

# THE ROLE OF PARTNERSHIPS IN ENVIRONMENTAL EDUCATION IN NEW ZEALAND SCHOOLS

## SOME FINDINGS FROM A RECENT RESEARCH PROJECT

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*Paper presented at the 2004 New Zealand Association for Environmental Education (NZAEE) conference, Christchurch College of Education, 14–17 January.*

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### Introduction to the research

A research project, *Environmental education in New Zealand schools: research into current practice and future possibilities*, was undertaken for the Ministry of Education by the New Zealand Council for Educational Research and the University of Waikato between June 2002 and June 2003.

The purposes of the research were:

- to analyse environmental education practice in New Zealand schools in order to identify strengths and opportunities for future school practice;
- to provide direction for the Ministry of Education and Government with respect to future initiatives in the planning, implementation, and evaluation of environmental education in New Zealand schools; and
- to facilitate further discussion between New Zealand policy-makers, researchers, and practitioners in environmental education about the way in which environmental education in schools is conceptualised, discussed, practised, and researched in New Zealand.

The evaluation included three components: a review of New Zealand and international literature in environmental education, a critical stocktake (survey) of nearly 200 schools involved in environmental education, and case studies of environmental education practices in eight primary, intermediate, and secondary schools and kura kaupapa Māori. The research reports are currently with the Ministry of Education and are likely to be publicly available in early 2004 (see Bolstad, Baker, with Barker, and Keown, in press; Bolstad, Cowie, and Eames, in press; Bolstad, Eames, Cowie, Edwards, and Rogers, in press; Cowie et al., in press).

The critical stocktake was conducted by way of a national survey of schools believed to be involved in environmental education. A database of potential schools for the sample was developed using information from a range of providers of environmental programmes and resources, including the Ministry of Education, local authorities, and environmental sector groups. The final database of 475 schools (17.5 percent of mainstream New Zealand schools) ranged across all school types and school deciles. Three identical copies of the survey were sent to each school: one to a curriculum leader in the school, one to the environmental education leader in the school, and one to a classroom teacher of environmental education. A total of 367 responses were received from 190 schools.

The purpose of the case studies was to seek examples of “good practice” in environmental education in a range of New Zealand schools. Many of the case study schools were identified via environmental education networks with whom we made contact during the research. The case studies sought to investigate the specific characteristics, contexts, and histories of environmental

education practice in these schools, and to identify the potential benefits for student learning created as a result of these practices.

In keeping with the theme of this conference, this paper focuses on one small aspect of the research project. Namely, it looks at what this research tells us about the current (and potential) role of partnerships for environmental education (EE) in schools both internationally, and in New Zealand.

### **What are “partnerships” in education?**

“Partnership” is a widely used term in education, but what does “partnership” actually mean, and what distinguishes it from other forms of relationship? Timperley and Robinson’s (2002) research on educational partnerships in New Zealand suggested that the strength of partnerships lies in the ability of the partners to become task-focused, and to recognise the progress they make together on “valued tasks”. In other words, partnerships are successful and fruitful when all the partners recognise that they are working together to achieve something they all consider to be important. This further assumes that all the partners have a shared view of *why* this goal is important, and what they are going to do to try to achieve it. Timperley and Robinson proposed that “efficient partnerships increase opportunities to advance common interests and to learn from each others’ expertise, to provide mutual support, and to increase commitment to a particular set of decisions” (Timperley and Robinson, 2002, p. 15). However, working in partnership is not always straightforward, as “participants in any partnership must negotiate the minefield of what the task might be, the responsibilities each might assume, the processes they might use to work together, how they will be mutually accountable, and how they will share power” (*ibid.*). Thus defined, “partnerships” are a complex and multidimensional form of relationship that goes beyond simple linking and networking between different parties and stakeholders in education.

In this paper, we draw from the *Environmental education in New Zealand schools: research into current practice and future possibilities* research to identify current or potential ways in which “partnerships” are manifested in EE practice in New Zealand schools. The “partners” in these relationships include: students, teachers, other school staff, education advisers, groups and individuals from environmental agencies, and groups and individuals from the local community. We consider how each of these partnerships can or might contribute to the success and sustainability of environmental education in New Zealand schools.

It is important to note that this paper provides only a cursory overview of the findings of this research project. For further detail, see Bolstad, Baker et al. (in press); Bolstad, Cowie et al (in press); Bolstad, Eames et al. (in press); Cowie et al. (in press).

### **Environmental education partnerships in NZ schools**

The research highlighted a range of areas in which “partnerships” did, or potentially could, support the development and quality environmental education practice in New Zealand schools. In the following section we discuss some research findings in relation to the following forms of partnership:

- Partnerships in the classroom
- Partnerships across subject areas
- Partnerships between school staff
- Partnerships between schools, and between schools and education advisers
- Partnerships between schools and the local community
- Partnerships between schools and environmental agencies.

## Partnerships in the classroom

The first potential locus for partnership in environmental education is the classroom; that is, partnerships between students, or between teachers and students. Contemporary literature on EE in schools promotes the sharing of power and responsibility for decisions and actions with students as a central feature of good EE practice (Jensen and Schnack, 1997). For example, the philosophy of education “for” the environment implies that, as part of their learning, students should actually engage in some form of action that will contribute to a more sustainable future. However, EE theorists are quick to note that helping students to “take action for the environment” is not enough, if students are not themselves involved in the decisions and planning that surround the action (Fien, 1994).

Jensen and Schnack (1997) argued that the purpose of schools is not to improve the world with the help of pupils’ activities. Rather, schools are meant to serve the *educational* goal of preparing students for the future. In other words, the purpose for teaching EE in schools is not for students simply to learn how to plant trees, or clean up litter, or address other “symptoms” of environmental problems; it is for students to learn how to be active participants in a society that is capable of achieving sustainable solutions to environmental problems. Therefore, in school-based EE, students must be supported to identify real problems, determine possible solutions, and participate in some kind of meaningful course of action that they have helped to determine. In doing so, students develop skills and knowledge; for example, how to seek out information and resources, how to approach people in the community for advice or support, or how to take into account different people’s needs and perspectives on an issue relating to the environment. The Royal Danish School of Educational Studies refers to this process as the development of learners’ “action competence” (Breiting and Mogensen, 1999; Jensen and Schnack, 1997).

In the survey, 39 percent (n=235) of teachers identified student empowerment and decision-making as student achievements from teaching their EE unit. These achievements were often associated with units that focused on the local environment, such as recycling, planting, and gardening in the school grounds. As one teacher wrote, it gave the students “a raised awareness and sense of empowerment. Enjoyment and pride in their accomplishment. A deeper sense of caring” (teacher, full primary). In one case study school, students were involved in re-landscaping the school grounds and made signs asking people not to pollute a local stream. The teachers felt that through taking action “for” the environment, the students had “learned the power that people can have when they work collectively together on a local issue”.

In spite of comments like these, it is somewhat difficult to know exactly how widespread or embedded are the principles of student decision-making and choice in EE practice in New Zealand schools. For example, most survey respondents described EE primarily in terms of education “about” the environment, with a secondary focus on students coming to respect and care for the environment. Although survey respondents described a range of student actions “for” the environment including gardening, recycling, and environmental advocacy in the home and community, overall, fewer spontaneously identified student decision-making or student choice as a central facet of action “for” the environment. These findings suggest that there is a wide range of understandings of what environmental education is among New Zealand teachers, and that not all teachers recognise the central role of student decision-making and participation in achieving the goals and aims of EE, as explicated in the *Guidelines for Environmental Education in New Zealand Schools* (Ministry of Education, 1999) and other environmental education literature.

By contrast, student action “for” the environment featured prominently in the case study schools. The case studies illustrated some rich examples of environmental education where student input, leadership, and decision-making were at the forefront of environmental education activities (see Bolstad, Eames et al., in press). Students involved in these projects often described immense pride in their undertakings. Many felt they had learned more about the environment through

involvement in these activities than they might have in a classroom. They also talked about learning how to actually “do” something – for example, how to:

- cultivate a garden, compost system, or a worm farm;
- develop landscaping plans;
- approach businesses, councils, or Boards of Trustees with a funding proposal;
- liaise with the media; or
- find ways to communicate an environmental message to the wider community.

For a handful of students at two of the case study schools, involvement in environmental education gave them the opportunity to go to international competitions or conferences on “children and the environment”.

An emphasis on collaborative work amongst the students was also strong in the case study data. Many of the views expressed by students at the case study schools centred on the development of their understanding of a collective role. This was manifested by the existence of student environmental interest groups in a number of schools, and the view that the whole community needed to help. For example, one secondary student said “It has to be a complete community project. A couple of people can’t go out there and say, we’re going to change the world.” An action group model instituted at one intermediate school led one teacher to say of their EE approach that “It’s been very student-led and student-focused, which was scary at the beginning, but it’s been so cool.”

Teacher respondents in the survey noted how, through teaching EE, they had developed new pedagogical strategies based around collaborative work and student decision-making. They saw themselves more as facilitators of student-driven learning rather than the teaching role they were more used to in other curriculum areas. Fifty-eight percent of teachers stated that their main achievement in teaching EE units was enhanced teaching strategy or satisfaction in student learning. For example, one contributing primary teacher noted a “new way of teaching – more action focused so children more enthused – great for teaching”. In one secondary case study school, teachers and students in a Year 12 environmental education course described the contrast between the way the environmental education course was taught (very discussion-based, with much of the course content negotiated and co-constructed between teachers and students), and the way other Year 12 subjects were taught (mainly teacher-directed, with course content largely pre-determined).

#### Partnerships across subject areas

The *Guidelines for Environmental Education in New Zealand Schools* (Ministry of Education, 1999) specify that environmental education should be integrated across all the mandated curriculum areas, thus creating the possibility for partnerships to develop across different subject areas. One potential benefit of such cross-curricular partnerships for learners is the creation of more “authentic” learning contexts, where students develop knowledge and skills across a range of discipline areas. Teachers also stand to benefit from cross-subject partnerships. In one secondary case study school, an EE course was co-taught by a science teacher and a social studies teacher. One of these teachers said the course had “built a relationship between the sciences and social sciences, but I still think there needs to be more ... I’d like this to be a catalyst for change in the school, that we do a lot more cross-curricular work”.

In the survey, when respondents were asked which subjects they integrated their EE with, science was reported by 69 percent of respondents followed by social science 38 percent, and technology 33 percent. However, the questionnaire format made it difficult to clearly examine whether teachers were integrating their EE across more than one subject area. Interpretation of the data

suggested that 20 percent of respondents taught their EE across science, social science, and technology. Few specific examples were given of teaching environmental education across a number of curriculum areas, and these were predominantly at the primary school level. There appear to be challenges associated with teaching environmental education across a number of subjects that may relate to school systems such as timetabling and time for planning with colleagues.

In the case study schools, a teacher who acted as the school's environmental education co-ordinator usually took responsibility for building environmental education into curriculum planning at classroom level, syndicate level, or school-wide level. In some of the primary and intermediate case study schools, curriculum-planning templates which featured explicit EE learning goals were used (although environmental education was not subject to the same assessment requirements as other learning areas). In one intermediate school where EE was strongly developed in only two or three out of twenty classrooms, these teachers had given their unit plans and resources to other teachers in their school to use as desired. In the case study schools, EE was most often linked to science, social studies, technology, and health, but also featured in English, mathematics, and the arts. One secondary case study school taught EE as a subject in its own right, primarily integrating science/biology and social studies/geography concepts and assessment standards.

#### Partnerships between school staff

The research highlighted a range of examples of working partnerships between teachers, and other members of school staff. These relationships and partnerships seem to be very important for ensuring the *sustainability* of EE in a school, in particular, by helping to develop shared understandings of the purpose and value of EE, and to identify ways for connecting EE across multiple aspects of school teaching and learning. The support of school management surfaced as a key issue. For example, in one full primary case study school the principal was actively involved in EE and several staff meetings had focused specifically on professional development ideas for EE. In this school, staff used long-term and unit-planning sheets that included a box for writing links to EE. This partnership between teaching systems and management support was seen as critical for the delivery of EE. In the survey, 10 percent of all respondents (n=312) noted that their main challenge in delivering EE in their school was getting leadership support. One secondary teacher felt the school's EE could be strengthened "if the principal understood what environmental education is – [that it is] more than gardening, [we] need a workshop for principals and BOT".

The development of policy regarding EE in the school was seen to be important in creating sustainability of EE programmes. This was seen to involve a commitment from school leadership and the Board of Trustees to a long-term approach to integrating EE into the school culture and planning effective ways for delivering and resourcing EE. This approach would help to ensure whole school involvement, which was described as important to the sustainability of EE in the school. For example, one secondary HOD saw the need for "whole school policy and programme from Board down to whole school action".

In a sense, the partnership revolving around whole school involvement would alleviate one of the biggest challenges reported – namely, a reliance on an enthusiastic individual or small group to drive EE in the school. In many of the case studies and comments from respondents in the survey, it was clear that EE was fostered by a single, passionate individual in many schools. Some respondents saw the need for "more in-service for whole school staff so that we could all work together" (deputy principal of a contributing primary school). Teachers in the case studies spoke about the need to remove the dependence from one individual, but also noted the difficulty of getting colleagues involved when they were bogged down with other issues such as NCEA implementation. Time issues featured prominently in teachers' frustrations in their attempts to

deliver an EE programme. As one secondary HOD wrote, “time to sit with colleagues in the social sciences to really nut out how best to develop and integrate better environmental education practice in our courses at senior levels”.

Partnerships between schools, and between schools and education advisers

Another area of potential “partnership” identified in the research stems from relationships between schools, and between schools and education advisers. These sorts of partnerships can serve to support and enhance EE by sharing of research and professional knowledge and experience regarding good EE practice. This could help to strengthen and support existing EE developments in some schools, or to nurture nascent EE development in other schools.

Time to develop partnerships with other schools for networking and professional development was another theme for teachers in the survey. The teachers felt the need to co-ordinate with colleagues and share ideas and were looking for a forum in which to do this. For example, one secondary HOD wanted, “time to reflect and plan next year’s campaign, opportunity to share experiences with other schools and listen”. Some teachers suggested the use of TKI (Te Kete Ipurangi – the Ministry of Education support website) as a tool to pool ideas about EE programmes. This resource was reported as being useful for EE by 29 percent of respondents in the survey. Others suggested newsletters of best practice be disseminated to schools.

One possibility raised was of collaboration between two or more local schools in an environmental project. This would allow sharing of resources, planning, and experience in school-to-school partnerships.

Some teachers in the survey said they wanted education advisers provided by the Ministry of Education to come in and facilitate EE programmes in schools. Some teachers, however, cautioned against a proliferation of advice channels and argued for a consolidation of resourcing into established channels such as Enviroschools.<sup>1</sup>

Partnerships between schools and the local community

Another area for partnership in EE is that between schools and the community. The findings of the survey and the case studies highlighted the importance of schools’ relationships with the community. This operated on two levels, that of interaction with the local community, and that of interaction with environmental agencies.

The interactions with local community ranged from increased parental involvement in the school (particularly in worm farming and gardening units), to involvement with the wider community (through native plantings and stream, lake, and beach care work). These interactions were seen to achieve improved school and community environments and to enhance the profile of the school in its community.

Partnerships between schools and environmental agencies

The most common “environmental agencies” with whom schools had contact to support delivery of EE were local and regional councils (named by around 50 percent of all respondents in the survey). Other relationships were reported with the Department of Conservation (DOC), botanic gardens, and local environmental organisations (e.g., WaiCare). Within the case studies, highly productive relationships were described with DOC, regional councils, and local botanic gardens. One teacher commented that it was important “for the children to develop the knowledge that there are people out there who are responsible for looking after the environment”.

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<sup>1</sup> In 2003 the Ministry of Education appointed regional EE co-ordinators for schools, who are working in liaison with the Enviroschool facilitators.

However, the research findings also revealed challenges associated with creating and maintaining partnerships with environmental agencies. Chief amongst these was the time required to identify and maintain these links (mentioned by 91 percent of respondents in the survey), particularly in the face of competing demands. As one contributing primary teacher noted: "Time involved – large amount of time required which is difficult to balance with being in the classroom." Teachers also expressed problems with communicating with the right people to help, and scheduling visits to agencies in a constrained timetable. A further complication appeared to be a mismatch between the goals, aims, and timing between the school and the agency. As an example, one contributing primary teacher noted that: "DOC conservation week is announced within the term rather than before the next term so it can't be planned for." This reinforces the point noted earlier, that successful partnerships require sound negotiation between parties involved of responsibilities, working processes, accountability, and power-sharing.

## Summary

In summary, the *Environmental education in New Zealand schools: research into current practice and future possibilities* research project has indicated that partnerships can be important in the delivery of EE in NZ schools. Some evidence was found for successful or emerging partnerships at many levels, involving teachers, students, other members of the school community, and groups and individuals with a stake in environmental education. However, challenges appear to exist in many schools in realising the full potential of such partnerships. For example, much negotiation, planning, and power-sharing is required to establish true partnerships between teachers and students, partnerships across subject areas, partnerships between staff within a school, and partnerships between schools and environmental agencies. Schools may benefit from the support now being provided by the EE regional co-ordinators, and professional development which targets the different needs of schools at different stages in the development of their environmental education programmes.

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