

Environmental Education/Education for Sustainability

Barry Law*



Section A: Describe the national policy of environmental education/ education for sustainable development

In New Zealand education for sustainable development has been addressed through the concept of environmental education and learning and education for sustainability and is identified as a policy strategy in many national and local government, business, and private sector documents.

Sustainable development in New Zealand is viewed as "a process rather than an end result" (Ministry for the Environment briefing papers). This view is also grounded in ecological sustainability and "aims for efficient use of resources, environmental preservation and a just and equitable social order all at the same time" (Ministry for the Environment briefing papers). Currently a Strategic Policy Group within the Ministry for the Environment is providing a scoping paper to explore the key elements that are necessary for sustainable development to be made operational in public policy. However, there still remains some confusion in New Zealand regarding the role of education, and in particular environmental education in teacher education, as an effective strategy for meeting some of the aims of sustainable development.

There are three major initiatives that promote education as an effective strategy for sustainable development. These have occurred at the Central Government level through the formation of a cross sector environmental education coordinating group 1999-2001 (Ministry for the Environment), the Ministry of Education environmental education professional development contract June 2000 - June 2003 and the environmental education coordination contract with School Support Services 2003-2005. These three initiatives have established a framework to assist with the effective coordination of education activities across all sector groups (local government, formal education, community groups, NGOs etc.).

1a The role of education in the national strategic plan for sustainable development

The Ministry for the Environment, Ministry of Education and Ministry for Local Government accept that environmental education (EE) is a key strategy within the broad framework of sustainable development. All three Ministries have become more proactive in this area over the last six years. Consequently, they have begun to address environmental education (education for sustainable development) in policy documents and in some aspects of practice. However, while a common approach to environmental education between the three Ministries has begun to influence the direction of policy documents related to sustainable development there is still an urgent need to put many EE strategies into practice.

* Experimental and Environmental Education, Christchurch College of Education, New Zealand

The Ministry for the Environment released the Government's strategy for the environment in 1995. 'Environment 2010' provides New Zealand with a management strategy for addressing environmental concerns. The document outlines a six-part management agenda to "help achieve the vision of a clean, healthy and unique environment, sustaining nature and people's needs and aspirations."

The six parts of the management agenda are:

1. Integrate environment, economic and social policy
2. Establish a coherent framework of law
3. Sharpen the policy tools
4. Build up the information base
5. Promote education for the environment
6. Involve people in decision-making

Part five 'Promote education for the environment' outlines four proposals for action:

- National approach
- Guidelines for schools
- Tertiary education programmes
- Community education policies and action plans that acknowledge their roles.

Three of the above four proposals for action have been addressed in the last six years. A National strategy for environmental education was written by the Ministry for the Environment in 1998. This document Learning to Care for Our Environment: A National Policy on Environmental Education clarifies an understanding of EE for all sector groups. The main aim of EE is "to encourage environmentally responsible behaviour and informed participation in decision-making by promoting environmental education throughout the community" Environment 2010 Strategy p.57.

National approach

The Ministry for Education launched the Guidelines for Environmental Education in New Zealand Schools in August 1999. This document identifies EE as an investment for the future. The EE Guidelines highlight essential skills, increased understanding of the environment, effective decision making and social action as critical tools to establish a sustainable future.

"Education for sustainability is a new focus for education. It is a way of helping individuals and societies to resolve fundamental issues relating to the current and future use of the world's resources. However, simply raising awareness of these issues is insufficient to bring about change. Environmental education must strongly promote the need for personal initiatives and social participation to achieve sustainability." EE Guidelines p. 8.

Guidelines for Schools

The EE guidelines for NZ schools support the national policy "Learning to Care for our Environment." The four key concepts that underlie EE in New Zealand are: interdependence, sustainability, biodiversity and personal and social responsibility for action. The concept of sustainability in New Zealand also recognises the special relationship of the Crown

with Maori through the treaty of Waitangi and therefore the notions of hauora (total well-being and balance with nature), rahui tapu (conservation) and kaitiakitanga (guardianship) are key aspects of sustainable development. The EE guidelines for schools provides a framework and direction for schools and the assumption is that teacher education providers will address this document within their pre-service programmes. The Guideline document clearly outlines that "the NZ curriculum provides a context for developing teaching and learning programmes for environmental education. Schools will also have a range of policies and practices through which the aims of environmental education can be met. Such policies and practices can be used to establish appropriate organisation, operational and curriculum objectives that promote a whole school approach to a sustainable environment." (EE Guidelines, p.15). However, the 1999 EE Guidelines for NZ schools is only a set of guidelines and doesn't carry the status of a formal prescribed syllabus. Currently there is no compulsion for schools to adopt any of the ideas outlined in the guideline document. However, the science curriculum has the mandated achievement aim: "In their study of planet earth and beyond, students will use their developing scientific knowledge, skills and attitudes to investigate how people's decisions and activities change planet earth's physical environment, and a responsibility for the guardianship of planet and its resources" (SiNZC, p.106)

Over the past decade there have been major changes to the curriculum framework in NZ schools and a stream of new requirements associated with assessment, funding, staffing, monitoring and reporting performance. This has placed pressure on teachers, managers and administration staff as they constantly dealt with a raft of educational changes. Consequently, environmental education has maintained its status on the very fringe of curriculum delivery in many schools. However, this is slowly changing as new initiatives are implemented. In June 2000 the Ministry of Education established a national professional development programme for environmental education. This programme trained 75 national facilitators working in 17 regional teams who facilitated over 40 two-day courses around New Zealand based on the Environmental Education Guidelines for NZ Schools. This equated to approximately 380 schools and 700 teachers. However, this is a small number given the total number of schools (2700) and total number of teachers (40,000).

More recent changes to the curriculum framework based on the curriculum stocktake (2001-2003) has seen the emergence of 'Education for Sustainable Development' as a new focus theme to be delivered across all learning areas/disciplines. At this point in time ESD/EE learning outcomes tend to be addressed in isolation within separate disciplines. This limitation makes it difficult for individuals or groups to gain the full picture of any issue and pursue any form of action for the environment that considers skills, knowledge and attitudes and values in a holistic manner.

However, the national environmental education professional development programme and the environmental education coordination contract has recently supported and promoted the development of courses that address "Sustainable Futures" at the senior (yrs 11-13). Currently 64 secondary schools are either delivering or writing courses (to implement at the start of 2005) that focus on education for sustainability.

Community education

The Ministry for the Environment supported local government initiatives in 1998 by allocating sustainable management funding to write an Environmental Education strategy document for local Government and non-Government organisations (NGO's) Environmental Education: A guide for programme providers. This initiative provided direction for community education policies and action plans and acknowledged the role of local government in educating New Zealanders

for a sustainable future. Local government in New Zealand has already established a number of key initiatives in education for sustainability and they provide education programmes for schools, small business and community groups. Some of these initiatives involve cooperative working relationships with other sector groups and this includes formal education providers. Specific examples of these initiatives are outlined in Section B.

Tertiary education

While many universities provide environment related papers, the focus of these papers is often on knowledge acquisition and awareness. Tertiary education providers have been slow to offer programmes that comprehensively address ESD/EE in formal qualifications. Consequently, there are limited qualifications in the tertiary sector that specifically address education for sustainability by linking biophysical, economic, cultural, social and political aspects together in a coherent programme of study. Victoria University in Wellington is currently developing a programme that specifically addresses education for sustainability.

In the late 1990's Massey University took the initiative to convene a series of meetings for tertiary institutions to explore education for sustainability in relation to core programmes of study, organizational structures and operational practices and while several tertiary institutions have adopted a more sustainable approach towards their operational practices many have not followed through on the initial support this initiative provided.

There have been several attempts within teacher education to address the inclusion of core or optional papers in environmental education. However, numerous obstacles such as; the over crowded curriculum, funding constraints and traditional practice have been cited as major limitations in establishing EE strongly within the current system of pre-service delivery in teacher education in NZ. Opportunities for pre-service teacher education courses in environmental education exist at Auckland College of Education (ACE), Massey University, Christchurch College of Education and Waikato University's School of Education. In-service courses in environmental education are offered through the School Support Services at Team Solutions ACE, Waikato University's School of Education, Massey University, Wellington College of Education/Victoria University, Christchurch College of Education and Dunedin College of Education.

Massey University provides a Post-graduate Diploma in Environmental Education. The Christchurch College of Education offers a joint Masters Degree in Environmental Education with Griffith University (Brisbane).

Significant influences on Policy in Learning and Education for Sustainability.

• Parliamentary Commissioners Office

The Parliamentary Commissioner for the environment (PCE) released his report "See Change: Learning and Education for Sustainability" (January 2004) that explores "how societies can learn to live in sustainable ways" (p.12). The document highlights the critical importance of education in its broadest sense and the need for re-design in education across all sector groups in New Zealand to bring about a fundamental change in thinking to achieve a sustainable future.

The purpose of the report "is to raise the level of debate about education for sustainability and to stimulate effective

action so that New Zealanders can learn to live in sustainable ways" (PCE, p.130). The document addresses the need for new thinking and a shift in how we view issues/problems in order to implement action that brings about situation improvement. A clear distinction is made in the document between learning and education.

Learning is viewed as: "a psychological phenomenon. It is a process in which people develop ways to see and interact with the world around them" (PCE, p.13). Education is described as "a sociological phenomenon. It is more focused on what educators (such as parents and teachers) do to facilitate learning in others".

The report clarifies the environmental dimensions of sustainability as:

- "The life supporting process (ecological systems) that provide people with good quality air, water, soil marine life, and a viable climate. This is essential for sustaining a world that humans and other species can survive and flourish in" (PCE, p.14).

- "Other environmental factors that contribute to people's quality of life. What people value about the environment is always changing, but most people in New Zealand today enjoy living in a good quality environment" (PCE, p.14).

Thus, Education for sustainability is viewed as:

Education that is not simply about sustainability but "education that empowers people of all ages and different backgrounds to contribute to a better future" (PCE, p.15). Thus, education for sustainability is characterized by such things as: encouraging people to ask questions, challenging underlying assumptions, critical thinking, individual and systemic change, redesigning systems and is grounded in a transformative process (PCE p.15).

The PCE's document covered seven major topics

1. Introduction to education for sustainability
2. People, places and pressures on sustainability
3. Explaining education for sustainability
4. Educating people for tomorrow today
5. Further shapers in society
6. Waste not, want not.
7. Future directions

Significant areas of focus included in the PCE's document are:

- Quality of Life
- Keeping an eye on the bigger picture
- Developing capacity
- Learning across society
- Pursuing social marketing for sustainability
- Being positive to cultural diversity

The Commissioners report is a brave document that is wide ranging and deals with many contentious issues related to learning and education for sustainability. This document has the potential to influence our thinking and shape future decision-making in a wide range of government and local body policy over the next few years.

Section B - Examples of 'Best Practices' in School Education

1. Ministry of Education.

a. Environmental Education Professional Development

The Christchurch College of Education was the successful tender for the national EE professional development contract in 2000. This contract is a Ministry of Education contract that started in June 2000 and finished in June 2003. The professional development programme involved three key initiatives. Firstly, it provided funding for the training of 75 national facilitators in seventeen different regions throughout NZ. A special Maori EE training programme added another 18 Maori facilitators. The second initiative involved the national facilitators delivering regional training programmes to teachers. The regional training programmes provided a detailed exploration of the EE Guidelines for NZ Schools. The professional development approach encouraged teachers to use innovative ways to address ESD/EE within their current school programmes and it also challenged participants to consider alternative ways of designing new school programmes that focus on ESD/EE. The third initiative identified teachers and schools that were committed to ESD/EE and provided additional support and assistance for the school to become a pilot school. The focus of the pilot schools was to establish a number of regional 'enviro schools' or 'model schools' that could demonstrate a balanced curriculum approach to achieving education for a sustainable future. Many of the national pilot schools are now part of a national "Enviro-Schools programme" (see description of the enviro-schools programme below).

b. Environmental Education National Coordination - School Support Services

In January 2003 a national environmental education coordination team was set up throughout New Zealand to support the professional development programme 2000-2003. Eleven full-time positions were allocated to the six School Support Service providers. One national coordinator was established (.5) based at the Christchurch College of Education. The remaining positions were allocated to the regional School Support Services providers. Currently we have 4 fulltime positions at Team Solutions (ACE), 2 positions at Waikato University's School of Education, 1.2 positions at Massey University, 1.2 positions at Wellington College of Education/Victoria University, 1.5 positions at Christchurch College of Education and .6 of a position at Dunedin College of Education. The regional coordinators are responsible for providing support for teachers and schools working in environmental education. The whole team meets twice a year to share new thinking and plan new directions. This year the team is split into four working groups addressing research in EE, developing new teaching and learning strategies for EE, developing NCEA achievement standards for education for sustainability and identifying appropriate structures for disseminating resources. The team reports once a year to a national reference group to gain feedback and provide guidance to the Ministry of Education..

2. Enviro-schools programme - Learning for a sustainable future

Creating a sustainable school

Enviroschools is a whole school approach to environmental education where students participate in creating a sustainable school with support from their communities. Schools form an Envirogroup, create a Vision Map and undertake environmental action projects that integrate the formal curriculum. The process is student-centred, allowing individuals and groups to learn through exploring their environment, making decisions, designing, implementing and maintaining

sustainability projects.

An enviroschool becomes a model for sustainability, reinforcing the environmental education curriculum and providing ongoing opportunities for student learning and action. Four key areas of school life are enhanced through this process:

- *Physical Surroundings* - Ecological and participatory design of grounds and buildings.
- *Operational Practices* - Sustainable conservation practices in the day-to-day running of the school.
- *Organisational Principles* - Participatory and democratic school management.
- *A Living Curriculum* - An integrated formal curriculum that enriches school and community life.

A partnership approach

Enviroschools development is an ongoing process of participation and partnerships at all levels. The Enviroschools Programme began as a Council/community initiative and is now governed by The Enviroschools Foundation which provides facilitator training, educational resources, sharing opportunities and a strong governance and networking structure. Funding for the national office comes mainly from grants and at the regional level from Councils and local Trusts.

At a national level the Enviroschools Foundation has a key partnership with the Environmental Education Guidelines Professional Development Programme, currently managed by the Christchurch College of Education. This partnership is crucial for the strategic direction of EE in schools nationally and for coordinating action to support schools in the regions. Links are also being strengthened with the Department of Conservation, sustainable business networks and other agencies to provide the cross-sectoral support that is imperative for sustainability education.

At a regional level facilitators and support people are mainly funded by Councils and some independent Trusts. Schools are supported through either the three-year facilitated Enviroschools Programme or the Enviroschools Awards Scheme, depending on the level of support in each region.

Further development needed

Sustainable schools have the potential to contribute to wide-ranging community benefits such as health and well-being, conservation, efficient urban infrastructure and increased community participation in local issues. Much has already been achieved to create this future. However, a secure funding base has yet to be established to enable the Enviroschools Foundation to further strengthen networks and provide increasing support to regions. A number of components are in need of immediate development, including:

- School facilitation of Maori perspectives of the environment,
- sustainability educational materials in te Reo Maori,
- facilitation of community mentor schemes,
- increasing the momentum of the national Enviroschools Awards scheme, and
- further support for the national Enviroschools reflection-evaluation process.

3. Local and regional government programmes that support school initiatives

A large number of community educators and local government organisations provide in-service programmes in environmental education for teachers and these include: Hamilton City Council (started Enviro-schools NZ), WWF-NZ, New

Zealand Association for Environmental Education, Northland Regional Council, Auckland Regional Council, Environment Waikato, Hawkes Bay Regional Council, Horizons Manawatu, Wellington Regional Council, Environment Canterbury and Southland Regional Council.

The Enviro-schools awards scheme developed by the Auckland Regional Council in conjunction with Enviro-Schools New Zealand (Hamilton) and supported by the National EE professional development facilitators is an example of a successful schools based awards programme. This programme provides an "incentive scheme for schools to become actively involved in environmental education" that assists students and teachers to "undertake initiatives that make a real difference to their communities" (Auckland Regional Council, p.2).

The purpose of the scheme is to encourage schools towards becoming a sustainable community incorporating best environmental practices that will carry over in to home/everyday life. The guiding principles include sustainability, environmental education, children's participation, respect for the diversity of people and cultures and Maori perspectives and knowledge on the environment.

The award offers schools

- an opportunity to make environmental education a central part of school life
- enriched and integrated educational experiences
- an opportunity to develop young people's decision making skills
- potential for financial savings
- a chance to share ideas with other schools
- access to a network of support agencies
- a national award
- an opportunity to become part of a global movement.

What it requires from the school

- the support and commitment from the principal and Board of Trustees
- a willingness to involve young people in planning decision-making and action
- active involvement from teachers, parents and the wider school community
- a willingness to take action and to commit to long-term change
- a commitment to document the process towards creating a sustainable school environment
- a commitment to explore the integration of curriculum objectives with school organizational principles, operational practices and school ground management that reflects a sustainable future.

The award is based on meeting established criteria in four key areas of school life curriculum:

- Organizational Management
- Operational Practices
- Physical Surroundings
- Living Curriculum

There are three levels of attainment:

Bronze

Silver and

Green-Gold

Criteria are established at each level covering the four key areas. At the bronze and silver level the award is school monitored and documented prior to submitting to the council as evidence for checking and feedback. The green-gold award is more prestigious and involves a school monitoring visit by a small group of assessors to make sure that the school has embraced the principles of a sustainable school environment.

The Auckland Regional council also provides environmental education through their "Learning through Experience" programme for school within the Auckland region. The programme supports curriculum achievement objectives and is supported by the Ministry of Education.

4. Collaboration and cooperation through a regional Environmental consortium.

Environmental educators in the Canterbury region of New Zealand have established a number of environmental initiatives by working together in a consortium and sharing their knowledge experience and resources to develop opportunities for schools. The consortium involves: Environment Canterbury, Christchurch City Council, Department of Conservation, WWF- NZ and Christchurch College of Education and the Canterbury Environmental Education Trust.

A school-based Road show for teachers outlines the opportunities, services and resources offered by each of the consortium partners individually or collectively.

Specific programmes that involve collaboration include:

- Coast to the High Country - A multi-day programme to gain first-hand experience of current environmental and sustainability issues facing the Canterbury Region. The environmental educator that facilitates this experience works with teachers, local government educators and DOC staff to customize each programme to suits the needs of both students and teachers.

- Learning through Action - Is an environmental education initiative that has twenty different programmes using natural and municipal sites around Christchurch. The environmental facilitators work with teachers to design a programme that best suits student's needs. Programmes focus on five key areas:

- Streams, rivers and wetlands
- Coastal programmes
- Biodiversity and Geology
- Water and Waste
- Heritage and History

•Department of Conservation Super Sites programme - Department of Conservation educators provide resources and staff to help teachers and students better understand conservation goals at the super sites that identify specific issues or highlight effective conservation practices.

The Coast to the High Country programme often uses both "Super Site" and "Learning through Action" sites, including local government educators to support the programme. This is an effective collaboration that provides a cooperative and supportive educational programme. The Consortium meets on a regular basis and its members are also key members of the New Zealand Association for Environmental Education.

5. Sustainable Business Partnerships with Education

Sustainable business interests are involved in supporting enviro-schools New Zealand by way of grants for administration and staffing. "Untouched World Foundation" associated to the Snowy Peaks Group in Christchurch provides funding support for the Blumine Island conservation project in the Marlborough Sounds. The Blumine Island project is a joint venture between Untouched World Foundation, Department of Conservation (National Biodiversity), Christchurch College of Education (Teacher Education for a Sustainable future) and South Island secondary schools (Practical experience through student-centred learning). The programme is designed to provide practical field trip experience for selected students and teachers to draw together conservation, education and sustainable business practices. The students and teachers involved in the field trips have supported enviro-groups back in their schools. As a result of the Blumine programme two of the schools involved now have head students who hold environmental leadership roles and have responsibilities for informing the school on issues related to sustainability.

Summary of key strengths in environmental education in New Zealand include:

1. The development of effective partnerships between formal education, local govt, Community educators and sustainable business that provide new ideas and new thinking about educating for a sustainable future.
2. An action based and student-centred approach to environmental education.
3. A small shift in curriculum thinking that identifies education for a sustainable future as a new focus theme in the recent curriculum stocktake (Ministry of Education).
4. The development of NCEA courses at the senior secondary level that focus on sustainable futures (currently 64 secondary schools developing courses in this area of study).
5. A strong national coordination team (11 fulltime positions) that facilitate regional in-service courses for teachers in environmental education across New Zealand.
6. An innovative Enviro-schools Foundation and awards scheme that supports the concept of sustainable schools. This programme supports the notion of sustainable schools where school grounds, operational, management and curriculum are all part of the sustainability process.
7. A strong national environmental education association (NZAEE) that provides networking, an organizational structure, political support and conference opportunities for environmental educators.
8. Research has been strong component of the EE professional development programmes in NZ. The NZ Council for Education Research and the University of Waikato have completed an independent evaluation of environmental education in New Zealand schools.

Section C - Challenges (Constraints and problems) faced in implementing current EE programmes both at school and other levels of education

1. An urgent need to re-examine the nature and structure of schooling in a more critical way to address environmental education/education for a sustainable future in its broadest context ie, school organizational principles, operational practices, school ground management and curriculum content. We are faced with a paradox, is education the problem or the solution towards a sustainable future. At our current levels of un-sustainable practice and over consumption it could be concluded that education is part of the problem. If education is the solution then it requires a deeper critique and a broader vision for the future. Thus, a whole system re-design needs to be considered to challenge existing frameworks and shift our thinking beyond current practice and towards a sustainable future.
2. Teaching and learning in environmental education needs to move beyond a mechanistic/transmissive approach to learning and adopt a more transformational process. Mechanistic systems, processes and assessments are the problem. Transformative systems, processes and assessments are a solution (Sterling 2001).

For example student decision-making needs to be a critical part of the education process (transformative) rather than teacher directed decision-making (mechanistic/transmissive). The emphasis on learning should be an integrative approach that has teachers as learners and learners as teachers rather than total focus on adults teaching. Teachers and students should operate as a critical community of reflective thinkers rather than as functional learners'. Meaning and understanding needs to be constructed and emergent rather than given and learning needs to be active rather than passive. Consequently the national environmental education coordinators are currently developing materials that explore appropriate teaching and learning strategies for environmental education.

3. Assessment Issues. There are currently no achievement standards that specifically address cross curriculum achievement standards for environmental education/education for a sustainable future. However the national environmental education coordinators are currently addressing this issue.
4. Lack of time in the current schooling system to implement action based projects that relate to issues of sustainability. Many school-based activities don't go past thinking about identifying possible actions.
5. The lack of status and support in schools for developing environmental education/education for sustainability programmes makes it extremely difficult for interested teachers to get things started. The National Environmental Education Guidelines for NZ Schools states that "the extent to which environmental education is incorporated within the curriculum will continue to be determined by the board of trustees of each school" (Ministry of Education/Learning media, p.5). Thus, environmental education is not viewed as a core component or essential requirement of schooling, it is left up to the school community to determine to what extent they will incorporate environmental education in to the school programme.

6. The delivery of environmental education (education for sustainable development) in New Zealand is still constrained in both formal school education and in the wider community by the lack of a broad vision that encourages collaboration and cooperation among all educators.
7. The emphasis on literacy and numeracy in our education system continues without any acknowledgement of the contribution of environmental literacy or integration between numeracy and education for sustainability. EE/EFS provides a ideal context for teaching the 'mechanical' skills of literacy and numeracy.
8. There are no ESD/EE requirements or specific outcomes identified for teacher education by central government and therefore, very few teacher education providers have developed courses or acknowledged ESD/EE components within pre-service or in-service programmes. The failure of many teacher education institutions to re-orientate their programmes has been due to four key factors. Firstly, the widespread and rapid changes in the education system over a relatively short period of time. Secondly, the autonomy held by teacher education institutions over their own programmes of study. Teacher Education providers are not accountable to anyone other than market forces. Thirdly, the perceived role of some institutions in delivering only what schools want (training) rather than assimilating training with education programmes that challenge and re-orientate content and practice within schools. The fourth factor is a lack of commitment by managers in some institutions to support areas of study that are not mandatory or part of the core curriculum.

The role of teacher education in ESD/EE is under review. Teacher education is identified in the current agenda of the NZ sustainable development group as a key target area for change.

9. Although indigenous perspectives of the environment are recognized as a crucial component of environmental education and sustainability there is a lack of structure within many organizations and institutions to provide support for this. More Maori educators and environmental education resources in te reo Maori are needed for Maori students and teachers in schools. However, it is also essential to have people who can bring Maori perspectives into mainstream education - widespread awareness and acceptance is necessary in order to bring about the inter-cultural understanding necessary for sustainability.

Presently, there is an attempt to address some of these issues but, they tend to be further constrained by the lack of an organisational and operational framework that outlines how specific outcomes will be achieved for each sector group working in environmental education/education for sustainability in New Zealand. There is also no formal monitoring procedure to check on whether specific outcomes for EE/EFS are being met in formal, local government or community education.

Section D - Country plans for the contribution of EE for the UN DESD

The National Commission for UNESCO-NZ's new education committee meets for the first time on February 3 2004 to discuss plans for the contribution of EE for the UN DESD. Several initiatives have been identified but no formal discussions have taken place to establish these in any official plan for the decade.

Current initiatives include:

- Continuing to develop a research community in EE/EFS in NZ
- Establishing a working group to explore effective teaching and learning strategies for EE/EFS
- Developing NCEA assessment standards for EE/EFS in NZ
- Continuing to develop partnership opportunities to model a cooperative and collaborative approach to EE/EFS
- Developing stronger links between educators involved in EE/EFS and sustainable business.
- Linking with the IUCN CEC EE network on supporting the Decade of ESD 2005-2015.

There are many positive initiatives in New Zealand and a willingness by interested educators to collaborate to achieve positive outcomes for a sustainable future. However, the biggest limitation is the lack of recognition for EE/EFS by some educational managers/principal's in our current unsustainable schooling system.

This limitation is compounded by the notion that EFS is the responsibility of the formal education system - making cross-sectoral collaboration very difficult.

Dr Barry law

Christchurch College of Education

PO Box 31065

Ilam

Christchurch

New Zealand

Ph 0064 3 3482059 ext 8369

Email barry.law@cce.ac.nz

Reference group

Heidi Mardon - EnviroSchools Foundation

Chris Arcus - Ministry of Education

Pam Williams - Immediate Past President of NZAEE

Raiha Boyes - Hoaka Pounamu & Whakapiki i te Reo Maori CCE.

References

- Auckland Regional Council. 2002. EnviroSchools Awards Scheme. Auckland: ARC
- EnviroSchools Foundation NZ. 2003. Strategic Plan. Hamilton: EnviroSchools
- Ministry of Education. 1999. Guidelines for environmental education in New Zealand Schools. Wellington: Learning Media.
- Ministry for the Environment. 2000. Briefing papers.
- Ministry for the Environment. 1995. Environment 2010. Wellington: MFE
- Ministry for the Environment. 1998. Learning to care for our Environment: A National Policy on Environmental Education. Wellington. MFE.
- Parliamentary Commission for the Environment (PCE). 2004. See Change: Learning and education for sustainability. Wellington: PCE.
- Sterling, S. 2001. Sustainable Education: re-visioning learning and change. Totnes, Devon: Green Books