Sustaining Development of Environmental Education in National Political and Curriculum Priorities

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Introduction - sustainable development

The purpose of this paper is to explore the relationship between national economic and political priorities and environmental education policy formulation and curriculum strategies. This relationship will be placed in the historical context of developments in environmental education in Australia from 1970 until the present and will be analysed in terms of the ideological and pedagogical stances implicit, and explicit, in the developments during this period. I will argue that the emphasis throughout the period has been to sustain the development of environmental education without any questioning of why, what and how this development should occur.

'Sustainable development' has become a slogan for governments, industry and conservation groups in recent times. It was the subtitle for the *World Conservation Strategy* (IUCN 1980) and the *National Conservation Strategy for Australia* (DHAE 1984) - living resource conservation for sustainable development - and was popularised in the report of the World Commission on Environment and Development, more commonly known as the Brundtland Report or *Our Common Future* (WCED 1987). The definition of sustainable development given in the *World Conservation Strategy* (IUCN 1980: section 1.3) and repeated in the *National Conservation Strategy for Australia* (DHAE 1984: 12) is as follows:

> Development is...the modification of the biosphere and the application of human, financial, living and non-living resources to satisfy human needs and improve the quality of human life. For development to be sustainable it must take account of social and ecological factors, as well as economic ones; of the living and nonliving resource base; and of the long term as well as the short term advantages and disadvantages of alternative actions.

These definitions of sustainable development fit into an environmentalist worldview Turner (1988, cited in Huckle, 1991, p. 46) calls 'accommodating' technocentrism: 'a conservationist position, which rejects the axiom of infinite substitution and instead supports a "sustainable growth" policy guided by resource management rules' (see Figure 1). Hart (1990, p. 58, citing Slocombe, 1987) includes sustainable development in the stream of

Figure 1

	The Four World Views of Modern Environmentalism
A	"CORNUCOPIAN" TECHNOCENTRISM:
	an exploitative position supportive of a growth ethic expressed in material terms (eg GNP); it is taken as axiomatic that the market mechanism in conjunction with technological innovation will ensure infinite substitution possibilities to mitigate long-run real resource scarcity;
В	"ACCOMMODATING' TECHNOCENTRISM:
	a conservationist position, which rejects the axiom of infinite substitution and instead supports a "sustainable growth" policy guided by resource management rules;
С	"COMMUNALIST" ECOCENTRISM:
	a preservationist position, which emphasises the need for prior macroenvironmental constraints on economic growth and favours a decentralised socio-economic system;
D	"DEEP ECOLOGY" ECOCENTRISM:
	an extreme preservationist position, dominated by the intuitive acceptance of the notions of intrinsic (as oposed to instrumental) value in nature and rights for non-human species.

Source: Turner, (1988), p.1

environmentalism he calls 'plan': 'a rational scientific approach with major planning, research, management and educational strategies primarily aimed at merging economic development with conservation of natural resources. The objective is to create a better environment but without changing anything quickly or fundamentally'.

In Our Common Future (WCED 1987, p. 8) sustainable development is even more obviously described in 'accommodating technocentrism' or 'environmentalism as plan' terms:

Humanity has the ability to make development sustainable - to ensure

that it meets the needs of the present without compromising the ability of future generations to meet their own needs. The concept of sustainable development does imply limits - not absolute limits but limitations imposed by the present state of technology and social organization on environmental resources and by the ability of the biosphere to absorb the effects of human activities. But technology and social organization can both be managed and improved to make way for a new era of economic growth.

The Commonwealth Government has a Working Group on Ecologically Sustainable Development (ESD in the jargon) involving government, industry and conservation groups as part of its preparation for the United Nations Conference on Environment and Development (held in Brazil in June 1992). In the Commonwealth Discussion Paper on *Ecologically Sustainable Development* (DPMC 1990, p. i) yet another definition was given:

Ecologically sustainable development means using, conserving and enhancing the community's resources so that ecological processes, on which life depends, are maintained, and the total quality of life, now and in the future, can be increased.

In addition to these definitions the term is subject to much contestation through the various interpretations placed on it by the multitude of groups using it: some use it to mean *ecologically* sustainable development whereas others mean *economically* sustainable development, and some use it to mean *sustainable growth* (Disinger, 1990, Huckle, 1991, Jickling, 1991). Whatever interpretation is used, sustainable development has become the latest in a series of environmental movements latched onto by environmental educators and in environmental education policy statements.

My concern is that the national policy planning groups in neither environmental education nor ecologically sustainable development seem to be questioning the ideological framework in which they are operating, although there are some individuals who are now starting to raise such issues outside these formally constituted groups.

Sustaining development of environmental education

The history of environmental education at the national level in Australia has been described on previous occasions (see, for example, Greenall, 1981, Greenall, 1987, Greenall Gough, 1991b), so only the essential points for this discussion will be noted here.

Environmental education is one of several adjectival educations which arose in the 1970s as a response to perceived needs in or for society. Unlike most of the others however, with the exception of health education (Colquhoun and Robottom 1990) and perhaps a few others, the rhetoric of environmental education goes beyond training to actually being concerned with education enabling learners to have a role in planning their learning experiences and to develop critical thinking and problem solving skills (Unesco, 1978). Unfortunately the uncritical 'do the right thing' type of training or public education campaign is as rampant in environmental education as it is in other adjectival educations.

Environmental education has its roots in both environmentalism and in education, and has relationships and similarities with science and science education. For example, like much science education, environmental education infrequently problematises or critically examines its roots and the implications of these for its practices.

The origins of the environmental education movement in Australia can be traced to the Australian Academy of Science conference on *Education and the Environmental Crisis* held in April 1970 (which is where the term 'environmental education' had its first formal recognition and use). Environmental education, as the conceptions of it evolved from this and other similar forums, was seen in very instrumental (or rational scientific) terms: 'What is needed is not only a fuller understanding of the biosphere, but a new sense of values, a new perception of our own role and responsibilities in and for the biosphere...Our only hope is that this new understanding may develop through the education of old and young' (Frankel, 1970, p. 8). This approach is perhaps to be expected given that it was the scientists who were calling for environmental crisis of the time. This crisis was being highlighted by people such as Rachel Carson and Paul Ehrlich and through events such as the Torrey Canyon incident.

At the international level scientists were making similar statements to Frankel. Also in 1970, the International Union for the Conservation of Nature and Natural Resources (IUCN) developed its definition of environmental education (as quoted in Greenall 1981, p. 66-67):

Environmental education is a process of recognising values and clarifying concepts in order to develop skills and attitudes necessary to understand and appreciate the interrelatedness among man, his culture and his biophysical surroundings. Environmental education also entails practice in decision-making and self formulation of a code of behaviour about issues concerning environmental quality.

This statement does however suggest a little more than what was envisaged by Frankel; it indicates that there was a perceived need to increase the environmental content of educational programs and to change the pedagogy of the education programs. That environmental education has these two different components was further developed in later Unesco/UNEP conferences and documents.

The environmental concerns of the Australian Academy of Science, the then recently formed Australian Conservation Foundation and other individuals and institutions were reflected in the 1973 (and subsequent) Australian Labor Party platform statement (as quoted in Langmore, 1987, p. 7)): 'This (environmental education) policy aims to facilitate public participation and awareness of the need to preserve the environment by One funding and expanding environment (sic) education and information programs; Two, further developing the environmental education function in the curriculum development centre.' Environmental education first became a priority for federal government educational efforts in 1973, when it was designated as one of five priority areas for curriculum materials development for the newly established Curriculum Development Centre (CDC) of the recently elected Labor Government. From the beginning, however, its development at CDC was subject to political posturing. Educators, especially those in bureaucracies, did not give it the importance its CDC priority status would have suggested. According to the then Principal Executive Officer of the CDC Interim Council (and now Secretary of the Northern Territory Department of Education), many academics viewed environmental education as a cultural rather than an educational priority and several council members (including some directorsgeneral of education) regarded it more as a political priority. In their opinion, the curriculum was already "overcrowded" and environmental education could be accommodated within existing subjects (Spring, as reported in Greenall, 1981).

Because of political problems generally beyond its control, the CDC environmental education program did not really get underway until 1977, and there were not any products from it for schools to consider until 1980. Public concern about environmental matters was strong in the early to mid- seventies, but waned later in the seventies as economic interests took priority. Although the development of environmental education had been sustained as a national political priority of CDC through the seventies, it lost this status by 1980. By the time the CDC environmental education program's publications were appearing environmental education has been deleted from the active program of the Centre: 'The Director and Council believed that sufficient resources had been devoted to environmental education and that other competing areas were growing in importance' (Greenall 1987, p. 9).

A new interest in environmental education was stimulated by the release of the World Conservation Strategy in 1980 which received sufficient political support to result in the development of the National Conservation Strategy for Australia (NCSA) in 1983, but again education was seen in instrumental terms. In the NCSA one of the 'strategic principles' was to 'Educate the community about the interdependence of sustainable development and conservation' (DHAE, 1984, p. 16) and the first priority national action to achieve the objectives of the NCSA, under the heading of 'Improving the capacity to manage' (DHAE, 1984, p. 17), was to: 'Develop and support informal education and information programs ... which promote throughout the community an awareness of the interrelationships between the elements of the life support systems and which encourage the practice of living resource conservation for sustainable development'. This is a very instrumental statement for the task of environmental education (although it was once called 'a new beginning for environmental education in Australia (Greenall, 1985)!). The advent of the WCS and the NCSA marked the beginning of the switch from a scientific rationalist approach to environmental education to an economic rationalist one, but both documents had limited impact or gave little impetus for the development of environmental education policies: they only served to sustain environmental educators' hopes for its development. However these documents can be seen as being of lasting effect given that they also are associated with the introduction of 'sustainable development'.

Another surge of interest in environmental education at the national level was in the late 1980s and was stimulated in part by the World Commission on Environment and Development (WCED) report (1987) which continued to reinforce the instrumental and economic rationalist role of environmental education (WCED, 1987, p. 46): 'Sustainable development has been described here in general terms. How are individuals in the real world to be persuaded or made to act in the common interest? The answer lies in part in education, institutional development, and law enforcement'. The WCED statement also indicates a slide in focus for environmental education which is consistent with its present economic rationalist stance. Whereas the focus for environmental education in Unesco-UNEP documents is social groups and individuals, the WCED focus is entirely on the individual, or 'blame the victim'. This change to a focus on individualism will be returned to later in this paper.

In the Commonwealth discussion paper on ecologically sustainable development (Department of Prime Minister and Cabinet, 1990, p. 19) again education is seen in very instrumental terms:

Public education campaigns can help in modifying behaviour to reduce demand for products with adverse environmental consequences and encourage the use of less damaging alternatives. The emergence of green consumerism attests to the ability of public education to modify consumption patterns. School programs are an important element of public education because they help shape basic attitudes and encourage responsible behaviour at an early stage of development.

Around this time the language of economic rationalism and sustainable development entered the rhetoric of national education policy. The 1989 Australian Education Council (AEC) national goals of schooling included one which states '[to develop in students] an understanding of balanced development and concern for the global environment', and the Victorian Ministry of Education policy on environmental education (1990, p. 11) has

added 'an understanding of the need to balance development and conservation to meet the needs of society' to the usual list of aims for environmental education derived from Unesco-UNEP documents (1978, 1988). However whereas the Victorian statement does include advocacy of informed decision making, development of an environmental ethic and an action orientation for students the AEC document does not and thus sustains a content orientation.

The Australian Association for Environmental Education also embraced the language of sustainable development at its 1990 international conference titled, Our Common Future: Pathways for Environmental Education, where former President Russell Linke 'noted that environmental educators now recognise that they have a role to play in the international debate on environment and development' (Sibly, 1990, p. 1). While there was some questioning of the concept of sustainable development at the conference (but within an accommodating technocentrist philosophy), there was little debate about education for sustainable development or environmental education. Indeed, to date, the pressure for sustaining the development of environmental education in the national political and curriculum agenda, or at least for keeping it on the agenda, has resulted in little questioning of the problematics of either the environmental or educational position implicit, or explicit, in the concept of environmental education being promoted through 'education for the environment' or 'education for sustainable development'. (There are some exceptions, such as my fellow presenters in this symposium, but none of us could be called power brokers in the national political agenda and our effect on government policy statements has been minimal.). It thus seems likely, in the current political and educational climate, that the supposed distinguishing characteristic of environmental education as 'education for the environment' is to become 'education for sustainable development' in the 1990s, as far as national and state level statements are concerned. One is then left to ponder why this change is being allowed to occur without debate within the ranks of environmental education, and education in general, given that the driving force for the movement is becoming more and more economic rationalist in its agenda.

What is the change to 'education for sustainable development' likely to entail? Dargavel and Brown (1991, p. 24) argue that 'If Australia's current round of Ecologically Sustainable Development (ESD) reports and its preparation for the UNCED conference are any guide, inequities [not only between but within countries, although a major cause of environmental degradation] may be ignored; "sustainable development' may well be depopulated of concern for people'. To support this contention they point out that rather than adopting a broad integrated approach between environmental imperatives, social needs and potential for economic development, the ESD process is broken into nine distinct sectors thought to have 'impact on the environment' (1991, p. 24): 'The selection covers the main physical resource sectors, all of which, except tourism, have a predominantly male workforce. It

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ignores the main sectors directly concerned with people, where the workforce is predominantly female: households, health, welfare, administration and services'.

What could this mean for environmental education? The nine sectors thought to have impact on the environment - agriculture, energy production, energy consumption, fisheries, forestry, manufacturing, mining, tourism, and transport - all have potential for ready inclusion in the existing curriculum, or education administrators could argue that these topics are already being covered, so no change is a likely outcome and the environment will continue to be studies as something separate from humanity in Australian schools something quite consistent with the relevant AEC goal for national schooling. Such an experience would not be new for environmental education: it has tended to be marginalised in the curriculum for much of the past two decades, although interest in it has been sustained, at varying depths, at the national level through the period.

Feminism and environmental education

As already noted, the concept of sustainable development is currently the subject of contestation and debate both nationally and internationally. Of particular interest, and relevance to environmental education is the discussion about the role of gender in sustainable development. Brown and Switzer (1991b, pp. 1-2) argue that

Sustainable development is not gender neutral, as many researchers would have us believe. Both traditional anthropology and recent statistical analyses establish that in every society, women and men function in somewhat different worlds. It follows that their respective contributions to the human impact on the environment must also differ...Gender is a core issue in sustainable development...In ignoring gender, there is a global distortion in ecological understanding of human impact on the environment.

They are supported internationally by writers such as Abzug (1991): 'Women are half the world's population yet we have almost no say in the environment and development policies that affect us, the lives of our families and the survival of this planet'. Abzug believes that this situation is as true today as it was 20 years ago when the foundation for most environmental policy was laid at the 1972 United Nations environment conference in Stockholm.

But it is not only in discussions of sustainable development that gender has been ignored: it is also a neglected area in environmental education curriculum and policy. Di Chiro (personal communication, 1991) notes that a computer search of the descriptors 'feminism' and 'environmental education' in ERIC yielded only two articles: one by herself (either 1987a or 1987b, she doesn't say which) and one by Salleh (1989). while accepting the cultural bias of ERIC sampling it is interesting that Salleh is an Australian (but the article was published in the US) and that both the Di Chiro articles were written while she was in Australia (but she is an American). With respect to environmental education Di Chiro (1987b, p. 40) writes:

A feminist perspective of environmental education offers a more complete analysis of environmental problems and therefore a better understanding of those problems and their potential solutions. Such an analysis is political, in that it examines how power relations (in, for example, gender, class, race) shape the world in which we live; it asserts that the 'polity' (human social world) determines and controls how this social world is and has been socially constructed and organised, and hence refutes the myth that the past and present state of the world is a 'natural' and therefore justifiable progression.

Feminist politics has not yet entered the formal agenda of environmental education, or education for sustainable development, but it should. As Claes Nobel (in Abzug, 1991) states, 'The world needs particularly the input of women...for they represent the very gender that creates life. Therefore, for the sake of global survival, men and women must, in this decade, become equal and cooperative partners in creating the common good for our common future'.

Brown and Switzer (1991a) in the Office for the Status of Women discussion paper on women and ecologically sustainable development have as the fifth principle 'developing environmental education which includes women's interests'. It is suggested that this could be achieved through

- ensuring that there is overall emphasis in research and education on the impact of 'female' industries on the environment; and
- including human and social development, the needs of human communities, and the interactions with the natural environment; and
- providing practical training in conflict management and the negotiated settlement of environmental disputes.

In the comment on this principle Brown and Switzer (1991, p. 16) note that women are less likely to have scientific or economic training than men and consequently have less influence on the development of curriculum priorities which may lead to issues of high priority to women such as reduction of toxic wastes and information on safety standards having a lower priority than they warrant. They also note that there is a need to compensate for the effects on research and teaching of the relative absence of women and women's interests from the professions of environmental science and economics: 'This absence has meant that many questions on ecologically sustainable development from the fields of health, welfare, household management and social policy have neither been investigated nor included in environmental education' (1991, p. 16).

Abzug (1991) also points out that 'although women are the vast majority of grassroots activists, very few of us are in positions of power, setting the priorities and making the decisions on issues to be tackled nationally and internationally'. Women are the majority of the primary school teachers and form a large proportion of secondary school teachers in Australia as well, so it would seem appropriate for feminist perspectives to be considered in environmental education practices.

Individualism and environmental education

Activities conducted under the rubric of environmental education can be grouped into three broad categories: information, education and training.

Information activities tell people about things. We all will be familiar with the pamphlets and posters *about* environmental issues that are distributed by various government and non-government agencies as part of their public and school education and information programs. For years now we have also been subjected to the interminable, though generally superbly photographed, nature documentaries by the Davids (Attenborough, Bellamy, Johnston and Suzuki) as well as Jack (Thompson), Harry (Butler) and Robin (Williams), to name a few. These activities are all designed to increase our *awareness* in the pious hope that by being aware we may start to *care* and maybe even to *act* for the environment - but the links are tenuous and grossly ineffective.

The ineffectiveness of information activities in actually achieving changes in attitudes and behaviours towards ones *for* the environment started to be realised in the late eighties, and suddenly we were inundated with *training* manuals: personal action guides to the earth (Commission for the Future, 1989), green consumer guides (Elkington and Hailes, 1989), green buyer guides (Margaret Gee 1989), 'it's easy being green' handbooks (Gell and Beeby, 1989) and '101 ways to protect our environment' booklets (Victorian Ministry for Planning and Environment, 1989), to name a few.

However these manuals only focussed on individual action; and while there is general agreement that we all need to do all the things recommended in the manuals we also need to do *more*. For example, the Victorian Government's (1989, pp. 4-5) booklet *101 ways to protect our environment* introduced us to the three Rs: reduce, re-use, recycle. No one would dispute that we need to address the rampant consumerism and materialism of Western society, but this booklet did *not* introduce us to the other Rs: reconstruction or redirection for society, which is definitely what we should be discovering when we look seriously at waste management.

As a matter of general principle the manuals neglect to look at the broader social issues, such as questioning the production of the materials that the individual has to deal with in the waste stream. For example, why don't the manuals recommend that individuals lobby manufacturers about removing their packaging to start with, or why doesn't government work directly with manufacturers on reducing packaging instead of producing booklets telling us to put less in *our* rubbish bins? Or is the packaging lobby too strong? Perhaps this is where environmental education has a place, and maybe you thought it was happening in schools? Well, think again...

Along the way *education* seemed to get forgotten - or at least confused. However a lot of people definitely believe that they are involved in environmental education by including information or training activities or by teaching ecological content in the curriculum, and some of them are wondering why there has been so little change after twenty years of supposed environmental education.

'Modern societies glorify personal autonomy and self realization' (Tesh 1988, p.157) and we are now 'part of the "us generation" who believe that socially responsible behaviour is necessary' (White 1990, p. 6). Hence the emphasis in recent environmental education curriculum materials on "personal action", and in environmental educational research (by Hungerford and his colleagues - see, for example, Hungerford and Volk (1990)) on measuring changes in individual's environmental behaviours. But as Tesh (1988, p. 158) notes "Unfortunately, individualism is more than a great liberator... it contains intrinsic contradictions (e.g. it frees people to exploit one another)". This potential for exploitation relates back to Di Chiro's concerns for a feminist perspective on environmental problems as many such problems are the result of one group exploiting the living space and/or livelihood of another and generally suppressing the women in that particular exploited culture (e.g. the Chipko movement cited by Di Chiro and many others).

Tesh writes of the ideology of individualism with respect to health, but her arguments are equally appropriate to environmental education. This perhaps can best be illustrated in the following adaptation of a quotation from Tesh (1988, pp. 161-2) in which I have substituted *environmental* for 'health' or 'healthy':

One consequence is the assumption that *environmental* education is the best way to prevent disease (*environmental* problems). Un*environmental* behaviour results from individual choice, the ideology implies, so the way to change such behaviour is to show people the error of their ways and urge them to act differently. Hidden behind statements that people should be able to choose freely what they throw away, whether they drive etc lies the ideological assumption that people are the best judges of their own interests. It begs the question of whether people actually are.

Greene (1991, p. 4) comments on both the focus on women and the individualist approach epitomised in the personal action guides:

Are Australian women concerned about the environment somehow

being encouraged to focus only on certain issues like blue-water toilets, and unbleached toilet paper, recycling, and composting, worthwhile activities though they may be? Is it a coincidence that some of the big structural environmental issues are considered too complex, too difficult to deal with in the general press?

I've always hated conspiracy theories, so I'm not suggesting that the situation I've described is deliberately created. Rather I'm saying that up to now, there has been a focus on the actions that individuals can take to improve the environment. There has, however, been much less attention given to some important institutional arrangements that should be changed because they don't make sense either environmentally or economically. I believe that if women work together, they can go well beyond individual actions and bring about the fundamental changes that are needed to make our society more environmentally responsive.

The individualist approach is also evident in the Commonwealth ESD discussion paper's advocacy of green consumerism as the model for public education referred to earlier, and in advertising industry reactions to green consumerism, such as the Clemenger report *Green* [Greed] *is Good* (White, 1990). The relationship between the individualist approach, economic rationalism and marketing are typified in White (1990, p. 3) quoting David Bellamy, '[who] said recently that market forces have destroyed one third of the world's ecosystem, altered the balance of another third and tainted the rest. And he said, "It is market forces which are going to put the world back together".

No one seems willing to confront the 'institutional arrangements that should be changed because they don't make sense either environmentally or economically'(Greene, 1991, p. 4). This unwillingness to confront institutional arrangements, and to instead put the onus on the individual, is exemplified in the Victorian Environmental Education Council discussion paper on an environmental education strategy for Victoria (1991, p. 7) in the statement

There is a strong tendency for us to expect "someone else" to fix the problems - stricter government regulations, more environmentally conscious industry attitudes and so on. While government and industry do have a major role to play, the reality is that we can't simply leave it to government and others to fix things. It just won't happen unless each of us plays our part.

The advertising industry does its best to keep the focus on the consumer rather than their own or their client's practices (see White, 1990), and the packaging

industry does its best to deflect attention from its activities by funding litter education programs as its way of supporting environmental education in schools and the community (see Greenall Gough, 1991a for further details on this aspect).

The education in education for sustainable development

Education *for* the environment (or sustainable development) as a form of training has already been noted. Jickling (1991, p. 9) believes that it is more suggestive of an activity like training or the preparation for the achievement of some instrumental aim', and that the phrase 'suggests a pre-determined mode of thinking to which the pupil is expected to prescribe [*sic*, I think he intends subscribe]'. As such, education *for* the environment is seen by Jickling as being contrary to the spirit of education. I must agree.

For some time a number of researchers (for example, Greenall Gough, 1990, Huckle, 1991, Robottom, 1990) have been arguing for a socially critical approach that takes a more holistic perspective as being a desirable direction for environmental education. That there may be a dialectic between environmental education as 'education *for* the environment' and environmental education adopting 'a critical approach to encourage careful analysis and awareness of the various factors involved in the situation' (Unesco, 1980, p. 26) has been a silence.

The rhetoric of environmental education states that it should encourage action for the environment - action which is, by its very nature, political. It is political both in its intent (a desire to be critical of and to transform society) and in its treatment by governments and systems at all levels. It remains to be seen whether education for sustainable development is incorporated in the AEC statements on 'Studies of Societies and Environment' as the relevant national goal of schooling would indicate it should be, and whether it is a depopulated view of sustainable development. According to Huckle (1986, p. 12) environmental education 'is about critically examining the economic and political processes shaping the social use of nature within different, but interrelated societies and helping pupils recognize the struggles of those working for greater democracy and an improved environment'. Huckle (1991, pp. 54-5) suggests that a socially critical pedagogy in the emancipatory mould (Giroux, 1983), which seeks to empower students so that they can democratically transform society and bring about the transition to sustainable development, as the most suitable approach for environmental education in schools. He sees it as having the following characteristics:

- learning is active and experiential;
- classroom dialogue introduces elements of critical theory and encourages pupils to think critically;
- pupils begin to see themselves, their histories and futures, in new ways. They develop a sense of their own power to shape their lives;

- values education develops comprehension of the sources of beliefs and values, how they are transmitted, and the interests they support;
- pupils reflect on the structural and ideological forces that influence and restrict their lives and on democratic alternatives;
- pupils are taught how to act democratically with others to build a new social order.

Such an approach would enable students to pursue the ecological and other content of environmental problems, and engage the problems, in a much more satisfactory and meaningful context than the present knowledge-based curriculum. In a socially critical pedagogy, students, teachers, parents and the wider community can all be involved in the practice of just, participatory and collaborative decision making, as noted above.

But socially critical pedagogy does not overtly seem to be the direction being adopted for the "clever country". Rather the future for Australian education seems to be very economy-driven and much more aligned with the economic rationalist approach to environmental education enunciated in recent statements such as the Commonwealth discussion paper on ecologically sustainable development (1990). Instead of indulging in wholesale acceptance of these statements as the direction for environmental education and being led by the environmental content, we should be more closely examining our pedagogy, that is if we do want to achieve the goal of empowered students.

It remains to be seen as to whether this approach is endorsed in forthcoming national statements. Finally, and most importantly, will national environmental education policy and curriculum strategies take cognisance of the need to address women's perspectives and individualism?

The low level of attention being given to environmental education (or education for sustainable development) by all Commonwealth government agencies would indicate that they are most likely going to behave like Alice when asked about the direction she wanted to take in *Alice in Wonderland* (Carroll, 1951, p. 60):

'Cheshire-Puss,' she began, rather timidly... 'Would you tell me, please, which way I ought to walk 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 walk,' said the Cat.

The challenge for Australian environmental educators is to provide strong guidance, through debate within the ranks and elsewhere, on the direction environmental education should take in national policy and curriculum strategies, rather than, as in the past, passively accepting without question the ideological stance behind the agendas being raised by and for the government by non-educators.

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