

CHAPTER

4

Educating people

for tomorrow, today



This chapter looks at the extent of education for sustainability in New Zealand today. It focuses on the environmental dimensions of sustainability, which until now have mostly come under the banner of environmental education. It begins by examining the priorities of central and local government and their efforts to educate for sustainability. It then looks at the formal education system from primary schools through to tertiary level. Although this chapter concentrates on government, it looks at the influence of community organisations and businesses as well. Overviews are contained at the end of most sections. A summary at the end of the chapter considers the overall effectiveness of efforts to date.

4.1 Central government

Central government has a pivotal role to play in education for sustainability. In particular, it influences the shape of the formal education system. Many people and organisations also look to central government for leadership and support. Furthermore, the government has developed various strategies and programmes to influence sustainable development in New Zealand. This section begins by looking at these strategies and priorities for education. It then looks at agencies with responsibilities in the environmental and education areas and some key initiatives that are underway.

Over-arching frameworks

Two key documents establish the government's over-arching priorities for education and sustainability:

- The *Sustainable development programme of action* (2003)¹
- *Education priorities for New Zealand* (2003).²

The *Sustainable development programme of action* sets the government's overall direction and priorities for sustainable development. It includes principles for policy and decision making such as: working in partnership with local government, encouraging participatory processes, considering the implications of decisions from a global as well as a New Zealand perspective, and respecting environmental limits.³ These principles have been adopted by Cabinet, and all Chief Executives of government agencies have been charged with implementing them in policy.

The *programme of action* comments that "sustainable development must be at the core of all government policy" and includes a vision that New Zealanders will "Cherish our natural environment, [are] committed to protecting it for future generations and [are] eager to share our achievements in that respect with others".⁴ However, it does not explicitly consider the roles that education could play to meet this vision.⁵ It briefly suggests that, "fostering an apprecia-

tion of New Zealand's unique natural environment among children and young people helps to ensure its protection and enhancement for future generations", although it does not expand on this statement. It only makes some reference to general education skills, such as access to education services and the need to build a 'knowledge economy'.

Education priorities for New Zealand provides a summary of the government's priorities in the education area. It draws together existing strategies and programmes across the formal education system, including the *Early childhood strategic plan*⁶, the *Tertiary education strategy*⁷ and current approaches to schooling. It places education at the heart of social and economic development in New Zealand, and comments that, "The investments we make each year in the development of our education system must focus on the things that really matter".⁸

Any mention of the environment is almost entirely absent from this document. The environment does not feature in any of the government's priorities, including 46 'general strategies' for education. Furthermore, the education priorities only refer to the importance of innovation and economic, cultural and social development as key areas for national development. This is despite the fact that environmental sustainability has been highlighted as a key national goal in other government strategies (see section 4.4). A lack of consistency in linkages between government strategies is widespread, as highlighted in *Creating our future*.⁹

Another key government document is the national strategy for environmental education, *Learning to care for our environment*¹⁰. This was released in 1998, and commented that:

There is an increasing appreciation that we all have a part to play in protecting and sustaining the environment. Environmental education is the key to providing people with the knowledge, awareness, attitudes and values that will assist them in this task. Environmental education is not just a priority for school children, it must be a lifetime commitment for all of us.¹¹

This document established priorities to:

- integrate and coordinate environmental education efforts
- evaluate environmental education activities
- enhance the capacity of tangata whenua in environmental education
- incorporate the aims of environmental education across the school curriculum



- promote environmental education in business education and training
- provide individuals and communities with the information and understanding to enable them to make environmentally sound decisions.

The government planned to monitor this strategy through regular reviews of the *Environment 2010*¹² strategy. This highlighted a need to have an integrated national approach to environmental education across all sectors of the community.¹³ *Environment 2010* is now obsolete, as it was the product of a mid-1990s government that is no longer in power. The influence and status of *Learning to care for our environment* remains unclear, although it should be noted that there are no links made to this strategy in *Education priorities for New Zealand* or *the Sustainable development programme of action*.

Other government strategies

The government has produced a range of other strategies, policies and programmes in the environmental, social and economic areas.¹⁴ Their relevance to education for sustainability is summarised in a background paper to this report.¹⁵ Although these strategies are not necessarily well connected to each other, they often highlight an important role for education to achieve objectives for sustainability. Comments include those on page 55.

Strategies with the strongest links to education and environmental sustainability are in the areas of biodiversity, waste, energy efficiency and climate change. Many other government strategies, including those for tertiary education, innovation, transport, health and tourism have very weak or non-existent links to education and the environment.²⁰

Government departments involved in environmental education

Many government ministries and departments are involved in environmental education. Three main agencies are:

- **Ministry for the Environment:** Mostly acts as a coordinator and facilitator for environmental education. The Ministry relies heavily on other networks, especially councils, to communicate with the general public. Most of the responsibility for day-to-day environmental management rests with local government (see section 4.2). The Ministry has therefore put most of its efforts into encouraging councils to employ environmental education staff, develop plans, and to share information and resources with each other. It has also done some work on specific issues such as waste and climate change.
- **Ministry of Education:** Responsible for the New Zealand Curriculum that sets out what all children should learn in schools. The Ministry produces

The large majority of our community remains unaware of the ecological impact of humans on our environment ... Maintaining our status as a 'clean and green' nation requires us to ensure we have the research and skills to...help all New Zealanders develop an awareness of the environment and the impacts economic and social activities have on it.¹⁶

– Tertiary education strategy

Creating understanding of energy impacts and actions at all appropriate levels throughout the community is fundamental to developing a sustainable energy future.¹⁷

– Energy efficiency and conservation strategy

There is a need to recognise and 'mainstream' biodiversity concepts in broader environmental education programmes and to make biodiversity information relevant to people's local environments, that is, to enable people to connect biodiversity with their places and how it contributes to their lifestyles.¹⁸

– Biodiversity strategy

Many people enthusiastically promote and practise waste minimisation, but others know little about the problem. We need to raise awareness so we can build on and support community responses to local waste issues.¹⁹

– Waste strategy

guidelines, which are not compulsory, to support the Curriculum. Guidelines for environmental education were released in 1999. The Ministry also funds professional development courses for teachers and develops materials to support environmental education in schools. More information about these initiatives is covered in section 4.3.

- **Department of Conservation:** Responsible for conserving the natural and historic heritage of New Zealand. The Department received special funding in 2000 to develop conservation awareness projects in urban and rural centres.²¹ The Department has developed a strategy to work more closely with communities, and provides education resources that are aimed at increasing support for conservation.²²

Many other government agencies are involved with specific issues related to education and the environment. For example:

- the Energy Efficiency and Conservation Authority and the New Zealand Climate Change Project are trying to raise awareness about energy sustainability
- the Ministry of Agriculture and Forestry sends kits to schools and provides information on sustainable agriculture.
- the Ministry of Fisheries aims to educate people about fishing rules to promote voluntary compliance with regulations.

Education of new immigrants

No matter how hard the government tries to educate the current population for sustainability, a steady stream of new migrants arrives in this country each year. These people contribute to the cultural diversity and vibrancy of life in New Zealand. They also bring with them their own worldviews that have been shaped by the societies they come from. As suggested in section 2.1, it often takes time for people to develop connections with their environment. No matter where they come from, new migrants probably need to learn how to live in an environmentally sustainable manner in New Zealand's unique ecology. As they settle in this land it is therefore important to consider what attempts are made to educate them for sustainability.

People who come to settle in New Zealand receive almost no guidance from the New Zealand Immigration Service on environmental or sustainability issues. A Settlement Pack has been designed to help people when they first arrive. It covers issues such as housing, health, education and business.²³ It includes only a small amount of information on declaring goods to protect New Zealand's agricultural industries and access to recycling facilities. No guidance is provided on how to behave in the environment. For example, there is no mention of the

need to protect coastal areas and to respect limits for taking fish and shellfish.

Several other government departments have started to expand their activities to work with different cultures. The Department of Conservation has targeted a variety of cultural groups in Auckland to achieve better conservation outcomes. They are currently working with the Chinese Conservation Trust and the Tapa Conservation Trust, which works with Pacific Island communities. The Ministry of Agriculture and Forestry has also begun to work more closely with Pacific Island peoples to improve compliance with biosecurity measures. For example, the 'Protect New Zealand' campaign launched in 2000 targeted Cook Islanders, Fijians, Tongans and Samoans living in or visiting New Zealand. The Ministry of Fisheries has also developed some multi-language notices and guides for recreational fishers.



Other initiatives

Other initiatives that the government has undertaken in the environmental and education areas include:

- **A Sustainable Management Fund**, administered by the Ministry for the Environment, provides assistance to community projects. Many of these projects have a strong education or communications component. The fund has supported: the development of environmental educational resources for schools and communities; a directory of educational resources; and guidelines for the development, implementation and evaluation of strategies and programmes.
- Some **Environment Centres** around New Zealand receive financial assistance from the Ministry for the Environment, under a scheme that began in 2001. The centres, most of which existed well before financial assistance came from government, promote a range of issues in their communities, including environmental education.
- A **National Youth Environment Forum** was established in 2003. Around 50 people between the ages of 15-18 were invited to travel from regions around New Zealand to present their perspectives on selected environmental issues. It is planned to be an annual event.

Overview of central government efforts

Many existing government activities are likely to be supportive of education for sustainability, although the emphasis to date has been on environmental

education. Over the last five years, in particular, there has been a focus on:

- building up capacities for environmental education in local government
- encouraging environmental education in schools
- working with communities on conservation issues.

Education issues are highlighted in many government strategies related to sustainability. The focus of these strategies is usually on raising awareness.²⁴ As chapter 2 highlighted, there is currently a low level of public awareness on many sustainability issues in New Zealand. However, it is important not to assume that changes in awareness will inevitably lead to changes in behaviour. Awareness raising is only one part of educating people for sustainability (see chapter 3).

The government is using a variety of different approaches to assist environmental education, but it is not usually seen as a priority. It has produced some guidance for environmental education in schools (see section 4.3). Many government departments have also developed education resources for schools, although there is no monitoring of the uptake and use of these resources. The government has not taken a proactive approach to cover all new migrants or to start educating them before they get here, although there are some promising examples of government agencies working with new migrants on environmental issues.

One approach the government has hardly used to reach a wider audience on sustainability issues is social marketing (see also section 5.4). The government has conducted many advertising campaigns to convince New Zealanders not to smoke or drink-drive and to motivate them to exercise more regularly, avoid accidents and to save for their retirement. A similar 'journey' has not been taken at a national level for environmental or sustainability issues. The only exceptions to this are the 'Reduce Your Rubbish' campaign coordinated by the Ministry for the Environment, and the 'Be Better Off' campaign conducted by the Energy Efficiency and Conservation Authority. Both of these began in 2003, but they were not well-funded. About \$400,000 was spent in the two-month rubbish campaign to produce and broadcast messages for the media. The energy campaign also lasted two months and was directed at businesses in the Auckland and Wellington regions. It cost about \$200,000, less than half of which went on advertising. As a comparison, the Land Transport Safety Authority spent over \$16 million on advertising in 2001-02, and one New Zealand company spent \$40 million trying to get their message across for people to buy their goods and services.²⁵

The government has acknowledged that there is a critical role for education to achieve sustainable development objectives for biodiversity, waste, climate

change and energy efficiency. Despite this, environmental and sustainability issues are not regarded as a priority by government in the formal education system (see also sections 4.3 and 4.4).

It is also important to note that the initiatives by government agencies are seldom well coordinated. It is possible that government agencies are sometimes confusing people and organisations by providing them with different, and sometimes conflicting, messages. Two key themes that were very clear in researching this report were that:

- central government needs to be providing more leadership and making a much stronger commitment to education for sustainability
- government agencies need to work more closely together to provide coherent messages for people and organisations to enable them to learn more easily.

4.2 Local government

Local government has an essential role to play in education for sustainability. As the “sphere of government closest to the people and environmental issues in the community”²⁶, local government agencies can be regarded as a key interface between individuals and communities, their environment and central government.

Learning to care for our environment recognised the importance of local government in environmental education. It also highlighted how environmental education can be a very effective tool for councils to fulfil their responsibilities under the Resource Management Act 1991 (RMA).²⁷ For example, Christchurch City Council has described environmental education as “an investment in our future”²⁸, while Environment Waikato has described it as “necessary to raise public awareness and increase involvement in environmental management, and to influence community attitudes and behaviour towards the environment.”²⁹

Use of the term ‘environmental education’, as in the quotes above, has historically been the norm in local government. However, the principles of education for sustainability are particularly applicable to local government, with its focus on active public participation (see section 3.4). Indeed, local government has often taken a leading role in implementing environmental education programmes in New Zealand. The impetus for this came from two main sources:

- **Agenda 21**, which highlighted local government’s role in environmental management at a local and regional level (chapter 28). It also recognised the roles that education and awareness raising have in the general enhancement of sustainability (chapter 36).

- **The Resource Management Act 1991**, which gives local authorities primary responsibility for the sustainable management of natural and physical resources. It promotes public participation in environmental management decisions. Education provides a key non-regulatory means for local authorities to implement their policies to achieve their objectives.

Initiatives by local government

In 2001 a stocktake was conducted of environmental education initiatives in local government.³⁰ It found that all 14 regional councils and unitary authorities do undertake some education initiatives. Only one of these councils did not employ any personnel for the sole purpose of environmental education. Only one council did not have an environmental education strategy.



According to this stocktake, most councils are targeting different sectors for their environmental education programmes, such as the general public, schools or businesses. Many councils also support care groups (such as 'Beachcare', 'Streamcare' and 'Landcare') where local communities take on responsibilities to care for, restore and/or manage specific areas with support from council staff. However, within the city and district council grouping, environmental education programmes have been almost entirely limited to

city councils. Within that group, even if staff are employed for environmental education initiatives, they have not necessarily had the time to undertake those duties.

The stocktake questionnaire did not define environmental education, so the respondents could answer according to their own interpretation of this term. While this makes rigorous analysis of environmental education programmes difficult, the fact that respondents felt able to include some form of initiative shows an awareness and acceptance of the need for environmental education. Initial small steps may expand to encompass more socially critical and transformative initiatives as support and need grows.

While most councils had a fairly wide target audience, a survey of regional council websites undertaken in 2002 showed a strong focus on school-based education.³¹ People we spoke with during research for this report suggested that schools can be seen as 'captive audiences', and that in the past some councils felt that there was a need to step in and fill a gap in providing environmental education in schools that was not being provided by any other agency.³²

Local government leads the way?

Several regional initiatives, which have been supported by their local authorities, have proven so successful that they have since been expanded to become nation-wide programmes. Support from central government has usually come after local government, often in partnership with other non-governmental agencies, has led the way. Four examples of local authority leadership are given below.

Enviroschools

Local authorities in the Waikato region were instrumental in the establishment of the Enviroschools programme, which began in 1993. Initially it was a one-year pilot programme, which ran in three Hamilton schools and was supported by Hamilton City Council and Environment Waikato. The programme has since been successfully launched nation-wide (see chapter 4.3). Local authorities have also provided strong support for the Enviroschools pilot programme and professional development for boosting environmental education initiatives in schools. Some participants in this study suggested that without this support from local authorities, these initiatives might never have got off the ground.³³

The Big Clean Up

The Auckland Regional Council (ARC) began the Big Clean Up campaign in April 2002 to involve all Aucklanders in addressing the increasing pollution and waste problems in the region. By late September 2003, approximately 44,000 households had joined the campaign. In April 2003, the waste section of the Big Clean Up went national, with support from the Ministry for the Environment and most other regional councils. The campaign ran as a pilot scheme for three months, with an aim to gauge the effectiveness of collaborative delivery of national environmental campaigns. While the Ministry for the Environment was the project manager for the national campaign, each regional council coordinated its own regional component.³⁴

Sustainable Households

The Sustainable Households campaign is a joint pilot project between nine local authorities.³⁵ The project has been funded by the Sustainable Management Fund over three years during the pilot stages. It covers a range of topics (waste, energy, travel, water, gardening and shopping) with the aim of helping householders become more aware of how their everyday actions affect the environment. The project aims to offer simple and practical ways to make a positive difference to the environment and the health and economy of the household. Evaluations have shown an immediate impact on environmental awareness and work is now underway to evaluate longer-term impacts.

Quality of life in New Zealand's cities

In 2001, New Zealand's six largest cities (Auckland, Christchurch, Manukau, North Shore, Waitakere and Wellington) published a report that measured the quality of life (including social, environmental and economic indicators) in these cities.³⁶ The report recognised the interconnectedness of factors affecting quality of life for their citizens. It recommended new partnerships with central government agencies to address some of the issues of concern. This initiative has recently expanded to include Hamilton and Dunedin. The first report has raised the profile of urban sustainability issues and has contributed to national monitoring work and debates on sustainability.³⁷ While this initiative is not education for sustainability *per se*, it has played a key role in promoting urban sustainability issues nation-wide. The second report highlights the view that New Zealand's cities may not be as sustainable as many people think.

Constraints for going further

The examples above provide a few snapshots of environmental education initiatives undertaken by local government. They do not illustrate the precarious nature of funding for many initiatives, or the associated lack of priority that is given to education by many councillors and council managers. Comments from participants during research for this report suggest that environmental education is not a priority for many councillors, who see it as an 'add-on' that is often impinged on by short-term economic imperatives.³⁸ In councils where the fate of environmental education programmes is not so precarious, the support often comes from individuals who have a passionate commitment to environmental education.

The fact that smaller district councils and unitary authorities undertake less environmental education also highlights difficulties with resourcing of both funds and capacity. Larger authorities with a larger funding-base can possibly afford to allocate funding to programmes with less obvious short-term results. Smaller councils may wish to provide environmental education programmes but are prevented by budget constraints.

Environmental education efforts have also been very difficult to evaluate. While outputs can be counted (for example how many people attend a workshop), it is far more difficult to measure desired outcomes and link these directly to specific education programmes. For this reason it has sometimes been difficult for programme providers to secure long-term funding for their environmental education programmes. If environmental education was seen as an integral part of councils' wider functions, this could be far less of a problem.

Conversely, there has been a growth in numbers of environmental education staff working in some councils, with larger regional and city councils giving more support to environmental education teams. Environment Waikato, for

example, had six full-time equivalents in 2001, a commitment echoed by the council's CEO when he said that the council's strong environmental education programme has had a definite impact on the community.³⁹

Opportunities for greater involvement

The new Local Government Act 2002 (LGA) provides local authorities with more flexible powers than they previously had. It also requires them to work very closely with their communities. The purpose of the Act is to:

... provide for democratic and effective local government that recognises the diversity of New Zealand communities; and to that end, this Act ... provides for local authorities to play a broad role in promoting the social, economic, environmental, and cultural well-being of their communities, taking a sustainable development approach.⁴⁰

A 'sustainable development approach' is defined in the Act as a principle that local authorities must act in accordance with. It includes the well-being of people and communities as outlined in the purpose, and "the maintenance and enhancement of the quality of the environment, as well as the reasonably foreseeable needs of future generations".

A key component for local authority planning in the new Act is the Long-Term Council Community Plan. This sets out a plan for a ten-year period, with operational details for a three-year term. This plan provides an opportunity for the local community to become involved in the decision making process, a purpose which is in accordance with the principles of education for sustainability (see section 3.4).

However, while there is much scope to respond to an active, participatory citizenship, it cannot be assumed that the public will have the desire or skills to participate effectively in the management of their community and environment. For example, local body elections have historically had low voter turnout rates. This suggests that there is a need for councils to play a much stronger role in encouraging and helping their residents to be actively involved in their community. This also highlights a need to educate staff to build up capacity within councils to meet the expectations of both the RMA and the LGA. Indeed, as Knight suggests, the issue is more complex than merely asking communities what they want:

If the requirement on local government to pursue sustainable development can still give rise to quite different, indeed contradictory, outcomes, then requiring councils to take better account of what communities want may not increase levels of sustainability. What is missing is some prior discussion on what improved levels of sustainability might mean, before asking people to decide how to achieve it. This

in turn inevitably requires an education process and a raising of understanding: who should do that, and how?⁴¹

The new legislation could be the platform needed to launch a new era of education for sustainability in local government in New Zealand. There will need to be careful consideration given to the issue of educating communities to become more active citizens, but the rewards of such effort are likely to be very high. The recent *Quality of life in New Zealand's eight largest cities* report⁴² found that the most frequent reason given for lack of satisfaction with citizens' involvement in their local governance was a lack of consultation. The report found that people do want to be more involved, so the challenge that faces councils is to find effective ways to facilitate this.

As noted earlier, local authorities have in the past concentrated much of their environmental education efforts on schools. Since central government has begun funding more resources for school environmental education (see chapter 4.3), local government could start to direct their focus more towards other sectors of the community such as businesses and primary producers. The need to help businesses learn how to improve the sustainability of their operations was a recurring theme among participants during research for this report.⁴³ There are already initiatives underway in the business sector (see section 4.6), but local authorities could provide more support in this area.

Participants in this study and local authority staff who responded to the Ministry for the Environment's stocktake⁴⁴ also commented on a need to educate some councillors on sustainability issues and familiarise them with ecological principles. Ensuring that local body politicians can develop a good understanding of sustainable development issues could certainly improve the priority given to education for sustainability.

Overview of local government efforts

Local government has been one of the key players in environmental education in New Zealand over the past decade, both in implementing programmes

directly and supporting others to do so. Education has been identified as a useful tool for councils to fulfil their statutory functions, particularly under two main pieces of legislation: the RMA and the LGA.

Much education that local authorities undertake is aimed at individuals or small groups to promote small scale, achievable actions. Examples of programmes that have grown from local and regional to a national focus are the Enviroschools programme and the Big Clean Up waste campaign.



However, despite a growth in support for environmental education within local authorities, many programmes are still vulnerable to funding cuts, especially when local body councillors do not understand or appreciate the long-term benefits of education. Most education has also been focused on dealing with effects (e.g. encouraging recycling) instead of addressing underlying causes of problems (e.g. reducing the amount of materials that are consumed in the first place – see chapter 6).

Major opportunities for further progress for education for sustainability in local government include:

- education of local body politicians to develop their knowledge of, and commitment to, sustainability
- community education to facilitate improved citizen participation in local governance, as promoted in the new Local Government Act
- further acknowledgement and support for education for sustainability initiatives at a local level.

4.3 Primary and secondary schools

Primary and secondary schools provide a vital context for children and young people to learn and develop. People learn a lot about their society through schools (although, as chapter 5 highlights, a huge amount of learning occurs beyond this system as well). People also develop many values through the education system, regardless of whether these are made explicit or not. Schools are often used to prepare people for employment. Ideally, however, education should develop the potential in people to learn for themselves and to be the best that they can be.

This section examines the environmental dimensions of sustainability in New Zealand schools today. Again, this has mostly come under the banner of environmental education. It begins by looking at the context for environmental education and the school curriculum. It then examines how environmental education is currently practised and some recent developments.

The context for environmental education in schools

All teaching and learning in New Zealand schools is framed by a national curriculum.⁴⁵ The New Zealand Curriculum Framework was published in 1993. It was developed over five years, during which time its environmental focus shifted. Initially the environment was included with science as an 'essential learning area' (which sets out the knowledge and understanding that students are expected to develop). It later became its own area of study, placed within (or across) the other essential learning areas.

This development reflected debate at the time about whether environmental education would be most effective as a cross-curricula subject or as a discrete learning area.⁴⁶ It also reflected a changing political climate, including a change of government. As chapter 3 highlighted, the school curriculum is commonly shaped by ideologies that are dominant in society. Neo-liberal ideologies, which have contributed to fundamental changes in New Zealand society from 1984 onwards, have also had a profound influence on the education system. There has been a major focus on preparing students for jobs within global markets.⁴⁷ Many commentators have expressed concern about this influence, which has helped to bring objectives and practices in the education system into line with commercial values.⁴⁸

The New Zealand Curriculum Framework is currently made up of seven essential learning areas: Languages, Mathematics, Science, Technology, Social Sciences, The Arts, and Health and Physical Well-being.⁴⁹ Environmental education fits into these learning areas as a cross-curricula theme, although it is not mandatory. Boards of trustees determine the extent to which it is taught within any school.

Before 1999, neither environmental education nor education for sustainability were taught on a formal basis in New Zealand schools.⁵⁰ Only some elements of environmental education were taught as part of existing subjects. As noted in section 4.1, the Ministry for the Environment developed a national strategy for environmental education in 1998 to address some of these shortcomings. The key priority of this strategy was to incorporate the aims of environmental education across the school curriculum. As a result, the *Guidelines for environmental education in New Zealand schools* (the Guidelines) were developed by the Ministry of Education.

The Guidelines set out the following aims of environmental education, which have been adapted from the Tbilisi Declaration (see section 3.1):

- Aim 1: **awareness and sensitivity** to the environment and related issues
- Aim 2: **knowledge and understanding** of the environment and the impact of people on it
- Aim 3: **attitudes and values** that reflect feelings of concern for the environment
- Aim 4: **skills** involved in identifying, investigating and problem solving associated with environmental issues
- Aim 5: a sense of responsibility through **participation and action** as individuals or members of groups, whanau or iwi, in addressing environmental issues.⁵¹

Maori in formal education

The *Guidelines for environmental education in New Zealand schools*⁵³ have a significant Maori component. They state that environmental education provides a context for students to learn about:

- the partnership established by the Treaty of Waitangi for managing New Zealand's natural resources
- the special position of the Maori people in relation to the natural resources of New Zealand
- the cultural heritage of New Zealand
- the significance of this heritage to present and future generations.

It is also important to consider how learning is conducted in Maori medium schools. It is not just the use of te reo which makes them different from state schools – it is also the way that Maori worldviews and tikanga (culture and customs) underpin everything that is taught. Kura kaupapa, for example, teach the same national curriculum that is taught in all other state schools, but all learning is undertaken through a lens that is based on cultural knowledge of cosmology and tikanga.

These schools are often an integral part of the local Maori community and regularly have more input from, and connection with, their community than many state schools. Learning therefore becomes multi-layered and inter-generational. This is particularly so with kohanga reo (Maori language 'nests'), which are as much about whanau development as about teaching pre-schoolers.

At the other end of the formal education scale are wananga, which are tertiary institutions that deliver programmes within a Maori context. This includes a focus on educating the whole person, rather than specifically equipping students for a career. For example, one of the purposes of Te Wananga o Aotearoa is "to equip our people with knowledge of their heritage, their language, their culture so they can handle the world at large with confidence and self determination".⁵⁴

Much Maori learning also takes place within the marae setting – an institution described by one Maori educator who participated in this report as "the greatest representation of Maori values coming to life."⁵⁵ Learning at the marae can be described as 'by osmosis', with people immersed (sitting, watching, listening) in a cultural setting to see how everything fits together.



The Guidelines identify sustainability as one of four key concepts underlying environmental education, although they do not define sustainability. They promote the integration of three key dimensions of environmental education: education 'in', 'about' and 'for' the environment.

Education 'in' the environment is concerned with learning outside the confines of the classroom and gaining first hand experience of the environment. Education 'about' the environment is concerned with developing knowledge and understanding about the

natural and built environments, including social, political, ecological and economic factors that influence decision making in society. Education 'for' the environment aims to integrate students' knowledge about, and experiences in, the environment to develop self-responsibility and a willingness to help maintain and improve the quality of the environment.⁵²

Environmental education in schools today

Because environmental education is a voluntary, cross-curricula subject, it remains difficult to get an accurate picture of the extent and quality of its inclusion in schools. The Guidelines were sent to schools with the hope that they would assist teachers to provide environmental education within the current curriculum.⁵⁶ However, they do not appear to have been widely used. Many people during research for this report suggested that there is a very low awareness among New Zealand teachers that the Guidelines even exist.⁵⁷

Recent research seems to confirm this perception. The Ministry of Education commissioned an in-depth evaluation of the impacts of environmental education in New Zealand schools.⁵⁸ As part of this, a 'Critical Stocktake' was undertaken that involved a survey of schools that were believed to be carrying out environmental education. There were 367 responses received, representing 190 schools. Most respondents were very enthusiastic about environmental education, although only half of them were aware of the Guidelines.

According to the Critical Stocktake, characteristics of environmental education in New Zealand schools today are that it:

- involves a wide range of activities
- includes student participation in activities outside the classroom, particularly in the school grounds but also in the local environment
- involves students taking practical action such as gardening, planting, and clearing up litter in the school grounds and the local community along with

monitoring waterways; students making and implementing decisions; and students advocating in the home and community

- is thought by teachers to contribute to a better school and/or community environment, and to enhance school-community relationships
- enhances student knowledge and understanding of the environment and environmental issues and develops student values and attitudes towards the environment
- may involve an enthusiastic individual or small groups of teachers or the whole school (principal, staff, student interest groups and caretaker)
- may involve the wider school community, particularly parents and the boards of trustees
- involves the use of environmental education service and programme providers, particularly local authorities
- may involve environmental sector professionals
- may involve community-based environmental and service groups.⁵⁹

The Critical Stocktake highlighted that the major focus of environmental education in schools to date has been on education ‘in’ and ‘about’ the environment. Topics that have been popular include waste management, water studies, planting and gardening, recycling, and worm farming. There appears to be much less education ‘for’ the environment. This is an issue with environmental education overseas as well as in New Zealand. Because education ‘for’ the environment tends to be more socially and politically challenging, it has not been implemented to the same degree as education ‘in’ and ‘about’ the environment.⁶⁰

Other recent initiatives

Over the last five years there been some new developments in environmental education in New Zealand. Key ones are identified below.

Professional development for teachers

The Ministry of Education recently funded three specific programmes to support environmental education:

- Professional development for environmental education at the Christchurch College of Education. Funding for this has now finished.
- Professional development for Sustainable Organic Schools run by Massey University and the Soil and Health Association of New Zealand. Funding for

Real Stories

I introduced environmental education to Kaeo School in May 2003 with professional development for the principal and staff. Our school is situated near the Whangaroa harbour. It is a decile 2 school and 88% of students are Maori. Our Tirohanga Whanui is: Building student knowledge, skills and capability towards shaping a sustainable future for a bi-cultural, bilingual Aotearoa, New Zealand.

Teachers introduced education for a sustainable future to all students in Term 3. Students are able to plan collaboratively to identify environmental issues and to actively learn to improve their environment in the school grounds and in the wider community. They evaluate and reflect on their learning. They produce PowerPoint and iMovie presentations to provide feedback to a range of groups and individuals. All students have become literate in Information and Communications Technologies during this time.

The introduction of education for a sustainable future has been successful because teaching and learning is totally integrated throughout all curriculum areas. Its concepts are embraced by the Board of Trustees and Principal as well as by all staff and students. Children have taken responsibility because it is an area in which they can experience success and share learning experiences with whanau and community. Feedback from parents and the community has been positive. The principal's commitment, with a passion for education for a sustainable future, is the driving force behind the success of this educational initiative.

Maiki Marks

Environmental Education Facilitator – Taitokerau, Northland

this has also finished.

- The appointment of 17 national and regional environmental education coordinators in 2003. Closely linked to colleges of education, these people support schools and kura to incorporate environmental education into the curriculum. Funding for the coordinators is currently ongoing until 2005.

These developments have been critically important, especially given the fact that the vast majority of teachers involved in environmental education have had no training in this area (see below).

National Certificate of Educational Achievement (NCEA)

The recent introduction of the NCEA has enabled new cross-curricula courses to be developed. Teachers can use achievement standards from different learning areas to develop these courses. 'Sustainable Futures' courses have begun to pop up in schools around the country, starting with Christchurch Girls' High School, which has successfully achieved a cross-curricula approach. There are around 60 other secondary schools in New Zealand that are currently interested in establishing Sustainable Futures courses within the NCEA framework.⁶¹

Enviroschools

In 1999 the Sustainable Management Fund provided funding for the development of the Enviroschools project (see also sections 4.1 and 4.2). The project was launched nation-wide in 2001. The Enviroschools programme involves students aiming to create a sustainable school through planning, designing and implementing environmental projects within school grounds.⁶² Students, teachers, boards of trustees, and the community become involved in developing "living policies"⁶³ aimed at making day-to-day functions in the school's curriculum and physical environment sustainable. There are currently around 50 Enviroschools in New Zealand.

Constraints for environmental education

While there have been some promising developments, the Critical Stocktake highlighted many challenges for environmental education, as identified by teachers. These include:

- the non-mandatory status of environmental education
- the challenge of integrating environmental education into other learning areas
- the need for whole school support and involvement
- the need for in-school leadership (from the principal and/or an environmental education coordinator)

- the need for further professional development for themselves or for their colleagues
- the need for resourcing in the form of environmental education units and the equipment needed to take action 'for' the environment
- the need for funding for teacher release so they have time to plan, prepare and share ideas, make contact with support people, and be involved in action 'for' the environment.⁶⁴

Many of these challenges were echoed by teachers during research for this report.⁶⁵ Two key areas identified in our research were the need for practical help with the teaching of environmental education and for clarification of the ambiguous status of environmental education in the New Zealand school curriculum.

As highlighted in chapter 3, environmental education and education for sustainability are often perceived as highly political. The authors of the Guidelines suggested that a major problem with their development was the tension between providing a policy document that could be used by teachers to legitimise the inclusion of environmental education in the curriculum, and providing practical guidance for environmental education programmes.⁶⁶ The authors noted that it was easier to achieve a cross-curricula approach at a primary school level than at a secondary school level, where knowledge has been disciplined into many different subjects.⁶⁷

Towards education for sustainability?

The New Zealand Curriculum was recently reviewed. In 2002, a report was presented to the Minister of Education that analysed experiences with the 1993 reforms.⁶⁸ It recommended changes to the New Zealand curriculum in a number of ways. Recommendations with particular relevance to education for sustainability were that:

- The essential learning areas should be revised to ensure that they better reflected future-focused curriculum themes. These include education for a sustainable future (including sustainable development and environmental sustainability), social cohesion (including developing resilience and a sense of social connectedness), citizenship (local, national, and global), bicultural and multicultural awareness, enterprise and innovation, and critical literacy (including digital literacy).
- The essential skills should be reduced to six skills and attitudes: creative and innovative thinking, participation and contribution to communities, relating to others, reflecting on learning, developing self-knowledge and making meaning from information.

- Professional development and materials should be developed for teachers on the most effective strategies for integrating and linking curricula.

Many of these recommendations would go a long way towards supporting education for sustainability. However a key issue remains. As chapter 3 highlighted, education for sustainability requires learning across boundaries. It does not easily fit into a single subject or disciplinary domain. Furthermore, all of the future-focused themes identified above directly relate to achieving a sustainable future (see some key principles of education for sustainability in section 3.4). Education for a sustainable future, or education for sustainability, could therefore be considered as an umbrella term across the entire curriculum. Environmental education for sustainability could then be positioned as a key theme within this, as long as it is covered in a cross-curricula way.



Overview of education in schools

Environmental education has had a slow and rocky start within New Zealand schools. A key issue is its non-mandatory status, which has several implications. First, the curriculum is already perceived by many people to be ‘overcrowded’.⁶⁹ When the Guidelines were released they were therefore ‘shelved’ by many teachers as something that they did not have time for.⁷⁰ While environmental education remains non-mandatory it will tend to be taken up only by dedicated enthusiasts. This has also been the experience overseas, where there has often been an uneven and “sporadic” quality to environmental education.⁷¹ Education efforts regularly break down in schools when these dedicated people leave.

Secondly, while environmental education is not mandatory, it is less likely to receive as much support (in terms of funding, professional development or physical resources) as the essential learning areas of the curriculum. All the teachers interviewed for this report raised these concerns. This is also a problem for teacher training institutes, as they have only a limited amount of time to educate teachers and they tend to focus on compulsory core areas. Environmental education may simply be perceived as an ‘add-on’ (although several colleges of education have taken a more proactive stance than this – see section 4.4). Indeed, the Critical Stocktake found that only six percent of teachers undertaking environmental education had received pre-service environmental education training. A further two percent had received both pre-service and in-service training. Internationally, the OECD has found that teacher training was the “weakest point” in environmental education in all countries

that it surveyed.⁷² In-service training is often seen as too costly, while pre-service training is almost non-existent.

To date, the vast majority of environmental education in New Zealand has focused on education 'in' and 'about' the environment. There has been a serious gap in education to achieve the transformative qualities that are vital to education for sustainability (see chapter 3).

Despite these problems with the implementation of environmental education to date, there have been some promising developments. EnviroSchools is a New Zealand-born initiative that has a lot of potential (it has entered only 50 schools out of more than 2,500 in this country). Sustainable Futures courses are also beginning to emerge in some secondary schools, although these have usually been driven by dedicated individuals, often without much support. The recent review of the national curriculum also provides a platform to give more priority to education for sustainability, including its environmental dimensions, in New Zealand.

It is important to consider links between primary and secondary school education and the tertiary education system as well. Secondary school teachers who wish to implement Sustainable Futures courses can often be constrained by university requirements for students to have credits in "approved" subjects, which are often slow to adapt to new courses.⁷³ Furthermore, as the OECD highlights, subjects in primary and secondary schools are often:

... legitimised by the disciplinary structures of higher education to a considerable degree. So environmental education as a subject does not have the legitimacy that traditional subjects like physics, chemistry, and biology have ... [The] role of the university in defining what knowledge consists of in modern societies is so central that environmental education is seriously impaired until universities regard [it] as a serious topic.⁷⁴

4.4 Tertiary education

The tertiary education sector, where post-school education and training takes place, includes universities, polytechnics, colleges of education and wananga. People in highly influential positions in society often have tertiary qualifications. For example, they design the systems for delivering water and energy to most of the buildings where people live, work and play. They develop ways to move people and goods around cities and throughout New Zealand or beyond. They educate children in schools, contribute to knowledge through research, and develop technologies and techniques for social and economic development. Many people with tertiary degrees also provide policy advice to government and shape strategic thinking and daily life in the corporate business world.

Education for sustainability in tertiary institutes today

Internationally, sustainability is becoming an integral part of programmes in forward-looking tertiary education institutes. Many institutes are linking learning and innovation to sustainability.⁷⁵ Many leading universities are reshaping their strategic plans to encourage education for sustainability.⁷⁶ This is not a minor phenomenon or a trivial trend. Over 1,000 university presidents and vice-chancellors have signed declarations that commit their institutions to change towards sustainability.⁷⁷

In contrast to the international scene, including near neighbours such as Australia, there has been very little research on education for sustainability in New Zealand's tertiary education sector. This may actually reflect the lack of attention given to sustainability issues in tertiary institutes. The consensus among the people we spoke with (including many tertiary educators) was that sustainability issues are gaining momentum, but they are still on the fringes of most tertiary organisations and their departments. As two New Zealand academics suggest from their experience:

One could hardly claim that the much-debated concept of sustainable development has made it into the mainstream academic discourse in business schools. Where space has been made for sustainable development in the curriculum, it would appear to be mostly at the margins, with core curricula remaining largely untouched by its ethos or substance.⁷⁸

Another report supports the view that sustainability issues are seeping into teaching and research, but only in an ad hoc way.⁷⁹ Enthusiastic individuals are usually left to push for changes in their departments, or to include sustainability issues in their own courses.

Looking at universities in particular, knowledge has traditionally been disciplined into many different fields or 'languages' (such as chemical engineering, chemistry, commerce, history, anthropology, physics, zoology etc). This has enabled people to develop in-depth knowledge in separate areas of expertise. The downside of this approach is that it is often very difficult to bring together valuable insights and understandings from different strands of thought. Many people do not recognise the limits of any academic language for understanding everything about the world. Students also find it difficult to develop knowledge of issues from a variety of different perspectives.⁸⁰ As the OECD notes, although universities have successfully separated knowledge into various branches of learning, they have been "very slow to address social problems, especially those that do not fit disciplinary structures"⁸¹. As section 3.4 highlighted, a key principle of education for sustainability is that it requires learning across boundaries. Many academics overseas have also highlighted how sustainability cannot simply be integrated into existing curricula. It requires a

transformative agenda that would require changes in education practices, addressing the way knowledge is sliced up into disciplines, as well as making structural changes in institutions.⁸²

A new breed of interdisciplinary environmental degrees, which address some of these issues, has recently emerged in New Zealand. 15 years ago there were only a few degrees focused on the environment. All eight universities and many polytechnics now offer various planning, environmental science, environmental management, resource management and resource studies programmes.⁸³ Although this has been a significant development, these degrees are mostly targeted at people pursuing professional careers in environmental management and planning. There is less potential for other students to gain an understanding of environmental or sustainability issues. Responsibility is usually placed on students to seek out environmental courses that can be found in many isolated pockets of institutions. For example, a recent audit of courses at one New Zealand university revealed that there are over 160 different courses with some environmental orientation.⁸⁴ These courses span most departments – from History to Surveying, Philosophy to Maori Studies, Design to Physical Education, and from Geography to all the sciences. Many of these courses are being taught by staff who have never met (at least until recently) or known about other courses on offer with environmental content. An advisory group has been established to develop an oversight of Environmental Studies within the university. This is a promising development, although this group is yet to focus on the broader concept of sustainability.

It is still common for a future architect, economist, engineer, business leader, or policy analyst (to name just a few) to graduate from any New Zealand university without developing any knowledge of, or concern for, environmental or sustainability issues. Many teachers are also being trained without developing any understanding of environmental education or education for sustainability. Because environmental education has never been compulsory in the curriculum, it has often been perceived as an 'add-on' (see section 4.3). This has major repercussions for young people in schools, as teachers can hardly be expected to educate people for sustainability if environmental education has never been part of their own professional development. Some colleges of education, particularly in Christchurch and at Massey and Waikato universities, have developed environmental education courses and supported in-service training for many teachers. Nonetheless, these courses are optional and normally draw on students who are already environmentally aware.

The government's framework for tertiary education

The major focus of this section has been on universities, as there is no research to draw on to examine education for sustainability elsewhere in the tertiary

sector. However, as highlighted above, sustainability still seems to be on the fringes of this sector. Because the government provides the bulk of funding to this sector, it is also important to consider how the current framework for tertiary education covers the environmental dimensions of sustainability.

In 1995, the government stated that:

... education providers in the tertiary sector should offer study programmes and research opportunities that will improve understanding of sustainable management of the environment.⁸⁵

Attention was drawn to the need for business people in particular to gain a good understanding of environmental issues through their education. In 2002, government reformed the tertiary education sector. Their intention was to make it contribute more explicitly to national development goals. Do these reforms encourage education providers to offer study programmes and research opportunities with a focus on environmental sustainability? A background paper for this report examines this issue.⁸⁶ Some key points are highlighted below.

The Tertiary Education Strategy

The government released this strategy in 2002 to set the overall direction and priorities for the tertiary education system. It guides all government agencies and organisations within the tertiary education system. The strategy includes six national development objectives taken from the Growth and Innovation Strategy. Tertiary education providers and government agencies are expected to work towards these. Environmental sustainability is clearly identified as a national objective. The strategy identifies a need for research and skills to:

- contribute to international understanding of climate change and reduce local impacts of these changes
- sustain New Zealand's biodiversity
- manage biosecurity risks
- manage changing patterns of (intensive and extensive) use of the land and sea
- help all New Zealanders develop an awareness of the environment and the impacts economic and social activities have on it.⁸⁷

The strategy begins with a good focus on environmental sustainability, yet this focus starts to fade as it continues. For example, there are six specific strate-



gies within the strategy. Only one of these refers to environmental goals (very briefly). The major focus is on economic transformation and innovation, as well as Maori development. The strategy also includes 35 objectives for action. None of these objectives make any explicit reference to environmental sustainability or the research and skills that were previously identified as important in this area, even though other national goals are covered in much more detail. One objective in the strategy is for all people to develop high-level generic skills. These skills are mostly targeted to be relevant for businesses. “Cultural and environmental” awareness is included, although it is categorised as a desirable “interpersonal skill”.

The strategy also includes tools to measure progress. None of these are related to environmental sustainability. It highlights a need for tertiary research to focus on meeting social and economic objectives, but no links are made to the environment.⁸⁸ Although environmental sustainability is highlighted as a national objective early on in the strategy, it is largely absent from the rest of the document.

Statement of Tertiary Education Priorities (STEP)

The government is required to issue a STEP at least once every three years. These are based on the Tertiary Education Strategy. They establish short-term priorities for tertiary organisations and government agencies. The first full STEP was released in August 2003 and will be in place until the end of 2004.

The key priority for this period is to develop capacity within the tertiary education system. It emphasises the importance of establishing the new reforms and to “change behaviours and attitudes to reflect the new ways of thinking and working”.⁸⁹ It sets priorities for tertiary education organisations and government agencies for each of the ‘specific strategies’ listed in the Tertiary Education Strategy.⁹⁰ None of these priorities are related to environmental sustainability.

Charters and profiles

All tertiary institutes need to have an approved charter and profile in place to get government funding. Charters set the direction for each organisation and identify their role in the tertiary education system. Profiles identify how an organisation will give effect to their charter over a shorter time period. These documents are assessed by the Tertiary Education Commission and must meet the directions of the Tertiary Education Strategy.

The Tertiary Education Commission has provided guidance for organisations on their charters. Although environmental sustainability is identified as a national goal in the Tertiary Education Strategy, it does not have a visible presence in these guidelines. Organisations need to illustrate their contribution to New

Zealand's identity and economic, social and cultural development but no reference is made to the environment.

The Commission has also developed 22 criteria for assessing charters and profiles. Only one of these criteria has some relevance to environmental sustainability. This is that all tertiary education providers need to show how they "will contribute to the Tertiary Education Strategy and other of the government's national strategies." Presumably a provider needs to show how it contributes to *all* of the national objectives in the strategy (including environmental sustainability), and other strategies related to sustainability, although this is not explicitly stated.

Overview of the tertiary sector

The tertiary education sector is a vital part of New Zealand society. If tertiary graduates do not have a core understanding of sustainability then the pathway to a sustainable future will remain a side road for far longer than necessary. Despite this, education for sustainability is still out on the fringes of most tertiary institutes.

The government has labelled the tertiary education system a key "strategic asset" and has argued that it is vital to build a "strong alignment between the Government's broader vision for the nation's economic and social development"⁹¹ and this sector. The 2002 reforms established a framework for government to have a much greater influence on the structure and shape of activities in the tertiary sector than they previously had. Environmental sustainability is clearly identified as a key national goal in the Tertiary Education Strategy, but it is not a priority (especially compared with the attention given to other national objectives). It is very difficult to see how the current arrangement can contribute to the desire to "help all New Zealanders develop an awareness of the environment and the impacts economic and social activities have on it".⁹²

The government is also trying to develop values and a culture in New Zealand for building a 'knowledge society'. The Tertiary Education Strategy comments that:

... the development of a prosperous and confident knowledge society... [will] require a culture of continuous inquiry, innovation and improvement – and of risk-taking and entrepreneurship.⁹³

It argues that "All New Zealanders will need to view themselves as part of an economy and society"⁹⁴, but no mention is made of New Zealanders viewing themselves as part of the wider environment that they essentially depend on. Key messages are also provided to tertiary education providers and government agencies to foster a culture of optimism and creativity and to work more closely

Real Stories

I grew up near the ocean and I was always an oceans person, but it wasn't until 1998 that I fell in love with conservation. That year I was involved with the Kamo High School marine reserve proposal. Students started the proposal in 1990 with the support and guidance of our teacher, Warren Farrelly. New 7th formers would come along each year and pick up where the last year left off. After twelve years of investigation, consultation and preparation, a formal application was made to the Director General of Conservation for three areas in the Whangarei Harbour to be declared marine reserves. I was so touched by the project that I went back to help other students with the formal application. It was a truly unique learning experience and an incredible task. Being out in the environment made me realise it was all worthwhile. I think I speak for all past students when I say it felt great to do something that actually *meant* something.

It was this project that got me inspired and helped me find my niche. After school I travelled overseas and came back more confident than ever and determined about where I wanted to be (Northland, New Zealand). I did a Diploma in Environmental Management at Northland Polytechnic, where I was offered another opportunity by a contact I had made. I was given a chance to design a marine education project supported by DoC. I thought back to a time when I went snorkelling at Leigh marine reserve with the local primary school. I was buddied up with two young kids. The look on their faces when they saw a huge snapper swimming by inspired me to capture that experience in an education programme. I also wanted to compare local unprotected environments to the protected marine environments. The 'Experiencing Marine Reserves' programme came to life (with the advice and supervision of an experienced educator). It is now a successful model for marine environmental education for year 7 and 8 students. The students' experiences on the programme often result in an enhanced perception of the environment and may result in action for the environment. The programme focuses on learning through experience and has also proved a successful way of learning for adults too!

As well as working full time on developing this programme, I am studying part time for a Bachelors degree. One of my visions is to have people my age (23) involved in local marine issues, as many young people are very active and often get very involved in environmental issues. My aim is to capture all ages through groovy marine resources and 'Celebrate the Sea' type events. For example in March 2003 my Trust (Nga Maunga ki te Moana Conservation Trust) and I organised a special event. With the blessing of the local Iwi we invited people to attend a celebration of the sea at the Poor Knights marine reserve. 'Big Day Out' musicians Pitch Black played in the sea cave in the name of marine conservation. This event generated a lot of publicity locally and on student radio in Auckland.

At the end of the day it's great to be involved in something that makes you feel great. So long as it keeps paying the bills, the road is set!

Samara Sutherland

with businesses. The Growth and Innovation Strategy (which is closely linked to the Tertiary Education Strategy) takes a similar approach. It emphasises a need to encourage “enterprising values and attitudes” with “pride in business”⁹⁵, and to develop an “effective innovation culture”⁹⁶ based on continuous improvement.⁹⁷ The government seems to want to build a culture aligned around economic growth (see also section 6.4). They have not identified any similar intentions to develop a culture based around sustainability and the capacity to ensure a good quality of life for New Zealanders into a distant future.

4.5 Community and NGOs

The focus of this chapter so far has been on government. However it is also important to examine the influence of other sectors of society. This section, and the following one on businesses, takes a very brief look at other organisations involved in education for sustainability in New Zealand.

Sustainable development must be implemented where people are able to learn, feel, and be empowered to act – at the local level.⁹⁸

There are many opportunities for New Zealanders to learn about and be involved in environmental and sustainability issues in their communities (see also section 4.2). Non-governmental organisations (NGOs) and community groups have been very active in involving people in environmental issues. The examples in this section are by no means exhaustive. They merely illustrate the range of work being undertaken. It would be impossible to identify everything that is happening, as many people are ‘beavering away’ in the background and working without any formal recognition of the good work that they are doing.

Environmental NGOs and community groups are often directly involved in education. Many of the traditional environmental NGOs, such as Greenpeace, the Royal Forest and Bird Protection Society, and the Worldwide Fund for Nature (WWF), have a strong nature conservation focus. Their education initiatives usually echo this, although they regularly focus on more general issues as well, such as recycling, energy efficiency and using public transport. They often highlight practical actions that individuals can take to reduce their environmental impact, although a major emphasis is also placed on awareness raising.

The environmental NGOs have also played an active part in mobilising public support for environmental issues on many occasions (see section 2.2). They often encourage people to lobby government and businesses on specific issues. All of these organisations target both adults and children, although WWF has a very strong school education focus.

During research for this report, many people highlighted the need to tackle environmental and sustainability issues through small, achievable steps.⁹⁹ While there is definitely a need for this sort of individual action/sector-based education, there is also a need for learning that looks at the bigger picture. Some environmental NGOs are encouraging people to think about deeper, underlying issues such as the flow-on effects of free trade on the environment and society.¹⁰⁰

New Zealand has one NGO with a specific focus on environmental education. The New Zealand Association of Environmental Education (NZAAE)¹⁰¹ was founded in 1982. Many of its members are practising educators from government agencies and schools. The association itself is more involved behind the scenes – for example, networking and coordinating the Enviroschools project and supporting professional development. To date, it has not taken on a more active role in lobbying.

Many people have also been working at a grassroots level to work with their local community on sustainability issues and to foster more individual involvement. For example, the Landcare Trust has many groups working in communities on sustainable land management and biodiversity issues.¹⁰² Staff from the Trust help coordinate landcare groups around the country and assist them to develop agendas and action plans and to source funding.

Around New Zealand, ‘Environment Centres’ have also been established by many local communities to promote issues such as community action, ecological restoration and environmental education. They provide an important ‘home’ for many people concerned about environmental issues, and distribute many materials related to environmental education.

Although the environmental NGOs have often been very effective at bringing issues onto the public agenda for debate, there is also a danger that they can sometimes perpetuate negative perceptions of environmental issues among some sectors of the community. This is often problematic in the media, which thrives on controversy and is very good at playing on stereotypes (see section 5.3). Sometimes there is also a problem with environmental NGOs ‘preaching to the converted’, whereas it is vital to engage with people across society to get traction on sustainability issues. As chapter 3 highlighted, there is a vital need for environmental educators to work with many different interests in society if they wish to further their concerns. For example, closer connections could be made with other organisations in New Zealand involved in sustainability issues such as peace education, human rights education, citizenship education and development education¹⁰³ (which are just as vital to education for sustainability as environmental issues). Environmental NGOs often work with businesses as well, although this often creates tensions for their ability to maintain an



independent voice.

In summary, much learning is taking place on environmental issues in communities around New Zealand. A huge amount of work is done on a voluntary basis, and it is a testament to the hard work of many passionate individuals and groups of people that there are so many groups and initiatives around. While many of the environmental NGOs tend to be more focused on conservation issues, these groups do provide an avenue for personal action. Community and NGO education can be particularly effective as it is often very practical, and people can learn a lot from their peers.

Many people have also established organisations to encourage education for sustainability in businesses. For example, The Natural Step Trust is part of a global network of trained facilitators. It uses a sustainability framework to guide organisations of all sizes to improve their operations. The Zero Waste Trust supports the activities of organisations to minimise and eliminate waste, and the BusinessCare Trust aims to increase the number of people who have cleaner production skills throughout the country.¹⁰⁴ A variety of smaller organisations also operate around the country.

4.6 Businesses

Businesses are often singled out in discussions about sustainability. Many people argue that commercial interests are a root cause of environmental and social problems. Others suggest that business holds the key to tackling issues around sustainable development.¹⁰⁵ Regardless of the views that people take, many businesses do contribute to major impacts on the physical and social environments in which they are based. They are also extremely influential in shaping production and consumption patterns as they provide people with goods and services (see section 5.4 and chapter 6).

New Zealand businesses, like others around the globe, have become increasingly involved in sustainable development concerns over the last two decades. There has been considerable debate about the role of businesses in society and the impact of their activities on the environment. Government and community organisations often try to develop an understanding of sustainability issues among businesses, although they do not always deliver their messages in coordinated ways (see section 4.1).¹⁰⁶ Many businesses have also taken a more proactive stance on sustainability issues than central government. Business people have established a variety of networks and organisations in New Zealand to promote learning and understanding of sustainability issues. For example:

- In the mid-1990s environmental business networks started to appear

around the country. They provided a forum for many small to medium sized enterprises to learn about environmental issues and to improve their performance.

- In 1999, the New Zealand Business Council for Sustainable Development (NZBCSD) was established. The aim of founding members (including many large corporations) was to develop knowledge, engage in dialogue, achieve action on sustainable development, and to have an influence in society.¹⁰⁷
- In 2002, a Sustainable Business Network was established to promote understanding and action on sustainability issues among small to medium sized businesses.¹⁰⁸

Business people have been motivated to form these sorts of organisations, and to address sustainable development concerns in general for many different reasons. Some people have been driven by personal values and concerns about the impact of business activities on people and the world around them. Others have been influenced by the ‘business case’ for sustainable development. This emphasises the need to look for opportunities (such as saving costs by using resources more efficiently) and challenges (such as damage to a valuable brand from being exposed with a poor environmental record). It also highlights the potential for ‘win-win’ solutions that increase business profits with less environmental damage.

There are often divisions within the business community, both in New Zealand and overseas, about the best approach to use to promote sustainability. Some people stress the importance of engaging with people’s personal values. They focus on ethical issues associated with sustainable development and highlight how values that are embodied in organisations need to change.¹⁰⁹ Other people believe that the primary focus should not be on values, but on ‘value creation’ (maximising profits). They suggest that the profit motive provides the most effective tool to shift business practices.¹¹⁰

Despite differences between these two approaches they often share some common ground. Advocates of a values-based approach frequently highlight how businesses can increase their financial value by being responsive to social concerns (captured in the phrase “do well by doing good”). Those who focus on ‘value creation’ also recognise that “it is not always profitable or appropriate for a particular company to do the ‘right thing’ with regard to sustainability”.¹¹¹ Both approaches often seek the same ends – working towards environmental, social and economic objectives while sustaining businesses that cannot survive without a profit. Nonetheless, there is a major point of difference. People with a strong focus on personal values often accept the need for businesses to be responsive to society’s concerns. People who place the primary focus on maximising profits tend to deflect responsibility for making changes to others in

society, such as government and community organisations.

New Zealand's business community is extremely diverse. Taking a single approach on sustainability issues is therefore unlikely to be very effective. Although the loudest voices usually come from large corporations, most businesses in this country are small. More than 95 percent of businesses employ less than 20 people, and most employ fewer than five.¹¹² People working in both small and large organisations will be motivated to learn and act on sustainability issues for many different reasons. Some people may make close connections between their personal values and the impacts that their organisation is having on the world around them. Others will be more easily swayed by opportunities to increase or protect their profits. Yet it is also important to recognise that businesses can be designed in many different ways. Some businesses are designed to seek rapid short-term growth and to maximise their profits. Others are less focused on growth, especially when the people who run them are driven not only by financial rewards.

Many New Zealanders today do not trust businesses, especially large ones, to act in society's best interests. This often harms businesses that rely on the goodwill of the communities they operate within. It also contributes to many tensions and dilemmas. Businesses provide a livelihood for many people and supply them with goods and services that can contribute to their quality of life. Because businesses are a major component of most twenty-first century societies, including New Zealand, it is vital to work with business people on sustainability issues. However, it is also vital to keep challenging businesses and some of their underlying assumptions. For example, some business people have claimed that the only realistic answer to sustainability problems is to develop new technologies.¹¹³ Others have claimed that sustainability is best promoted by maximising economic growth.¹¹⁴

Often business people aim to influence the structure and the content of the formal education system as well. Employers regularly call for better connections to be made between the skills they seek in employees and the skills developed in people through their education. This can be useful in ensuring that education and training programmes meet evolving business needs. However, it is also important to ensure that business leaders' views on knowledge needs do not dominate education.

Concerns have also been raised about the growing influence of corporate marketing in schools.¹¹⁵ New Zealand businesses have generally taken a low-key approach to this issue until recently. However, there are signals that many marketers now see schools as a fertile ground for corporate communications and sponsorship.¹¹⁶ Beyond the formal education system, businesses also help to shape consumer desires and behaviour throughout society (see section 5.4).

A major effort is therefore required to ensure that business practices can contribute to sustainability, while keeping an eye on what business people are actually trying to sustain.

4.7 Summary and key points

This chapter has looked at the environmental dimensions of education for sustainability in New Zealand today, which have mostly come under the banner of environmental education. Here is a snapshot of the current situation:

- Environmental education is currently not a priority for central government in the formal education system. Many government strategies related to sustainability highlight a need for education to be used to achieve their outcomes. However, the focus of these strategies is often on awareness raising, and they are seldom well coordinated (if at all). The government's strategy for environmental education also appears to be outdated. Central government's focus over the last five years has mostly been on building up capacities in local government and taking some steps to encourage environmental education in schools.
- Local government has become much more involved in environmental education over the last decade. Many initiatives have been expanded to a national level after local government led the way. However, environmental education is still not a core part of most council activities. Funding and support for education within councils is often precarious. The Local Government Act 2002 provides a useful opportunity to launch a new era of education for sustainability in local government.
- Environmental education has had a slow and rocky start within New Zealand primary and secondary schools. It is still not conducted in the majority of schools. A key issue is its non-mandatory status. Guidelines for environmental education have assisted many teachers, but there is a very low awareness that they even exist. Most existing environmental education is focused on education 'in' and 'about' the environment. The transformative qualities of environmental education have often been lacking. A recent curriculum review provides an opportunity to give education for sustainability, including its environmental dimensions, a much more prominent place in the education of young people in New Zealand today.
- Sustainability is still out on the fringes of most tertiary organisations and their departments. Although there are many courses that have an environmental component, connections are seldom made across disciplines of knowledge to integrate thinking on sustainability. The government has recently reformed the tertiary education sector. Although environmental sustainability was identified as a key national goal, it is not seen as a

priority. The government appears to be more focused on building a 'knowledge society' with a culture based around values such as risk-taking and pride in business.

- There are many opportunities for New Zealanders to learn and be involved in environmental and sustainability issues in their community. Environmental NGOs and community organisations have been actively involved in raising awareness and highlighting individual actions that people can take to reduce their environmental impacts.
- Many businesses, both large and small, have shown a growing interest in sustainability issues over the last decade. Various networks and organisations have been formed to promote sustainable business practices. However, concerns have also been raised about the influence of some corporations in schools and their role in shaping consumption and production patterns.

Drawing all of this together, how effective has environmental education been to date? It is impossible to generalise across New Zealand. Nonetheless, as section 4.3 highlighted, it seems that most environmental education has focused on 'green' topics such as recycling, tree planting and 'nature conservation'. Connections have seldom been made between environmental issues and social, cultural and economic concerns. The underlying causes of environmental problems are rarely being addressed, as the primary focus has often been on dealing with the 'symptoms' of these problems (such as recycling waste – see chapter 6). A lot of the focus has been on changing individual behaviours, instead of changing the systems that perpetuate unsustainable practices. As chapter 3 highlighted, key principles of education for sustainability include critical thinking and social transformation. These elements have often been lacking from environmental education in New Zealand. This is probably because this kind of education is much more difficult to undertake. It requires strength, stamina and courage to openly seek to challenge the status quo of the society one is a part of.

This overview is not a criticism of environmental education efforts to date, as they have been very helpful. It is important to commend the efforts of many individuals and organisations who have contributed to many changes – often with little support, but with much dedication. Their efforts have contributed to an ethic of caring for people and the environment that surrounds them, which is vital for a sustainable future. Nonetheless, the time has come to build on this foundation. Education for sustainability needs to build on the successes and commitment of existing environmental education efforts and to delve into the underlying reasons why New Zealand is developing in such an unsustainable way.

