on the quality of our environment.

At the very least, it is important for other teachers engaged in E.E. to try and ensure that home economics teachers are not undermining their efforts since, whether or not home economics teachers stress the environmental consequences of consumer decisions, the fact is that such decisions do have environmental consequences. Consider, for example, the home economics teacher dealing with the topic of convenience foods; the home economics teacher's attitudes to the environmental consequences of the use of packaged foods might complement those of an environment teacher, but they might also be conflicting or (and, perhaps worse) the home economics teacher might ignore environmental consequences altogether.

A balanced programme in home economics education would include (with roughly equal emphasis): Family economics and home management; human development, foods and nutrition; design, textiles and clothing; and housing. Every one of these topics is relevant to E.E. Indeed, in one sense home economics is E.E., but with its main focus on the near (man-made) environment.

Should environmental educators find that home economics teachers are seemingly unaware of their role in E.E., the following is offered as an authoritative reminder of the nature of home economics:

"Home Economics works through family to effect an optimum balance between people and their environments. Home Economics accepts the challenge of helping people to adjust to change and to shape the future. The core of Home Economics is the family ecosystem. It is the study of the reciprocal relations of family to its natural and man-made environments, the effect of these singly or in unison as they shape the internal functioning of families, and the interplays between the family and other social institutions and the physical environment." (From *Home Economics - New Directions II*, an official statement of purpose and priorities for the profession by the American Home Economics Assoc. *J. Home Econ.* May 1975, p.26).

Clearly, environmental action begins with the individual in his/her everyday home and family life - and that is precisely where home economics educators can be most influential.

2. ALLEN STROM - currently retired from working for his living to living for his work (of promoting E.E.). Allen was a teacher, then Chief Fauna Officer with NP&WS and more recently Conservation Adviser to the NSW Ed.Dept.



The term "environmental education" is comparatively new in our schooling system, but resource exploitation has probably been an aspect of education for some time. Unfortunately, an evaluation of resource use is still far from being the vital feature of education that it merits.

E.E. should aim to develop ... environmental awareness .. an understanding that environment is the space and its contents around us that provides the quality of our living, and

an appreciation that without effective resource management, quality of living must deteriorate and even threaten our very existence.

It is imperative to remember that we live by using the resources of nature and that protection *per se* is as self-defeating as unmanaged exploitation. Nature is a great cup containing all the resources which we need in order to live and to live with quality; if the present quality of living is to be maintained or bettered then the resources in all their diversity must continue to give a sustained yield. This is the task of management and the major concept which E.E. must aim to establish.

E.E. should be distinguished from environmental studies which aims to produce problem-solvers ... professional or otherwise. Neither does E.E. aim to solve the problems of particular environments even though it may be determined to produce an awareness to such problems. Frequently the causes of environmental problems are complicated; nevertheless, the environmentally aware citizen will be more insistent upon the problems being resolved. Despite this fact, E.E. is not the means of pushing a particular cause, or of indoctrinating for a particular attitude towards resource use. Those who use propaganda to

substantiate a particular resource use procedure must not be permitted to cover their actions with the title of Environmental Education.

It is not uncommon to regard certain natural and social science programmes as being E.E. This is particularly true of ecological studies. The truth is that many concepts arising from science and social studies do provide some building blocks for E.E. programmes, but geography provides the structures and history. The time flows by which the existing circumstances have evolved; expression through word, material, movement, line and colour enable the learner to bring ideas together for consideration and exposition; measurement and calculation are essential to many environmental determinations.

E.E. is multidisciplinary because all disciplines are involved in determining what constitutes the environment and the processes of resource use and management.

The initial E.E. programmes must be based on the region to which the learner belongs ... the "home environment". The techniques that he should learn from these initial programmes may then be applied in assessing other places visited, or other environment problems for which he is called upon to make a judgement. All of us as part of the community are either making judgements on environmental matters, or else allowing someone else to make the judgement for us.

Whilst the introduction to E.E. and development of a programme should be classroom based, personal environmental encounters in the field are essential. Whether such encounters are based on excursion procedures or on assignments for individuals, must be decided by the educators or the system under which the educator works. Once again, the initial learning technique should be based on "home territory" and should also aim to make the learner aware of input of resource use and management in his environment.

*I think that I shall never see
A billboard lovely as a tree,
And unless the billboards fall
I'll never see a tree at all.*

Ogden Nash

3. LES JOHNSON - currently an art consultant for the S.A. Education Department, he represented the Australian Society for Education through Art at the Perth E.E. Conference, 1978.



It appears to me that much of the current practice of environmental education is essentially negative in nature. Simplistically stated, the approach can be summarised in a pattern like ..

The world is a mess ... so ...
DON'T cut down trees
DON'T litter
DON'T waste fuel
DON'T pollute
DON'T ... etc.

Perhaps the same messages can be communicated more effectively in a more positive framework.

For a very large majority (99% or more) of Australians the environment is man-made or man-affected and it is shared with others. This it seems must become a major premise on which to build programmes of education that are designed to develop an awareness of the complex inter-relationships between man and his environment. Most Australians aspire to live on a "quarter-acre block" in a villa style dwelling. This must therefore be worthy of consideration as a major setting for environmental education. Such issues as industrial design, town planning, suburban architecture and suburban living then emerge as matters for concern, along with ecological balance, resource and energy management, conservation of the natural environment and so on. Potential for education in this vein exists in the programmes of design education initiated in S.A. and enjoined in various ways in other states. However development is hesitant and support in schools spasmodic. Selective support to aspects of this area of education could do much to develop important cognitive facets of the aims of environmental education.

Beyond these cognitive facets, a major concern in environmental education is in the area of values education. In terms of the man-made environment aesthetic values have particular relevance.

These are accented in current structures of education collectively described as "the arts". The role of the visual arts is perhaps obvious but the "people to people" implications of the performing arts - drama, dance, mime and music - are neglected. Many opportunities to develop the environmental value issues of living in suburbia (or elsewhere of course) are to be found in arts education.

* * * * *

The following from "The Plain English Speaking Award, *The Age*, Melbourne, 1978, could be a useful introduction to a discussion on values.

A parable has been written about us: "Ungrateful Children of God". It tells of a man who went to God and complained that this earth wasn't good enough for him. God asked him if the moon in the sky was not a source of pleasure, if the blue hills in the distance were not beautiful, but the man answered "no", saying that they were common and ordinary. God showed the man the gorgeous shapes and colours of the tropical fish, but the man was not interested. God took him under a shady tree and commanded a cool breeze to blow and asked the man could he not enjoy that, but the man remained unimpressed. God showed him the lakes, the caves, the geysers, the sand-dunes in the deserts, the snow in the Himalayas and the crystal water falls, and asked the man had He not made this planet beautiful, to delight the man's eyes, ears and even stomach, but the man still clamoured for a heaven of pearly gates. "You presumptuous, ungrateful child," God said. "So this planet isn't good enough for you. I will therefore send you to hell where you shall not see sailing clouds or flowering trees, not hear bubbling streams, and there you shall live till the end of your days." And God sent man to live in a luxurious apartment in a crowded city.

* * * * *

Kevin Blachford of the Curriculum and Research Branch (Vic.) has produced a paper, *Approaches to Values Education*, under Round 1 E.E.P. grant, which should be available soon.

* * * * *

Live simply,

so that others may simply live!

IS E.E. A BANDWAGON?

1. PETER PRITCHARD - currently officer-in-charge of the new Whipstick Environment Centre in Victoria, he is concerned that E.E. might lose its support before it has a chance to prove itself in schools and in the wider community.



Is E.E. in Australia a political football to be kicked about by "greenies", political candidates and empire builders? Or is it a new and critical component in community education?

The seventies revealed a multitude of campaigns being fought over environmental issues and that particular bandwagon was overcrowded until the Treasury guillotined many funds to organizations and environmental protection in general.

I believe E.E. will not gain impetus in Australia until educational leaders, the politicians and the electorate in general - blue and white collar workers - have sufficient opportunities both to enjoy and understand their environment. Local Chambers of Commerce, unions, factories, and tourist information centres could distribute simple E.E. kits showing opportunities close at hand - in both the local and national sense. Another embarkation point might be field study centres set up for adults as well as children.

Such approaches would be far more effective than having the community continually exposed to just the negative aspects - as seems to happen currently.

Any such moves would cost money and effort and would certainly test whether or not E.E. was a bandwagon. ***

MOTTOES, CARTOONS, POEMS

Short, bright ideas for the Newsletter are welcome, e.g.

We are used to the bad guys doing the wrong things, but not the good guys.

Is there an artist who would contribute sketches for the Newsletter?

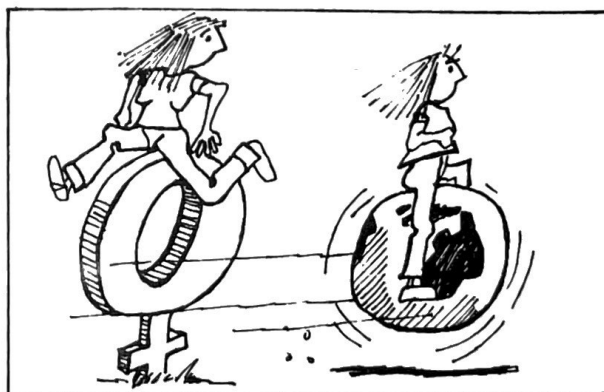
2. FRANK HADDON - currently SLO for this project and star of "Look, Laugh, Listen and Learn". These ideas have been extracted from a paper, *How do you feel about E.E.?*

Everywhere one looks today in educational material the word "environment" appears. There is now "Environmental reading" and "learning through the Historical Environment". One could suppose that environmental education has become a major part of modern educational philosophy and structure. Is this really so, or is the word "environment" just the fashionable icing on a stale educational cake?

Traditionally, the natural environment has been the most important aspect of environmental education. A pre-requisite of any work on the environment has often seemed to be a degree of zoology or botany, and this led teachers to say that they did not feel competent to teach about the environment.

However, once it is accepted that creating environmental awareness does not require an enormous store of knowledge, it is interesting to consider what are desirable precursors to learning and teaching about the environment. For many people it is just an extension of childhood training which considered outside influences as much as considering oneself. People who have had their attention drawn to factors such as Man's total dependence upon nature, the effect that Man has on nature and the effect it has upon Man, are more willing to accept that an understanding of the management of natural resources is an absolute necessity for the continued well-being of Man as a species. For others, there is an awakening realisation that things have changed in their lifetime and that if accelerated change continues then the following generations will experience a world markedly different from the present.

continued



For some, whose lives are chained to the ethos of economic and technological growth, the thought of a stable economy, with no annual increase in gross national product, is a heresy, dooming the land to a social and political damnation where the standard of living cannot be measured in material gain.

One of the most satisfying developments in environmental education in recent times has been the interest shown in the effect that the environment has had upon the historical development of Australia.

The spectrum of environmentalism ranges from the doomsday believers who expound the dictum of "preserve or perish", to those who are occasionally and moderately concerned about the environment when they discover their favourite fishing spot is covered with concrete. The doomsdayers believe the answer is in immediate and total revolution: the *laissez-faire* extollers convince themselves that governments and legislation will cure all environmental ills. Somewhere between the two are those who are concerned about the depletion of natural resources, and who see the answer in a slow but consistent evolution of economic ideals, in an education system which allows the child to develop environmental awareness with all its connotations and a legislative system which allows a government to make decisions for the long-term benefit of the nation, rather than for short-term electoral benefits.

Environmental education comes down to a personal commitment. It includes a commitment to the environment and to education in general. It relies upon a realisation of the necessity for some gradual change to the social and economic bases of our lives. It does not feed on pessimism but on an optimistic view of the future based on continuing personal involvement with developing environmental awareness. It does not see subject areas as barriers to this awareness but as avenues of discovery, all blending to develop a picture of Man's place in the natural system. There is no one right answer or one correct method but there is a conviction that each individual has the right to experience an education giving sufficient understanding on which to base attitudes and make sound judgements. While environmental educators believe in the absolute necessity of understanding

Man's total dependence on nature, and in the evolution of a philosophy which understands Man's role in the management of natural resources, they also realise that individuals must develop those judgements and philosophies for themselves, through a planned and structured system of education, not through an emotional and unsound indoctrination.

POLICIES IN ENVIRONMENTAL EDUCATION

- : *The Donga at Enfield*, a video tape showing the evolution of a primary school's policy in E.E. was funded under Round 1 grants and should be available in the new year.

However, no other Australian examples of school policies in E.E. have yet been sighted. If you know of one, please forward a copy.

- : The Tamagawa Gakuen, a private school in Tokyo that caters for children from junior primary to Ph.D. level, has this to say about Nature (just one aspect of its extensive and fascinating philosophy).

"Hills, valleys, woods and ponds, and many flowers are seen all year round on the 300 acres of the campus at Tamagawa. Every morning and evening, the Tanzawa, Hakone, and Chichibu mountains can be seen for quite a distance. Thus, all the students appreciate their 'student life' which is surrounded by nature. This kind of natural life is very precious in this modern age which has threatened destruction of nature through many kinds of pollution. The influence of nature on the minds and bodies of our young people is almost immeasurable. The appreciation of nature makes natural and rich human minds, open and pure hearts, and at the same time, it builds strong and powerful courage in them so that they will be the possessors of undefeated strong wills."

- : Queensland and W.A. state Education Departments have policies on E.E. and at least two other states are currently developing theirs. Have any of the independent schools systems made any moves?



EDUCATION DEPARTMENT POLICIES IN E.E.

Queensland 1977

The upsurge of interest in E.E. led to the establishment of a Coordinating Committee on E.E. which issued a policy paper.

"In setting down guidelines for environmental education in Queensland schools, the Department aims to:

- : introduce the pupil to his local cultural and natural environments both past and present, and help him to realise that he is part of them;
- : develop in pupils an understanding of how man is using and mis-using his resources;
- : provide an opportunity for pupils to develop field skills through environmental problem-solving;
- : provide an opportunity for pupils to develop social and physical skills through adventure and challenge;
- : assist pupils to develop and review attitudes, values and sensitivities conducive to concern for a wise use of the environment; and
- : assist pupils to develop a realisation that the solution of environmental problems often lies in group and political action.

Within this framework the Department encourages help from all bodies who are interested in environmental education. Private schools and organizations have the use of Department Field Study Centre facilities. Departmental staff have assisted these bodies on numerous occasions and will continue to do so."

Western Australia 1977

Although many courses in schools are related to the environment, it is only quite recently that the term "environmental education" has become part of the everyday vocabulary of education. Environmental education has come to mean different things to different people. It is the purpose of this statement to define the meaning and the implications of this term for education in Departmental schools in Western Australia.

The environment consists of the physical factors such as land, water, sea-bed, atmosphere, sounds, odours, tastes and radiations, living things, aesthetic factors and other factors which in their

inter-relationship affect animal and plant life. That is, it is the natural and man-made objects and conditions which surround living things or the aggregate of the external factors which in some way influence the life of a living thing.

In 1976, at a meeting of UNESCO in Belgrade, a document known as the Belgrade Charter was produced as a framework for environmental education. In the Charter it is stated that there is evidence of increasing deterioration of the environment in some forms on a worldwide scale. There is need for a new ethic supporting attitudes and behaviour for individuals and societies which are harmonious with humanity's place within the biosphere and which recognizes and sensitively responds to the complex and ever-changing relationship between man and nature and between man and man.

Therefore, concern for the quality of the environment and consideration of the consequence of environmental preservation and change are significant issues for our society and should be recognized as important parts of the school curriculum.

The objectives of environmental education as set out by the Belgrade Charter are to help individuals and social groups develop:

1. Awareness and sensitivity to the total environment and its allied problems.
2. An understanding of the total environment and its associated problems, and humanity's critical responsible presence and role in it.
3. Attitudes of concern for the environment and the motivation for actively participating in its protection and improvement.
4. Skills for evaluating environmental measures and educational programmes in terms of ecological, political, economic, social, aesthetic and educational factors, and skills for solving environmental problems.
5. A sense of responsibility and urgency regarding environmental problems to ensure appropriate action to solve these problems.

The Education Department considers that environmental education refers to an approach to education far broader than that encompassed by terms such as

"conservation" and "pollution". The environment in which the student is developing should be used to give relevance to all areas of learning by providing concrete and meaningful examples. By a variety of appropriate examples an awareness of the environment will be generated in the student. Through this awareness a student will be more likely to recognize the importance of, and changes in, the environment itself. No single institution or subject area within an institution should assume full responsibility for education on environmental issues. Environmental education does not refer to a single course or subject to which a student is exposed at set periods in the school timetable. All subject programmes should contain elements which relate to the unique features of an environment other than those normally experienced by the student. Environmental education provides relevance to educational programmes and, in addition, includes elements of the quality, appreciation and use of the aesthetic, the social, the recreational, the cultural and, in particular, the physical environment.

The classroom teacher is the key to a worthwhile environmental component in the curriculum by structuring an atmosphere in which accurate and objective information can be examined. This requires an appreciation of the broad concept of environmental education and active involvement in its incorporation into the school life of a student. Environmental education should become an integral part of the curriculum.

The development of this broad concept of environmental education will involve students in discussion and a study of the environment in thoughtfully designed classroom activities and by taking students into areas adjacent to the classroom and into the local community. In addition, the Education Department encourages teachers to provide experiences in environments different from those inside the school and in surrounding areas by encouraging excursions, field trips, tours, visits, exchanges and camps where these are used to provide unique worthwhile experiences.

SUBSCRIPTIONS for 1978/1979 are \$3 (or an exchange Newsletter) to Project Office and made payable to CDC - Canberra. If an asterisk appears here then subscriptions are outstanding. Please forward with information asked for on Newsletter No.1 if you wish to receive more Newsletters.

RESOURCES

1. One of the Australian E.E. conference reports worth reading is *Education and the Environmental Crisis*, edited by J.Evans and S.Boyden and published by the Aust.Academy of Sciences in 1970 (now out of print). In it William Stapp outlines a 9-phase strategy for school-based curriculum development in E.E., Earle Hackett proposes some new approaches to infant education and Beverly O'Neill compares syllabuses from primary and secondary schools across states. It is quite heartening to reflect on the changes that have occurred in each state in the last 8 years!

Russell Linke's surveys (see p.3) in 1973/74 looked in detail at syllabuses, educational materials, and teachers' perceptions of E.E. and are also important base documents.

2. *Environmental Activities Manual*, Vols. 1-6 edited by W.Stapp and D.Cox, Set \$US10, from D.Cox, 32493 Shady Ridge, Farmington Hills, Michigan, 48018, U.S.A.



Vol.1 - Concerning Spaceship Earth - E.E. philosophy, a model, teacher guidelines to implement the model, resources, index to activities.

Vol.2-6 - Grade level activities developing the 5 major concepts - Ecosystem, Population, Economics and Technology, E.Decisions and E.Ethics, through problem-solving, value clarification and environmental encounter activities. A volume for each of Lower, Middle and Upper Elementary, and Junior and Senior High Schools.

This manual appears most promising and answers some of the questions posed in the letter to the editor. Has anyone

tried it out in a school situation? A review would certainly be useful.

3. BOOKS

- : Bibliographies are too long and lack sufficient information to help busy people make a selection from them. However, one that lists journal articles, from a wide range of sources, under E.E., E.E.-Aims and Objects, E.E.-Correlation with other Subjects, E.E.-Study and Teaching, by J.Lee does look useful and is available from E.H.C.D. Box 1890, P.O. Canberra, A.C.T. 2601, as Library Bibliography No.6.

- : A book that is full of thought-provoking ideas and looks worthy of buying is *What makes Education Environmental?* by McInnis and Albrecht, Data Courier Inc.

4. FROM THE A.C.T.

- : *Environmental Studies for Primary Schools*, J.Irwin, 1977, A.C.T., Schools Authority, P.O.Box 20, Civic Square, 2608. This is a delightful 30-page account of a real class's activities in a nearby playground, roadside park garden, pine forest, creek and grassland. Teacher guidelines are woven through it.

- : *A Guide to Outdoor Education in the A.C.T.*, 1978, E.F.Westphal (ed.) A.C.T. Outdoor Education Association. This 50-page booklet will be sent to those on the Project mailing list (i.e. those who have subscribed!)

5. JOURNALS/MAGAZINES/NEWSLETTERS

Most Environment Centres and organizations publish newsletters that deal with some facets of E.E. but mostly with facets of the environment. However E.E. publications worth knowing about are:

- : *Journal of Environmental Education* from Helders Publ. 4000 Albermarle St. NW, Washington D.C. 20016, U.S.A. at \$19.62 per annum (4 issues). Research journal largely concerned with the development and measurement of environmental attitudes and behaviours.
- : *BEE - Bulletin of Environmental Education*, from Education Unit, Town and Country Planning Assoc. 17 Carlton House Tce. London, SW1, at £5 per annum (12) Teachers' magazine with particular emphasis on activities in the urban environment.
- : *EINGANA*-from Environment Teachers Assoc. 28 Hunter St., Ferntree Gully, 3156, at

\$10 per annum (6). Newsletter with information on events, publications (such as *Eco-Units*) and curriculum developments, particularly in H.S.C. Env.Sci. *If you know of others, please send details with short comments.*

6. CHILDREN'S PICTURE BOOKS

What effect do picture books have on the development of young children's attitudes? Is the brilliant Dr. Seuss book, *The Lorax*, (also in film) depressingly negative to 5-year-olds? Is it more appropriate to high school students? Recently Puffin have published *Dinosaurs and all that rubbish*, by M.Foreman and *V.I.P. Very Important Plant*, by T.Greenwood, both aimed at developing environmental attitudes. Have you come across any others? If so, how about a brief review of your favourite one or two?

EVENTS

NATIONAL GOULD LEAGUE CONFERENCE FOR ENVIRONMENTAL EDUCATORS (Nov.29-Dec.1, Ku-ring-gai CAE, Sydney.) Theme - P.R. - Publications and Resources for E.E. All states have been invited to present position papers. The national applicability of the wide array of school level resources will be examined as will methods of publicizing E.E. and Gould Leagues to the general public. Visit to Longneck Lagoon Field Studies Centre. Contact: David Tribe, Public School, Burton St., Milson's Pt. 2061, Phone (027)927 934.

PROJECT NEWS

The SLOs met in Adelaide from Sep.19-21 to compare manuscripts from Round 1, applications for Round 2 grants and to review the Project's progress. The wide diversity of applications was quite exciting with most areas represented. The Management Committee met on Sep.22 and will meet again on Nov.10 to allocate grants for Round 2. Applicants will be notified of their success or otherwise about Nov.16, but it is clear that a number of worthy projects will miss out because nearly 100 applications were received and only \$20,000 is available.

Industries such as energy, forestry, tourism, etc. could benefit by helping professional educators to produce balanced materials.

If you know of any organization or person who might be interested in funding a specific project, could you let them and/or me know?

