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# EDUCATION AFFECTS OUTCOME?

DOES ENVIRONMENTAL  
EDUCATION MAKE A  
DIFFERENCE - AND HOW  
DO WE KNOW IF WE  
SUCCEEDED?

This workshop at the NZPI Conference 2003 explored whether environmental education (EE) is successful in delivering environmental outcomes. The discussion focused on local government's efforts to promote environmental awareness and action and how to evaluate such EE efforts. Topics discussed included: what is successful EE - a preliminary discussion; does EE contribute to better environmental outcomes; evaluating EE - are there hard facts on the "soft option".

## WHAT'S THE PROBLEM?

Many New Zealanders perceive environmental issues as something that only motivated communities and Government are involved in. Some people are environmentally aware but do not act on this. The Parliamentary Commissioner for the Environment (May 2002) reports that we need an adult public that is well informed, interested and involved in environmental decision-making.

Education has been used as a tool to raise people's awareness of environmental issues, motivate people towards environmentally Friendly behaviour and achieve environmental outcomes.

Millions of dollars have been spent on environmental management and yet few resources have been spent assessing the effectiveness of these efforts including education projects, programmes and activities.

There has been a shift in recent years towards more emphasis on non-regulatory approaches to achieving environmental management objectives and policies. Local government in New Zealand is working towards improved environmental outcomes, including many projects that promote community environmental awareness and action. Education is mentioned as a method in most resource management plans, however, it is not clear how education links improved outcomes.

We assume that EE is making a difference (in many cases it is), and yet we are not sure to what extent it is successful because there has been limited evaluation of these initiatives. Politicians, communities and managers are asking, "What is the return on this recent investment?" This raises many questions:

- what difference has education made
- how effective is education as an environmental management tool

- what role does education play in achieving environmental results
- how can we prove the value of council EE efforts
- do we really know how successful our education programmes are
- how do we know when and by how much we succeeded?

## IS THE TERM 'ENVIRONMENTAL EDUCATION' A TURN-OFF?

An underlying question is what is meant by EE? The term means different things to people. Many think it refers to producing education material for school children. In this paper a broader definition is used. EE is about raising awareness, educating people in the outdoors, changing attitudes and motivating people towards environmentally sensitive behaviour and decision-making and achieving positive environmental outcomes.

It encompasses education for the environment. Environmental educators in local government include EE staff, resource carer people (such as coast care, waste managers, park rangers, air quality officers and resource consents staff), communications staff, management, compliance staff and so on.

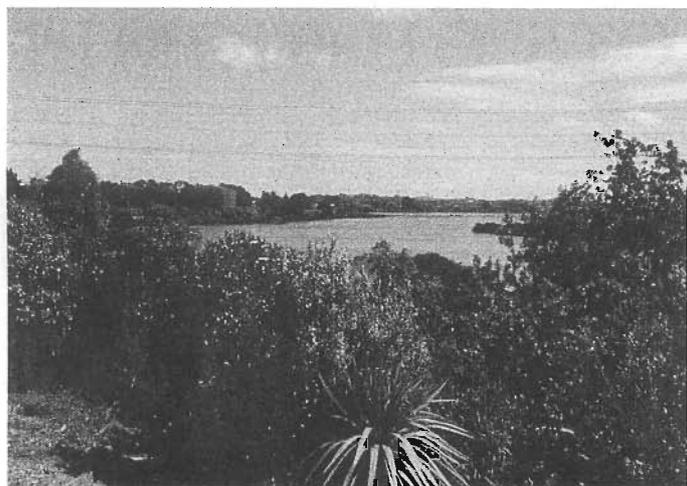
The term environmental education may well be a turn off for some and it is not as strategically focused as it could be so that it contributes to the achievement of environmental outcomes.

## WHAT IS SUCCESSFUL ENVIRONMENTAL EDUCATION?

Successful education influences learning, challenges values and helps achieve change and action. EE efforts and resources have increased since the early 1990s because regulatory approaches alone were not working.

EE started with a focus on raising awareness of environmental issues and moved towards a focus on action and achieving better outcomes. Some initial thoughts on what constitutes successful EE includes (but is not limited to):

- there is clear vision and leadership behind the initiatives



- it is based on an understanding of participants' needs e.g. not coercive or patronising
- it involves partnerships and working together
- a strategic and integrated approach - it's well linked with policy and strategic direction
- is action oriented and focuses on improved environmental results
- is relevant to the every day
- is simple and fun (things are in bite sized chunks)
- it connects heads, hands and hearts (and focuses on the benefits of getting involved)
- it is monitored and evaluated - and fosters a culture of learning from experience
- leads to better environmental outcomes
- leads to improved environmental quality
- takes society a step closer to sustainable development.

Below: Figure 1.

### DOES EDUCATION LEAD TO BETTER OUTCOMES?

Most councils include education as a method in district / regional plans and there are EE staff positions and strategies in place. So education has a place within local government practice. Education remains a fairly undeveloped strategy overall across local government in that: funding is not always adequate or even secure; and the contribution of educators is not always integrated with the role of policy makers and operational staff.

Education could be more effective with a greater link to policy and strategic directions of councils. Where this is occurring the results are proving valuable. In order to know whether education makes a difference to environmental outcomes, we need to integrate education into planning and decision-making processes and evaluate its success.

It is challenging to assign causal links to EE

and environmental outcomes because: environmental management is complex, there is often a long time lag between an environmental intervention and a result, and many factors affect learning and behavioural change.

If successful education influences learning, challenges values and helps achieve change and action, then in an environmental management context we expect success to mean that:

- people learn something about the environment
- their values are challenged
- there is an element of change or an action that leads to
- better environmental outcomes.

In reality this is often not evaluated if considered at all.

### EVALUATING EE

We lack a strong evaluative culture in New Zealand environmental management and are sometimes unsure how successful some environmental management projects are.

"We fund a wide range of projects in the community but we don't really know if we've been successful" (Ministry for the Environment, 2002).

Evaluation of EE is in its infancy in New Zealand. Good practice tools and an evaluative framework to assess the success of initiatives and education's contribution to environmental management are lacking. What is happening, what works and why does it work, and how can we evaluate the effectiveness of initiatives to raise awareness and promote action? Without a culture of learning from experience and reflecting on what works, the success of EE for environmental management may be questioned.

The limited evaluation that has occurred has tended to focus on the outputs and processes of a

What to evaluate?	Evaluation type	Means what?
<b>The process</b>	Methods	Are the intended processes in place, what happened and did that approach work? eg outline what was done and how and whether this worked eg the use of TV as in the "Reduce Rubbish" campaign
<b>Implementation</b>	Methods	Is the project, programme or activity being implemented in the manner anticipated? eg are participants & stakeholders satisfied with implementation?
<b>Outputs</b> • educational • environmental	Results	What were the material products of a project, programme or activity eg number of pamphlets produced, number of people involved, number of trees bought, amount of publicity for a sponsor
<b>Outcomes</b> • educational • environmental	Results	What were the achievements or changes brought about by the project, programme or activity? This may be a supportive context or infrastructure for longer-term cumulative effects or impacts eg increase in wetlands
<b>Impacts</b>	Results	What were the longer term cumulative effects of the project, programme or activity? eg lasting changes?

project or activity, for example, how many schools were involved in a rubbish campaign and whether the teachers and students enjoyed it, rather than the actual impact on environmental outcomes, such as 'was rubbish reduced because of the campaign?' This focus on methods evaluation, rather than results evaluation is limiting. Environmental outcomes are important. An evaluation framework focussing on outcomes or results is outlined and was discussed with practical examples at the workshop.

## FRAMEWORK FOR EVALUATION

A suggested evaluation framework for local government EE is put forward in Figure 1.

Once an EE project, programme or activity has been evaluated it is important to complete the feedback loop, and translate the findings of the evaluation into action and to influence the approaches used in the future (whether education, regulation or incentives).

## CONCLUSION

Some excellent EE initiatives are occurring across local government. But do these efforts make a difference to environmental outcomes? Evaluating their success in the absence of an accessible evaluation framework for environmental education poses a strong challenge. It may also put Future funding at risk because of the lack of ability to qualify and quantify the difference that education has made. To help fill this gap an evaluation framework for environmental education is suggested.

## REFERENCES

- Buchan, G, Spellerberg, I and Bell, K.S. (2003) *How do we measure the returns on investment in environmental education? Some evidence of payback in New Zealand*, poster paper to be presented at the EE Conference in Portugal May 2003.
- Fien, J , Scott, W and Tilbury, D (2001) *Education and Conservation: Lessons from an*

*Evaluation*, in *Environmental Education Resources*, Vol 7, No. 4

Ministry for the Environment (2002) *Promoting Environmental Awareness and Action in the Community*, Report prepared by Steve Menzies, MfE, Wellington

Parliamentary Commissioner for the Environment (2002) *Newsheet*, May

Sustainable Management Fund (1999) *Environmental Education: A Guide for Programme Providers - how to develop, implement and evaluate strategies and programmes*, prepared by Jo Blakely, Michelle Rush and Ross Callaghan for MFE, Wellington.

Quality Planning website  
[www.qualityplanning.org.nz](http://www.qualityplanning.org.nz) has guidance notes on monitoring and reporting. These provide some discussion on evaluation.

