

DEVELOPMENTS IN ENVIRONMENTAL EDUCATION IN NEW ZEALAND

Claire Freeman & David Chapman

New Zealand has experienced a recent resurgence of interest in environmental education, particularly in the informal sector. Whilst this resurgence is welcomed it takes place against a background of earlier frustrated initiatives and within a socio-political context where the emphasis is on market economics and constrained resources. This paper assesses both the successes and failures of environmental education in recent years, before focusing on current developments in environmental education in both the informal and formal sectors. Finally the paper explores the potential for real progress in environmental education in New Zealand against this background of economic and environmental competition.

INTRODUCTION

Environmental education in New Zealand has had a chequered development path. It is only in the last year or so that New Zealand has formally attempted to address its all too evident neglect of environmental concerns. This process began in June 1998 when the Ministry for the Environment released its national strategy for environmental education *Learning to Care for the Environment* (MfE, 1998a). The strategy was intended as a cohesive approach to environmental education in both formal and informal sectors. The production of a government supported environmental education strategy would normally be a matter for much congratulation but in New Zealand past experience suggests that this could be premature. To support this statement we trace the development of environmental education in New Zealand. In doing so the paper explores the reasons for New Zealand's late start and goes on to examine its more recent moves, beginning with a formal education focus before expanding to a broader local government partnership focus. Finally we ask: given New Zealand's current socio-political climate which embraces the 'competitive market economy', what avenues present themselves for real progress in the field of environmental education?

ENVIRONMENTAL EDUCATION: A CONTESTED FIELD

Environmental education in New Zealand, as elsewhere, is the focus of much controversy and debate. One issue that emerges when discussing the environment and environmental education is 'language' and the meaning of environment and environmental progress. Much of the language used in the field of environment has multiple meanings and encompasses divergent environmental perspectives. O'Riordan (1989) has for

example described a range of perspectives which might be held by different groups who would see themselves as being concerned for the environment (O'Riordan, 1989). O'Riordan estimates that between 85% and 95% of people subscribe to the dominant social paradigm in which consumption, wealth accumulation and economic rationality are of central concern and environmental concerns subsidiary. It is an approach that captures the creative efforts of a large body of humanity. It is argued by many though (Fien & Trainer, 1993 and Fensham in Gough, 1997), that economic rationality and growth itself are the primary causes of environmental problems. The goals of environmental education as expressed in key environmental education documents such as the *Belgrade Charter* and the *Tbilisi Declaration* are the creation of a 'new global ethic' and 'to examine the symptoms and root causes of environmental problems' (UNESCO-UNEP, 1976 and 1978). These goals directly question the imperative of economic growth and capital accumulation.

This fundamental clash of purpose sometimes results in the use of language that apparently supports environmental goals but which has been reinterpreted and used to cover philosophies which do not have the environment as their prime focus. To illustrate this a section of the Brundtland report *Our Common Future* (World Commission on Environment and Development, 1987) is worthy of brief attention here as the notion of sustainability provides an excellent example of definitional looseness in environmental language.

Chapter 2.2 of the WCED report clearly identifies that everyone has as a minimum the legitimate right to aspire to a better life and to have their basic needs met. It recognises that such rights are

problematic in that:

Living standards that go beyond the basic minimum are sustainable only if consumption standards everywhere have regard to long term sustainability (WCED, 1987:43).

Less clear is how such needs are to be met:

Meeting essential needs depends in part on achieving full economic growth in places where such needs are not being met. Elsewhere it can be consistent with economic growth, provided the content of that growth reflects the broad principles of sustainability ... (WCED, 1989:43-44).

Statements like these which address over-consumption and express limits to wants, are often set adjacent to calls for growth and fail to mention redistribution issues. The sort of language used in many official documents, as indicated above, reduces their practical value as they remain open to a range of interpretations which can be adapted to suit different environmental or developmental goals.

In New Zealand these issues are particularly relevant, especially when our history of environmental degradation is matched with our recent whole hearted adoption of market driven economic reform. Environmental rhetoric is often used by politicians and their ancillary bureaucrats to reassure the public and to create the illusion of action. The significance of this statement will emerge throughout the paper as we describe the nested contexts within which environmental education rests. When foundational documents such as the *Belgrade Charter* and the *Tbilisi Declaration* are examined they clearly indicate the transformative function of environmental education. It is a function strongly supported by Annette Gough who has been arguing for over a decade that environmental education programmes cease to be environmental education if the transformative action component is missed (Greenall, 1987; Gough, 1997). There is little evidence of any acceptance within New Zealand of this transformative component of environmental education, a point that emerges very powerfully as the environmental and social context for environmental education within New Zealand are examined in this paper.

ENVIRONMENTAL CONTEXT

Internationally New Zealand has an image of being an environmentally friendly, 'clean green' country.

In reality its environmental history is one of the mass destruction and devastation of its unique biological heritage. The full significance of this damage is only now starting to be acknowledged and addressed. "New Zealand, one of the last places on earth to be settled by humans, has one of the worst records of biodiversity loss" (DoC/MfE 1998:4). The process of change began with the Maori settlers when about a third of the forests were converted to grasslands. Continued clearance of the indigenous vegetation came with the European settlers who reduced the indigenous forest by an additional third and extensively modified wetlands, dunes and coastal areas. Between 1890 and 1900 alone 13% of New Zealand's total land area was cleared of forest (Taylor & Smith, 1997:5). The process of transformation as it occurred on the plains was particularly devastating as Park (1995:331) describes: "When the Treaty of Waitangi [1840] was signed almost all the plains ecosystems were composed exclusively of plants and animals native to the country"; now "instead, almost every tree, every bird, every living thing on the coastal plains [with a few exceptions] is foreign". Early responses to addressing this loss were significant though by no means widespread. The most notable was the gifting of Tongariro National Park to the nation in 1887 by Te Heu Heu (Paramount Chief of the Tuwharetoa tribe) who was concerned to preserve its unique and sacred landscape from the ever-encroaching activities of settler farmers. Such foresight has however, been in short supply and the survival of what remains of New Zealand's natural landscape is uncertain.

The government has begun to respond to environmental concern over the last decade with the publication of some key documents. These include the *Resource Management Act 1991*, the *Environment 2010 Strategy* and most recently the *Draft Biodiversity Strategy*.

* *Resource Management Act 1991*: The Act was a radical legislative initiative which placed the environment at the centre of all planning and land use activities: "The purpose of the Act is to promote the sustainable management of natural and physical resources" (New Zealand Government, 1991:24). The Act thus requires that all those involved in land use management - architects, planners, recreation managers, conservationists - not only be familiar with the Act but with environmental principles. Environmental education in its broader sense has thus become a key issue for many professions and for local authorities as a

whole.

* *The Environment Strategy 2010*: sets out the government's vision for New Zealand in the next century. Section 8.5 headed "Promote Education for the Environment" has as its goal:

To encourage environmentally responsible behaviour and informed participation in decision making by promoting environmental education throughout the community (MfE, 1995:57).

Specific proposals for action are identified for schools and tertiary education. The environmental vision set out in the strategy is however one that is set firmly within the context of 'a competitive enterprise economy' (MfE, 1995: 9).

* *Environmental Education Strategy: Learning to Care for Our Environment*, published in June 1998 jointly by the Ministry for Education and the Ministry for the Environment, is aimed at giving formal recognition to "environmental education as an effective contribution to achieving the vision set out in the *Environment 2010 Strategy*" (Environment Waikato Regional Council, 1998). In a more pragmatic sense the strategy aims to provide a framework for supporting and promoting environmental education activities undertaken by government agencies and other bodies.

* *The Draft Biodiversity Strategy*: Released in January 1999 the strategy clearly reveals the level of concern not only for biodiversity conservation in its own right but the strong need for environmental education in a broader sense. The Strategy defines environmental education as:

A multi-disciplinary approach to learning that develops the knowledge, awareness, attitudes, values and skills that will enable individuals and the community to contribute towards maintaining and improving the quality of the environment (DoC/MfE, 1998:133).

At the series of workshops held around the country to discuss the strategy, and attended by members of various professions, local authority officers and the general community, the need for environmental education was a recurring theme.

As New Zealand enters the new millennium it takes with it a national commitment to environmental progress as expressed in national policy and legislation, but also an environment under

serious threat. Conservation is a matter close to the hearts of many New Zealanders who from an early age are encouraged to experience the outdoors. Most experience this as part of the annual school camps, where from about age nine they are given outdoor experiences in forests and in the mountains, often sleeping in huts or camping in or close to the 'bush'. Not only is the natural environment one that is regarded as important for and by children but the conservation of New Zealand's natural heritage, as Te Heu Heu's gift indicated, is one of considerable concern to Maori who have developed a cultural relationship with their environment. Whilst Maori perspectives are becoming increasingly acknowledged in legislation such as the Resource Management Act of 1991 and government policy documents they still remain poorly acknowledged in more formal environmental education settings. In New Zealand generally the environmental cause receives widespread though by no means universal public support. The success of New Zealand's future environmental endeavours requires that there is a strong political, social, and economic will to support the environmental cause. Here there seems to be little cause for optimism, as an examination of socio-political events since the early 1980's indicate.

SOCIO-ECONOMIC CONTEXT

In 1984 the fourth Labour government came to power and discovered it was in a state of financial crisis. It then began an economic 'rationalisation' process, which continues today. This process involved the sale of state assets to private owners, cutting public services, and having fewer government departments. Many of those remaining provide a policy and regulatory function rather than service delivery which has been contracted out or is being conducted by state owned enterprises. The impact of these changes have been described by a number of authors (Codd *et al.*, 1995; Codd, 1998; Peters & Marshall, 1996). The restructuring process is based on theoretical foundations such as public choice theory which sees people as rational economic choosers and the market as the best mechanism for the exercise of that choice. The overall philosophy behind the process, Codd (1998), argues, is that people are incapable of acting for (and prioritising in favour of) the public good and thus need competition to keep them honest. It also espouses the notion that government activity stifles initiative. Consequently, by reducing government to a regulatory minimum human creativity is unshackled and economic prosperity

results.

An analysis of the literature related to the above is beyond the scope of this paper; nonetheless it is the authors' view that this 'economic oriented' ideology driven by the 'new right' is both simplistic and seriously flawed. This economic ideology, however, underpins government policy in New Zealand, as the 1992 Rio Conference national submission made clear:

The role of the state is seen more as providing the policies and the regulatory framework within which people themselves make decisions which affect their lives ... The government has withdrawn from much of its direct involvement from development projects, commerce and industry in the belief that private enterprise is more motivated and better equipped to make decisions resulting in the most efficient use of resources (MfE, 1992:92).

Statistical evidence clearly reveals though, that despite government rhetoric over the last decade and a half espousing the virtues of economic rationalisation, the results are high rates of unemployment and growing inequalities in wealth, whilst the promised economic miracle continues to lie around the corner. The *New Zealand Listener* reports work by Chaterjee (Campbell, 1998) which identifies that in the decade and a half since this process began the wealthiest 15% of households have become wealthier, the next 25% have held their own and the remaining 60% are worse off. The growing social tension associated with these increasing inequities does not constitute an ideal climate for generating environmental concern. This is especially so when it is considered that 'user pays' regimes, in health and education in particular, are seen to put the availability of quality services out of reach of a growing sector of the community. Within this unhappy context it is salutary to trace the development of environmental education in the school curriculum.

DEVELOPMENT OF ENVIRONMENTAL EDUCATION IN NEW ZEALAND: THE FORMAL SECTOR

Paralleling the deteriorating economic situation and growing social and economic inequities has been the increasing politicisation of education. In the early 1980's the Minister of Education had instigated a review of curriculum (Dept of Ed., 1984). The review was discarded by the incoming

Labour Minister who instigated his own review based on wide consultation. The results of this work were published in 1986 and 1988 (Dept of Ed., 1987; 1988). In this review one of the priority areas to emerge, as a major 'curriculum aspect', was Science, Environment and Technology. In a cabinet reshuffle in late 1988 the Minister responsible for this review was relieved of the education portfolio. The portfolio was taken over by Prime Minister David Lange who shelved the curriculum review and initiated a complete re-organisation of educational administration including the dissolution of the Department of Education and the District Education Boards.

When the Labour Party lost office to the National Party in 1990 the incoming Minister of Education began another review of the curriculum, dissatisfied that the previous consultation had included community but not business interests (see Bell, Jones & Carr, 1995). When the draft National Curriculum emerged in 1991 (Min. Ed., 1991) it separated off new 'essential learning areas', but still included Science and Environment as one area and Technology as another. This reflected the government's new vision for education. By 1993 when the final curriculum framework was published, essential learning areas still included Science, Technology and five others. Environment however, had been relegated to the small print.

The essential learning areas are broad recognisable categories of knowledge and understanding. They provide the context in which the essential skills, attitudes and values are developed. Other important areas of study such as the environment, culture and heritage, are included in a number of essential learning areas (Min. Ed., 1993:8).

This development runs contrary to government's international commitments. In signing *Agenda 21* at Rio the government undertook:

to strive to update or prepare strategies aimed at integrating environmental education as a cross cutting issue into education at all levels over the next three years (UNCED, 1992:265).

Whatever conclusion might be taken from this, it is hard to avoid the observation that while the government were pledging to expand environment in the formal curriculum they were in fact in the process of reducing it.

Interestingly, a contract was let in 1995 to produce

policies and guidelines for environmental education but these remain unpublished (see Law & Baker, 1997). New Zealand thus remains without any national educational policy or guidelines for environmental education in schools. The government's Environmental Education Strategy (MfE, 1998a) identifies only "incorporating the aims of environmental education across the curriculum" as a priority for the next three to five years. It is a goal which is reflected five years on but which waters down the earlier pledges made at Rio. (Educational guidelines are reported to be due for release in August 1999.)

Given the socio-economic context described and placing the chequered history of environmental education within that context, it is difficult to view the Ministry for the Environment's 1998 Strategy with optimism. This is especially so since the government has consistently diminished the status of the environment in formal education from its initially encouraging emergence in the late 1980's to its currently nebulous position. Until substantial impetus and resources are given to the Strategy it seems likely to remain an article of rhetoric. It is difficult to see how for example, environmental education can be emphasised in schools when it is not regarded as an essential learning area. Schools are evaluated by the Education Review Office on their curriculum delivery. Removing environmental education from the formal curriculum is therefore a telling blow to the likelihood of its inclusion. It is also difficult to imagine the government reframing the curriculum in order to make it a learning area, let alone providing the resources necessary to train and assist teachers to enact a subject which potentially challenges the philosophical ground on which the government stands.

Opportunities for environmental education are presented within the curriculum as it is currently written, but they are diffused throughout the curriculum documents and hard to identify. Teachers therefore lack a coherent vision of what environmental education should be. The development of a curriculum document clearly indicating the status, scope and practical teaching strategies for environmental education in schools is urgently required (see Chapman, 1999). The Ministry of Education is again working on developing such guidelines for environmental education, which are informally circulating the country at present. Whether or not they will emerge in a form that provides impetus to the field of environmental education remains to be seen. History suggests not.

DEVELOPMENT OF ENVIRONMENTAL EDUCATION IN NEW ZEALAND: THE INFORMAL SECTOR

Agenda 21 which emanated from the Rio Earth Summit of 1992, has been influential in New Zealand and informs its environmental legislation and policy framework. Principle 10 of *Agenda 21* states that "environmental issues are best handled with the participation of all concerned citizens, at the relevant level" and in principle 11 goes on to identify the role for national government:

States shall enact effective legislation... environmental standards, management, objectives and priorities [that] should reflect the environmental and developmental context (MfE, 1993).

Environmental progress requires local and national government to work in partnership in developing national guidelines, and providing the resources necessary for local government to develop implementation strategies at local level.

It is questionable whether national government is providing the necessary direction and support as agreed under *Agenda 21* with regard to environmental education. In its national environmental education strategy the Ministry for the Environment addresses these issues by pointing to the need to recognise the current and potential contribution of environmental education outside the formal education sector. It asserts:

Environmental education activities are already taking place within a wide range of sectors, for example educational institutions, government departments, local authorities and non-governmental organisations. The diverse and extensive nature of these activities is a necessary response to specific needs and local circumstances (MfE, 1998a :7).

Environmental education in the informal sector experiences a different array of difficulties. It is both broad and variable and suffers from the definitional difficulties mentioned earlier so that it can be difficult to identify what is actually taking place. It is clear that since the promulgation of the Resource Management Act (RMA) in 1991, there is a definite trend towards interest in and commitment to environmental education partnerships involving community groups and local authorities.

The RMA empowers local authorities to act on behalf of the environment:

In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development and protection of natural and physical resources shall recognise and provide for the following matters of national importance ... the protection of outstanding natural features ... the relationship of Maori and their culture and traditions with their ancestral lands (MfE, 1991: section 6 a-e.).

The Act goes on to specifically define the powers and responsibilities of regional and local authorities with regard to the environment (sections 30-31). Thus local authorities have far greater ability to act and can command resources to support their actions in ways that are not possible within the formal education system where environment has been de-emphasised. As a result it seems local government has been more pro-active and a number of local authorities have developed their own local environmental education guidelines.

In considering both the positive and negative aspects of this range of related contexts the RMA's empowerment of local authorities provides productive opportunities to introduce environmental education into formal schooling through the development of partnerships. The actions that planners, architects, recreation managers and others take can profoundly influence children's lives and environmental experience. However, these professionals often have little if any training and experience of some of the complex ethical and practical issues associated with working with different children and enacting the curriculum. In developing partnerships local authority officers working in their professional fields of expertise can liaise and work closely with teachers, play-workers, youth-workers and others who possess these skills so that successful environmental education outcomes can be achieved. The following case studies give positive examples of how successful environmental education programmes can be developed, whether in-house or through partnerships.

CASE STUDIES

Case Study 1: Regional Councils: Environment Waikato

New Zealand's nine regional councils undertake environmental planning at the strategic planning level, having responsibility for geographical areas which will include several district councils. The

primary responsibility of regional councils is to protect, conserve, and control natural and physical resources, namely soil, land, water and coastal resources, at regional level. A survey of environmental education activities in regional councils undertaken by Manawatu Wanganui Regional Council in 1998 found that three had an existing environmental education strategy with four in preparation, and all except one had one or more dedicated environmental education officers. The council where environmental education has been developed furthest is Environment Waikato which has a team of four full time staff responsible for environmental education. The council's environmental education strategy has the same name as the Ministry for the Environment's strategy but predates it by two years. The strategy is action focused and identifies environmental education targets for particular sectors namely the regional economy, the formal education sector, care groups and self help community groups, and industry, business and other user groups. For each of these sectors, key issues and actions are identified. The strategy is wide ranging and direct in its willingness to recognise constraints, both in terms of resources and as regards failings and limitation associated with the council's own modes of organisation for example, "Teachers and students find it difficult to access environmental education resources held by Environment Waikato and other organisations" (Environment Waikato, 1996:30). The strategy builds on documents such as the *Tbilisi Declaration* and was devised after wide consultations both internally and externally with groups such as schools, local environmental education teachers, Waikato Environmental Business Network, and the Royal Forest and Bird Protection Society. As yet the implementation of the strategy is in its early stages but does build on a sound base as set out in the strategy. It also receives strong support from the regional council. This bodes well for the development of environmental education in Waikato.

Case Study 2: Waitakere City Council

New Zealand has a strong interest at national level in children's rights as evidenced in its appointment of a Children's Commissioner whose task it is to advise government on and to monitor children's rights. At local level cities such as Waitakere continue this concern for children's rights, recognising that "children and young people need special consideration in decision making processes" (Waitakere City Council, 1998). Waitakere City is

one of a number of smaller city units that together make up Auckland, New Zealand's largest and only million plus city. The city has adopted the Principle of First Call for Children which originates from the World Summit for Children held in 1990. The Summit saw a role for local government in:

Ensuring that children are accorded environmental protection - from promoting safer communities, to providing pure water supplies, to making sure that the viewpoints of children and young people are regularly heard.

Environmental education is a central component of Waitakere's aim of creating an 'eco-city'. Children are particularly significant given Waitakere's population profile where one third of the population is under twenty. In developing its eco-city approach in conjunction with its First Call for Children Programme in 1998 a series of child centred actions and strategies were undertaken including:

- * Building a skateboard facility at TePai Park in consultation with the Youth Councillors
- * Involvement in the planning and running of the Pasifika Festival
- * A sustainable schools project to work with students to reduce school waste
- * Involvement of young people through local schools in 'Keep Waitakere City Beautiful'
- * New Schools involved in the Safe Routes to School programme
- * A youth environmental conference in Waitakere for local young people, and
- * Supporting a Rangatahi/Youth representative on Te Taumata Runanga and the proposed *ranagatahi roopu* (youth support group) for this position.

Case Study 3: Christchurch City Council

The Christchurch Children's Strategy was initiated in 1995. The Children's Strategy Working Party began a large scale research project to provide a basis for the strategy. The study included 892 children (age 7-13), a citywide parent/caregiver survey, and interviews with representatives from 44 provider groups as well as with council and representatives. It was the largest consultation with children ever undertaken in New Zealand. Later in 1995 a Children's Advocate was appointed to the City Council's Policy Directorate. The advocate's primary task was to 'facilitate the vision of a child friendly city':

Imagine a city in which children are valued

and precious - where politicians, children, parents, planners and business people recognise the need to actively and deliberately move towards creating such a city. It would be safe. Children's opinions and perceptions would be given validity by decision-makers. Children would enjoy a clean green attractive environment (Christchurch City Council, 1995:1).

Environmental education is implicit throughout the strategy. Environmental issues and the positive environmental benefits Christchurch offers were a major concern for the children interviewed. The Strategy has been supported by a number of environmental activities, most of which meet the needs expressed in the government's Environment Strategy 2010 for encouraging 'environmentally responsible behaviour and informed participation'. The strategy has been followed by a youth policy study which focuses on the 13-15 age group (MacDonald, 1998).

The methods adopted for promoting environmental action and awareness in the city focus on developing partnerships between children and young people, council departments and external organisations using methods identified as important in the MfE Environmental Education Strategy. For example, Coast Care is a coastal management programme run through the Parks Unit designed to control and prevent erosion. School groups and families have been involved throughout this project. Schools participate in raising *Pingao* (an endangered native dune plant) which is then planted as part of the dune stabilisation programme. Other programmes focus on school grounds management (New Zealand schools generally have large grounds), beach clean ups, organisation of the Kids Fest, redevelopment of the City Square, redevelopment of Stewart Fountain, Mainzeal 'Bridgewater' mural and many other projects. Thus whilst children are involved in a range of more traditional environmental education activities, these are integrated into a much broader range of environmental quality programmes.

Case Study 4: Palmerston North City Council: Schools Alternative Transport Kit

In conjunction with Massey University College of Education the Strategic Planning Unit of the Palmerston North City Council has developed a kit for schools entitled *Going Places*. This kit provides a good illustration of how educators and

local bodies can work together in the interests of the environment. In developing the kit the planning unit sought to tackle environmental issues but also hoped to be able to inform children about the planning process. It sought to expand environmental activity beyond greening projects and into the realm of social decision making, around the topic of urban transport.

The kit forms a self contained unit of work most suitable for 12 and 13 year old (year 7 & year 8 students) students and provides the supporting resources needed to conduct the activities. The full range of activities suggested involves students in maintaining their own transport diary for a week and considering the impact they have on traffic flows. They transfer traffic information including bus and cycle routes from a city-wide map (constructed for the task) and their own transport movements onto a map of their local area. They conduct a traffic survey at a local intersection to determine the pattern of flow throughout the day, the types of vehicles and their occupancy. Further activities involve: working out the real financial costs of running vehicles of different sizes, examining the costs and convenience of cycling and busing, investigating the city's 'bike plan', consideration of the number of jobs that are linked to the motor transport industry, and conducting interviews with people about their transport choices. The students and groups report their findings back to the class. The unit then changes tone and considers the social and environmental costs of cars. It looks at health issues, the impact of exhaust emissions, the projected numbers of vehicles in the future along with the way cars have been presented in the media. There are suggestions for reviewing advertisements on television and in print and considering the messages about cars and the people who drive them.

The final phase of the unit involves a visioning activity in which students produce a submission to the council on specific or general issues relating to transport. Council planners have committed themselves to responding to these issues and developing a dialogue with students relating to the issues they raise.

The kit meets environmental education goals in that it is integrated across the curriculum, it considers a local issue in a global context, reviews the inter-related nature of environmental, social and economic issues and involves participatory action in the democratic process. It has the potential to

empower young people in the formation of city planning and goal setting. Funding of the kit and provision of resources support schools in participating in work of a kind that would otherwise be difficult. Crucial to the development of this kit has been an understanding of the opportunities to meet environmental education goals within the curriculum and the ability to relate integrated activities back to specific 'achievement objectives' in individual subject areas required by the curriculum.

WHERE NOW?

We suggest that the most promising avenue for developing environmental education initiatives and programmes in New Zealand appears to lie in the potential for linking local bodies, using the local authority mandate given under the RMA, with formal education. Local authorities can support and empower teachers to act for the environment within the New Zealand Curriculum by providing expert knowledge and teaching materials that address local environmental issues and problems. This would then link schools with community agencies and environmental organisations and would be action focused. Developing such linkages within the constrained resources available to both those working in formal education and in local government will not be easy and educators will need to be creative in finding opportunities to link with agencies for educational purposes.

The task of developing effective environmental education that does incorporate the critical 'transformative action component' identified by Gough (1997) is one that could become more problematic if the economic imperative in New Zealand takes even wider hold and environmental concerns become further marginalised. At present however, the language of environmental concern in both the curriculum and in the RMA can be combined in a powerful alliance. There are danger signs, however. The recent review of the RMA, New Zealand's environmental cornerstone, proposes to narrow the definition of environment to purely physical 'natural processes', removing consideration of social and economic matters. The reason given for this retrograde move away from recognising the inter-relatedness of social, economic and environmental concerns, is to provide a "more legally precise guide" and to "limit recourse to arguments that attempt to frustrate ... on the basis of negative economic effects" (MfE, 1998b:11). This revision demonstrates quite clearly the contention that economic growth and market rationalism directly

oppose environmental values. The proposed change would have the negative impact of creating a much narrower, smaller umbrella with which to shelter the environment. Again environmental concerns bow to economic ones.

Despite the positive sentiments expressed in government documents, evaluation of the future prospects for environmental education in New Zealand does not give cause for optimism. For, whilst publicly extolling New Zealand's environmental virtues, the government continually subjugates environmental concerns beneath economic ones, narrows the scope for environmental action in its key legislation, and prevaricates over instituting environmental education in its school curricula. New Zealand is a contrary place, possessing a unique environmental heritage which forms an essential part of New Zealander's psyche. Yet, its people seem unable to give the vital unequivocal support necessary for ensuring the survival of that unique heritage, particularly when such support questions the unabated pursuit of that capitalist enigma, 'the economic miracle'.

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