

Sustainability and Our Cultural Myths

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Abstract

This paper begins by weighing the term sustainability and considering its meaning in "common culture" terms as people outside the academy might understand it. The first implication is that none of our current behaviour meets the simplest criteria of sustainability. The question "why?" is raised. In responding to this question I suggest that our social structure is founded on a number of myths. My view is that these myths provide a useful explanation for the false consciousness in which western culture appears to be lost. I conclude that educational efforts that do not confront the system of myths work against the environment by tacitly supporting the mechanisms and structures that are the causes of environmental problems. I suggest that the U.N. decade for sustainability must be made to work despite critique of the term sustainability. In closing I suggest that confronting the myths addresses only one aspect of a concert of forces that constrain education on behalf of the environment and elaborate some suggestions for new thinking.

Résumé

Cet article examine d'abord le terme « durabilité » et sa signification dans la « culture générale », c'est-à-dire, selon la compréhension des gens à l'extérieur du milieu universitaire. La première constatation est la suivante : aucun de nos comportements actuels ne respecte les critères les plus fondamentaux de la durabilité. Il y a donc lieu de se demander pourquoi. En guise de réponse, je prétends que notre structure sociale est fondée sur un certain nombre de mythes. À mon avis, ces mythes sont des excuses faciles que les gens utilisent pour expliquer la fausse sensibilisation qui caractérise la voie dans laquelle les pays occidentaux semblent s'enliser. J'en conclus que toute tentative d'éducation qui n'affronte pas ce système de mythes milite contre les intérêts de l'environnement en appuyant tacitement les mécanismes et les structures qui sont à l'origine des problèmes environnementaux. Selon moi, il est essentiel d'assurer le succès de la décennie de la durabilité des Nations Unies, malgré les critiques à l'endroit du terme « durabilité ». Pour conclure, je soutiens qu'en affrontant ces mythes, nous n'abordons qu'un aspect de tout un ensemble de forces qui contraignent l'éducation environnementale et je propose de nouveaux schémas de pensée.

There is a tendency within environmental education to emphasise the positive. The point where this is productive is passed when we stop critically analyzing and discussing the nature of our activities and the degree to which they achieve their intended ends. Karl Popper (1979) maintains that all knowledge growth "consists in the improvement of existing knowledge" (p. 71), and failure to critically evaluate and improve what we do results in stagnation. Swann (1999) captures this tension well asserting, the "feel good factor may provide an individual with encouragement to continue" but adds, "it may also, of course, lead to complacency" (p. 25). The notion that we should continue to debate and contest ideas has been repeatedly emphasised in environmental education (Robottom, 1987; O'Riordan, 1989; Gough, 1997). These authors make arguments that are consistent with Popper's (1979) view, that knowledge development requires debate and contest.

We stand on the brink of a decade dedicated to sustainability, an event that provides an unparalleled opportunity to make progress in our field. In response, I undertake a critical evaluation in this article and explore the implication of the ideas raised for the way we conduct our social relations. I identify a number of myths which shape those relations. These myths have profound implications for practice in environmental education.

A Framework for Critique

Echoing through the literature on environmental education is the concept of the "rhetoric versus reality gap." This idea was discussed by Stevenson (1986), again by Fien (1993), reviewed by Palmer (1998), and implied in other works (for example, Robertson & Krugly-Smolka, 1997; Lousley, 1999). This is not the gap between positive environmental values and action, which has been another debate that has been a focus in recent issues of the journal *Environmental Education Research*. That debate centres on individual attitudes and behaviours. I am focussing on the general and widespread gap between theorizing in the field and what is seen in practice.

Part of the rhetoric-reality problem involves the difficulty in carrying out socially reconstructive teaching within institutions which reproduce existing social relations (Fien, 1993). Bridging that gap involves contesting the meanings and understandings we have of both environmental education and of schooling. In developing the ideas in this paper I review some common understandings found in public discourses, as well as those in the academy, and explore the implications they contain for education and for theorising in relation to sustainability and to school-based education.

There is within our field too, a call for new paradigms. The establishment of a "new paradigm" involves the questioning and changing of the underlying assumptions and beliefs that underpin our ways of thinking. The basis for this challenge is provided in the foundational documents of environmental

education. The Belgrade Charter (UNESCO-UNEP, 1976) calls for a new global ethic. The Tbilisi Declaration (UNESCO-UNEP, 1978) calls for new patterns of behaviour. The latter also stresses the interdependence between the social, economic and natural aspects of the environment and calls for an examination of the causes as well as the symptoms of environmental problems. This interdependence is seldom addressed in practice. Fien (1997) considers that most environmental education activities consist of activities which he argues are insufficient in meeting the goals of environmental education or education for sustainable living. He calls for attention to social issues such as poverty in our practice and this paper responds to that call. Issues of human justice and poverty, it should be noted, arise in the first sentence of the Belgrade Charter (UNESCO-UNEP, 1976). Fien is not alone in his critique of environmental education practice. Huckle (1991) considered many programmes to be part of the problem rather than the answer while Lousley (1999) suggests many of these programmes actually de-politicize environmental issues.

There is also a more ambivalent questioning of environmental education activity. Scott and Oulton (1999) and Oulton and Scott (2000) consider the critical approach has not worked and call for plural understandings while Walker (1995, 1997) draws attention to the gaps between the "espoused" and "in-use" theories of teachers and calls for new approaches. Critical theory is held to blame for constraining the field in these critiques.

There is, however, a sociological literature that argues schools act to reproduce existing social relations and injustice. The work of Michael Apple (1990) is prominent in this literature. Apple contends that schooling acts to reinforce and maintain injustice and that reproduction of our existing social paradigm is embedded in our language. I will argue that the concept of sustainability has become part of that reproductive mechanism and needs to be challenged if attempts at environmental education are to be genuine.

In doing this I adopt a critical realist position after Bhaskar (1978) in which the ways we construct meaning (while bedded in time, place and culture) are shaped by the material structures within our societies (which are also products of place, culture, and time). These material structures are in turn shaped by deeper mechanisms and forces such as economic and political imperatives. The mechanisms by which these forces act must be understood and confronted in any process of change. Plant (2001) advocates this critical realist approach in environmental education and summarizes the "empirical," the "actual," and the "real" domains identified by Bhaskar.

Applying these ideas in the natural world is relatively simple. The social world is more complex however, containing many realities and more complex interrelations of cause and effect than Plant's example of gravitation and tides provides. I use the term "empirical reality" to refer to the reality of personal actions and interactions and "material reality" to refer to the equally real realm of organisations, regulations and structures, such as schools and

curriculum. I use the term “deep reality” to refer to the underlying natural, social, political, and economic forces that shape events at the other levels. All three levels are interrelated.

At the core of my critique in this article is that very little work in environmental education consciously examines the problems at all these three levels of reality, or the levels of society at which they are manifest (the micro level of practice, the meso level of institutions, and the macro level of wider social forces). Such an analysis makes it clear that attempting to initiate change at one level without canvassing support for that change at the other levels renders success unlikely.

To further assist my analysis I utilize the ideas of O’Riordan (1989) identifying four philosophical approaches in western environmentalism, summarized in Table 1. These ideas provide a tool for analyzing the underlying values in arguments and ideas. This article emphasises the degree to which “Technocentric” views of the world, that regard nature as at the convenience of humanity, are dominant within European environmentalism.

Ecocentrism		Technocentrism	
Gaianism	Communalism	Accommodation	Intervention
Faith in the rights of nature and of the essential need for co-evolution of human and natural ethics.	Faith in the co-operative capabilities of societies to establish self-reliant communities based on renewable resource use and appropriate technologies.	Faith in the adaptability of institutions and approaches to assessment and evaluation to accommodate to environmental demands.	Faith in the application of science, market forces, and managerial ingenuity.
“Green” supporters; radical philosophers.	Radical socialists; committed youth; radical-liberal politicians; intellectual environmentalists.	Middle-ranking executives; environmental scientists; white-collar trade unions; liberal-socialists, politicians.	Business and finance managers; skilled workers; self-employed; right-wing politicians; career-focused youth.
0.1 - 3% of various opinion	5 - 10% of various opinion surveys	55 - 70% of various opinion surveys	1 - 35% of various opinion surveys
Demand for redistribution of power towards a decentralized, federated economy with more emphasis on informal economic and social transactions and the pursuit of participatory justice.		Belief in the retention of the status quo in the existing structure of political power, but a demand for more responsiveness and accountability in political, regulatory, planning, and educational institutions.	

Table 1. European perspectives on environmental politics and resource management. (O’Riordan, 1989, p. 85)

The position taken here is that technocentric environmentalism is part of the existing social and environmental paradigm that has caused environmental problems. It lacks the transformative capacity for change demanded by environmental education goals. Informed by these perspectives I wish to critically explore the notion of sustainability and explore the cultural myths that I suggest maintain our present social paradigm.

I am drawing on an eclectic range of perspectives in this analysis. Environmental education is supposedly an integrated and holistic discipline. The problem with taking this holistic view is the difficulty of arguing in both breadth and depth. I trust to the intelligence of the reader to judge the places at which I have compromised on detail in order to draw together this range of strands.

Sustainability

Since the mid 1980s the field of environmental education has been influenced by the concept of sustainability. This idea suggests our behaviour should be such that it can be continued indefinitely. The Bruntland Report described ecologically sustainable development as meeting "the needs of the present without compromising the ability of future generations to meet their own needs" (WCED, 1987, p. 8). Jickling (1999) suggests there are now more than three hundred definitions.

Setting aside the issue of what constitutes human needs (for it is clear that opinions on "needs" held by rich and poor are vastly different) the essential issue is that our behaviour does not prejudice the future. It is also clear that current human behaviour is not sustainable. In order to sidestep definitional debate I ask, what sort of behaviour would be sustainable, and I suggest four answers:

- We do not use materials faster than they can be replaced.
- We do not dispose of materials faster than the Earth's can absorb them.
- Our behaviour does not threaten other living things or their ecosystems.
- The Earth's natural features minimally disturbed.

While it is obvious that our behaviour is not sustainable in any of the terms that I have outlined above, the degree to which this is the case needs re-emphasizing.

John Ralston Saul (1997) describes our civilisation as "unconscious," ruled by corporate and government elites who have retreated from reality, from history, and who hide behind specialist and obscure languages that mystify and increase this isolation from reality. He describes it as corporate fascism in which the politics of interest groups and stakeholders dominate the interests of citizens and the wider public good. Saul describes the "great leap

backwards” over the last thirty years. An estimated 50 million people in the west are unemployed. Over five million Americans are under “judicial supervision,” a three-fold increase since 1980. The income of 75 million Americans is now lower than in 1966, though “the inequality gap shrank continually between 1929 and 1969. Since then, it has been continually widening” (Saul, 1997, p. 14). This is in the U.S.A, supposedly the best-case scenario, the model society. Statistics on life in the “developing” world (World Bank, 2001) reflect the stark reality of the global imbalance between rich and poor and reflect the same growing imbalance within societies. For example:

- Sixty-six percent of the population of Zimbabwe have no sanitation,
- Almost half of the world’s population live on less than \$2 per day,
- Over one billion live on less than \$1 per day,
- This group includes 70% of the population of Nigeria, and
- Up to 80% of the world’s population have never made a phone call.

This kind of information renders the media messages glamourising the technocentric “faiths” summarized in O’Riordan’s table as of very dubious worth. The central question however is, “How is the insanity that results in such damage and injustice maintained in the face of the evidence?” What is also at issue is how the sustainability discourse can be seriously discussed under these circumstances when it is clearly a fiction. I propose that this sustainability fiction (that it is possible to live sustainably within a technocentric paradigm) is maintained by a set of underlying beliefs that are deeply embedded in our culture

Our Great Cultural Myths

These tacit and largely unidentified understandings I call myths. Picard (1972) considers that some myths act to justify an existing social order, but identifies another form of myth in “less advanced societies” that explain the world as seen within that culture. The “myths,” as I use the term here, combine the ideas above, and are thus our cultural beliefs that act to explain and maintain existing social relations. These myths are so pervasive, so plausible, so subtle and so much the things that we would like to believe that they are the very air we breathe.

I seek to add taste and smell to these myths by identifying them and explaining how they are maintained. Shifting the notion of myths from the general, to specific statements provides a way forward in our field I suggest. My list is not definitive and contains four first order myths:

- We live in a democracy,
- Our society is just and fair,

- Economic growth is good for everyone, and
- Everyone can succeed if they work hard enough.

These are supported by five second order myths:

- Society is a collection of individuals each of whom, by their choices and efforts, determine their own fate,
- Success is the accumulation of wealth and possessions,
- The health of a society is summarized best in its rate of economic growth,
- Progress and development mean increased control and more complex technology, and
- Freedom is the ability to choose in the marketplace.

All of these myths are underpinned by the technocentric axiom that the universe exists for the convenience of humans. These myths are maintained by and maintain a fabric of further myths of decreasing universality and importance, and I suggest that the notion of sustainability is in danger of contributing to this fabric of myths.

The fabric of myths is crucial in maintaining the social paradigm which is competitive, unjust, and unsustainable, and which falsely attributes blame for social problems to individuals. If we call for a new paradigm we first have to expose the myths. When we call for new social metaphors as Bowers (2001) does, we need to dismantle and replace them. A precursor to this is understanding how they are maintained in order to confront that message system.

Maintaining the Myths

The myths are largely untrue and are hegemonic, the “common sense” of our society that acts against the interests of most citizens and maintains the privilege of the powerful. Of primary importance in perpetrating and maintaining these myths are television and the media in general.

It is not only advertisements that contribute to this. Prime time programmes also create and reinforce views about what is important, what successful people wear, how they talk, what, where and how they eat, drink, drive, live and own. They also suggest how relationships are conducted and influence countless other aspects of behaviour. These are images of what is considered to be successful and legitimate the power relationships in society.

Remember that every second of media time is there by conscious editorial or executive decision and the media are controlled by the very wealthy and thus powerful. This power is part of the mechanism that shapes the material structures in which we live and thus also shapes the ways in which we construct meanings. Those who purchase space in the media are deliberately coercing these meanings. Speaking of this “public relations industry,” Suzuki and Dressel (1999) begin as follows:

No one talks about the fact that there is an international \$35 billion a year propaganda for hire industry. And what I learned in writing the book is that even the most exaggerated parody of this industry couldn't anticipate how cynical and pervasive it really is. (p. 87)

Violence, too, may serve hegemonic purposes. President Bush's rage at the attackers of freedom and democracy seems quite routine amid the incessant violence on television. His abuse of power is unbridled and explicit. Despite this however, in many instances the media has buried the moral issues involved. Such calls contain a naked exercise of power that is heard by billions. If you challenge us we will kill you. This is a threat against humanity and the media are its willing vector. These are all aspects of deep reality that need to be confronted by educators acting for change.

Central to myth maintenance are supposedly "self made" people. In the front line of this group are actors and sports stars. Wealthy, apparently by their own efforts and talent alone, they are living billboards for individualism and the material trappings of success which fuel consumption.

When things go wrong the poor are architects of their own poor planning and choices. When really big business "turns turtle," however, it is as a result of catastrophic trading conditions and often requires a government bailout, in the public interest of course. The satirical tone is an attempt to make the point concisely. Readers will no doubt examine the finer texture of this mythical fabric themselves.

The Sustainability Challenge

So where does sustainable development stand in our concern for the future within a society founded on myths? I take the view that the concept of sustainability is, at its core, useful. In the context of a decade dedicated to sustainability it must become more than that. It has to be reconstructed as a critical point of leverage for change. This will not happen if environmentalists fail to challenge its construction. Academic environmentalists I suggest are too fond of language that refers to a spade as a podio-manually operated earth inverting instrument. Public discourses, while tending to be a little more basic in their language, are equally successful at obscuring meaning.

In an article in the New Zealand press in the middle of a controversy over mining licensing for example, Oram (2001) was critical of a Ministerial decision not to allow a mining operation to be extended into the conservation estate. He advocated that by allowing mining, New Zealand would grow its economy and also develop sustainable development skills it could market to the rest of the world.

It is difficult to understand what meaning the word "sustainable" has in this context. The environmental destruction implicit in the proposal is labelled as sustainable development by the technocentric exponents of

unfettered market economics and growth. The argument that the term is technocentric has been well made in the environmental education literature (see for example Fien & Trainer, 1993; Huckle, 1991).

There is a second more sinister point, however. The concept of sustainability is uncritically linked with growth, with environmental exploitation and with naked instrumentalism. This interpretation is widely read and through this, unsustainable activity becomes perceived as sustainable in the public arena and is woven into the fabric of myths. Jickling (1999) provides further examples in which participants in two different environmental issues debates invoke the concept of sustainability in arguing for opposing positions.

My conclusion is that sustainability, as it is employed in general usage, can mean anything you want. It has so many interpretations that it lacks any capacity to confront the reality of the unsustainable behaviour of our societies. The notions of sustainable growth, sustainable development and sustainable consumption (OECD, 1999), link the concept of sustainability with language that has implicit meanings and assumptions that are technocentric and underlie the causes of environmental problems. Notions of sustainability developed from this values base cannot contribute to long-term solutions to environmental problems. As Fien and Trainer (1993) put it, "If you save this wild river or that forest, the growth economy will just move to consume others somewhere else" (Fien & Trainer, 1993, p. 20).

Critical citizens must consider the idea that these diffuse meanings are maintained deliberately to obscure the issues. As Huckle (1983) pointed out, vague imprecise terms serve politicians well as they act as an umbrella for a wide range of interest groups. Sharpening definitional clarity reduces the size of the umbrella and limits the room to shelter under it, reducing political support.

Education Against the Environment

At the 1999 Australian Association for Environmental Education Conference in Sydney, I heard Julian Agyeman, as a keynote speaker, call for some "kick arse environmentalism" to the acclamation of the audience. At conferences I have attended since I have seen little evidence of this "kick arse" spirit. They are generally polite affairs at which some "may I take this piece of lint off your coat environmentalism" would stand out. There is little discussion of the core inequalities of power and wealth or the acknowledgement that confronting these involves political action. Despite thirty years of discussion of education about, in, for, from and with the environment, it seems most environmental education is against the environment because it does not confront the issues of cause and therefore tacitly supports the status quo. Huckle has repeatedly made this argument.

Further, success in our society is usually achieved by alignment with the structures of power. Critique is acceptable as long as it is polite and within certain limits. This type of critique helps convince us, and maintain the myth, that our democracy is sound despite the accelerating disparities between rich and poor and growing environmental stress. One can attack the status quo in a journal, but one would not raise such difficult issues at an institutional reception for the Minister.

What I say here is to some degree bedded in current orthodoxy. Paradigm shift, in the Khunian sense, supposedly occurs when the inconsistencies in the dominant paradigm cause increasing discomfort. The points raised here, and the suggestions in response, are intended to aggravate that discomfort and help the shift towards that threshold of change. Much of the environmental discourse fails to do that I suggest.

The journal *Environmental Education Research* (EER), has in recent years devoted considerable space to the “gap” between attitudes and action, and to “significant life experiences” and their impact on behaviour. The issues in this debate can be traced at least as far back as Caduto (1983a, 1983b). Iozzi (1989a, 1989b) reviewed the literature and Newhouse (1991) made a further review contribution. *EER*, Volume 5, No. 4 (1999), focused on the issue of “significant life experiences” and Chawla (2001) added to the debate, triggered, by a symposium on the subject at the 2000 meeting of the American Education Research Association. It was again the subject when Rickinson (2001) reviewed the evidence, and *EER*, Volume 8, No.3 (2002), returned to the theme in a debate on the “gaps” between attitudes and behaviour. Rickinson’s review was a theme in *EER*, Volume 9, No. 2 (2003). The discussion has continued for two decades.

While this is valuable in many ways, seen from outside the academy, these debates may be seen as elitist and obscure, an exercise in stylishly running on the spot, part of an elaborate regime of warm-up activities that must occur before “podio-manually operated earth inverting instrument uplift” can occur. In their paper, Kollmus and Agyeman (2002) mention that in describing a few of the influential frameworks in the “gaps” discussion they have also neglected many. One such is the social marketing model, an idea which has been growing in profile at recent conferences. When these further areas of the discussion are considered, it seems that as well as warming up we need also to develop an apparel range, apply an organic sunscreen, develop a media campaign glamorising spade work and produce designer spades before we actually begin to dig!

In considering the content of the extensive debate I have summarized above, what I take out of it as a teacher and teacher educator is this: I have always believed that people are unlikely to care for things they have no experience of, nature experiences don’t seem to produce nature haters, they do seem to have at least some positive contribution to make to concern and action on behalf of the environment, but don’t expect miracles. These

experiences are only part of a complex picture. Now, let's get on with it. How can I make spaces for novice teachers to have these experiences when they are not valued in an academic culture?

If at some point the discussion is not distilled into useful guidance for practitioners, what is the point? Walker (1997) makes this point but unlike her I do not interpret this failure to make progress as a failure of critical theory. It is a failure of environmental educators to actually be critical. We have not yet learned how. To return to my theme, the initiatives celebrated at conferences and in the literature often ignore the causal issues of power and uneven access to wealth. Neither do they engage at the political level. They generally restrict themselves to the micro level and only occasionally consider organisational change.

In response to this failure, and as part of the "learning how," I suggest that we need to view our society at the three levels I have described. We also need to just be honest; to expose the contradictions and myths in our culture, to call injustice injustice, to identify lies as lies and to call a spade a spade. This is difficult, unpopular and painful and requires courage and endurance, moreover it calls for action. The time for polishing the spade is past.

These may seem harsh criticisms but they are not new. Scott and Oulton (1999) and Oulton and Scott (2000) charge that despite thirty years of intense activity in environmental education it is unclear what has been achieved. They cite Walker (1997) in their critique and also explore the theoretical source that informs Walker's work, Robinson's (1993) development of Problem-based Methodology. Robinson rejects critical theory as having been unable to assist in solving real educational problems. Oulton and Scott (2000), and Walker repeat this claim, the former citing work in the ENSI project to support their argument. Both the work of ENSI (Posch, 2003) and Robinson (1993) draw on the work of educational psychologist Chris Argyris. He proposes first-loop reflection on practice at the micro level and occasional second-loop reflection examining institutional assumptions (in Robinson, 1993).

I suggest that critical theory is not reflected in micro initiatives that are reported in our field which are often limited to nature studies and litter schemes. These micro initiatives have not brought about change. This is not a failure of critical theory. It is a failure of our field to yet develop approaches that work. My response to the work of Walker (1995, 1997), Scott and Oulton (1999), Oulton and Scott (2000), and Robinson (1993), has been to propose the three loops of reflection put forward here and in so doing merge an educational psychology perspective with a sociological one. This draws on critical realism in order to provide the robust ontology needed to support an escape from perpetual relativism. This three loop strategy has the potential to bridge the chasm between social theories and practice. While I agree that we have not yet learned how to use a critical approach to inform practice, I suggest it is equally flawed, as Walker (1995, 1997) implies, to hope that teachers will, by some indigenous means, rescue our society.

Teachers are embedded in the existing social paradigm. More importantly, the school context cannot be seen in isolation from society. School practice is nested within the other social levels described here and seeking to develop changed practice by artificially truncating our understanding of that context is not a convincing strategy. The goals of our field challenge the current paradigm calling for a new ethic and changed behaviour and are at their core critical. I have argued that our existing paradigm is shaped by the myths I have identified and these must be challenged if we are intending to enact the goals of our field. This notion, together with three loops, or levels, of reflection at the levels of empirical, material and deep social reality may provide a way to bridge the gap between rhetoric and the reality of practice that I identified at the start of this paper.

Epilogue

In reflecting on these ideas in light of the United Nations decade focusing on sustainability, I have found myself extending this position. The Earth Summit in Johannesburg appeared unable to move from rhetoric to action, and a sustainable future requires action. Suzuki and Dressell (1999) report that the richest fifth of the world's population command 82.7% of its resources while the poorest fifth manage 1.4%, leaving 15.9% for the middle three fifths. The ratio, rich fifth's consumption to poor fifth's consumption, was 30:1 in 1960 and 59:1 by 1989. There is no question that all can live as the rich do; consumption needs to change.

If the poorest fifth were allowed to quadruple their consumption (to 5.6%), the middle three fifths to double theirs (to 31.8%, still double the level of the poorest fifth), and the rich fifth required to halve their consumption (to 41.5%), the rich fifth would still be consuming more than the rest put together, and the overall consumption would be 20% lower. If the poor fifth increased their consumption by a factor of ten (to 14%) and that set the benchmark for global consumption per fifth ($5 \times 14\% = 70\%$), we would be down by 30%. These figures emphasise the imbalances that sustainability must address.

The myths I have proposed above however do not by themselves provide a sufficient explanation for the current state of inequality. I have argued elsewhere (Chapman, in press) that we suffer from a "values psychosis" and see this as a further explanation for our social behaviour. At a personal level and in our social rhetoric we claim to be caring human beings guided by "human values." We all say we believe in caring for and nurturing children, giving them safety, homes, comfort, opportunity and hope. We are appalled by mistreatment of children within our society. While opposed to active abuse though, we turn a blind eye to local poverty that ensures children are "passively" abused by neglect. When children are poor and far away in another

country, and when their cultures are different from our own, we are able to ignore the most appalling suffering. We are even able to be convinced that it is acceptable to submit them to chemical or explosive rain. Our concern for children diminishes with distance and cultural congruence. This values "over-ride" is usually driven by powerful economic interests through the media, as has been obvious in the events of the Gulf War.

We have another set of values then, which are also held both individually and collectively. Central to these is money and the economy which often over-ride our human values. The bigger the economic prize the greater the power of the over-ride mechanism in that we will allow economic values to dominate closer to home, closer to ourselves at the centre of our own world. There are a number of trigger points however where this over-ride becomes unacceptable such as those effecting children, cute animals and sometimes the elderly.

Thus, while the recent conviction in New Zealand of a local man for killing his wife and daughter for an insurance settlement provoked horror, joining in the war in Vietnam in the 1970s (to choose a safe example) in order to appease a powerful trading partner was largely acceptable to the country. The two acts are essentially the same though, killing people for money. Our values psychosis allows these two similar events to be concurrently acceptable and abhorrent. Evidence of this psychosis can be seen written into Agenda 21 (UNCED, 1992). In Principle 16 the apparently significant statement is that the polluter should pay, provided though, that international trade and investment are not distorted (UNCED, 1992). Thus, the environment is in reality subservient to trade. The myth that economic growth, i.e. trade and investment, is good for everyone supports this construction that we protect the environment as long as this does not interfere with the interests of the powerful.

In closing I suggest a number of hypotheses arising from these ideas. Firstly, within the environmental literature there is a general lament that we are not really getting anywhere. I am going to propose that this is because environmental education programmes have shied away from addressing the central issue of values. They have rarely engaged with the values psychosis I have mentioned here and the fact that outside our own immediate locality, economic values often over-ride human values. We seldom mention this, let alone confront it.

My second hypothesis is that the cultural myths discussed here fill our collective consciousness and deflect scrutiny from the underlying psychosis. Thirdly, we attempt to engage with environmental issues through school based education which often purports to be, but is not, neutral. The *New Zealand Curriculum Framework* (Ministry of Education, 1993) acknowledges schooling is not neutral and elaborates a set of "human values" that should inform programmes. Throughout the document however, there is an unacknowledged emphasis on "economic values." The values psychosis is thus buried within

the structure of the curriculum and therefore difficult to confront because it is axiomatic to the document. There is a large literature however which proposes that rather than being neutral, schooling actively reproduces existing social relations and affirms exploitative structures through implicit messages buried in curriculum and in-school organisation and practices. Thus my third hypothesis is that even attempting to conduct environmental education through schools may be to act against the environment by continuing the illusion that schools are agencies that act in the common good.

My point in raising these issues is not to be pessimistic but to be realistic. These are huge issues and they will not be resolved by hiding from them. It is my contention however that environmental education will be in a better position when these issues have been subjected to our collective attention.

My own response, and the one I am advocating throughout this paper is to act at three levels. I attempt, as a teacher educator, to develop theoretical tools to help teachers grapple with the issues and to write curriculum materials that assist their work. School topics such as "wants and needs," "rich and poor," "how government works," "analyzing advertizing," along with more traditional topics that engage with the inter-relations in biological communities, energy use in natural and human systems, discussion of the values that inform our society and particular events that occur within it are also required. This is my contribution to the micro level of daily practice confronting the empirical realities of teaching, but it should also lead students to examine society at the three levels I have discussed.

I also attempt to challenge the structures and assumptions within education that perpetrate unjust values, such as the curriculum. This activity involves challenging the underlying values buried in competing curriculum conceptions, exposing the incoherence of the explicit curriculum with the messages that pervade schooling and society, and examining the legitimacy of the multiple tasks schools are expected to perform. This addresses environmental education at the meso, or material reality level.

Finally, I try to act politically in the interests of a just and functional democracy; to confront deep reality. This involves advocating for social and environmental justice, challenging technocentric and exploitative assumptions and developing the courage to raise issues that it is easier to shy away from. All these acts are political. I assert that we all need to be doing these things and that the gaps in, and failure of, environmental education occur because this is not done. Many environmental education initiatives celebrated at conferences are micro level initiatives that seldom persist because they are unsupported at deeper levels. The best initiatives have elicited this support but I have not seen them theorised in the way suggested here. I will thus close by hypothesising, fourth, that without some engagement with the wider spectrum of issues and levels that I have attempted to canvas here, especially at the political level, without picking up the spade and starting to dig, our field will continue to run stylishly on the spot in its regime of perpetual warm-up activities.

Notes on Contributor

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