Education for Sustainability: An appropriate concept for Pacific Island schools?

Subhashni Nathan and Neil Taylor

Introduction

This article is intended to introduce educators in the Pacific region to the concept of 'Education for Sustainability' (EfS). This is a relatively new educational concept which has evolved from Environmental and Development Education. The article looks at the need for sustainability with particular reference to the Pacific and goes on to discuss some of the key components of EfS before looking at the suitability of EfS for Pacific Island schools.

The Need for Sustainability

Modern economic development has brought considerable benefits for many of the world's people: greater life expectancy, more gender and racial equality, more consumer choice and some extension of human rights and political freedoms. Although these benefits are not to be discounted, they are unequally shared and are associated with such mounting costs as ecological degradation, economic instability, social exclusion and loss of cultural diversity.

According to the World Wide Fund for Nature (WWF) publication *Caring for the Earth* (1991) our civilisations are at risk because we are misusing natural resources and disturbing natural systems. We are pressing the Earth to the limits

of its capacity. The unprecedented increase in human population and activities has had major impacts on the environment. If humans want to survive and enjoy a satisfactory quality of life, there needs to be a new kind of development that does not involve the unbridled exploitation of the planet's resources, one that is sustainable.

These sentiments are particularly true for the island nations of the Pacific region where, in many cases, economic development is gathering pace and increasing numbers of their populations are embracing some of the high consumption aspects of a western lifestyle. This trend, if it continues, is likely to put at risk the fragile ecology of the region.

Education is seen by many as playing a crucial role in the transition to sustainability. The 1992 Earth Summit stated that "education is critical for promoting sustainable development and improving the capacity of people to address environment and development issues" (UNCED, 1992: 2). In the 1990s, mounting concern over environment and development problems has meant greater support for an educational approach that not only considers immediate environmental

improvement as an actual goal, but also addresses educating for sustainability in the long term. However, unless teachers have a clear understanding of these concepts and a positive attitude to them, there is little prospect of Education for Sustainability (EfS) becoming a reality.

What is Education for Sustainability and how does it differ from Environmental Education?

Since the 1992 Earth Summit, sustainable development has become the generally agreed goal and education has been identified as one of the means of achieving this sustainable society. As a result, a new phrase has been added to the educational vocabulary – education for sustainability. According to the United Nations Conference on Environment and Development (UNCED), education for sustainability is the term used for the education which is "so critical for promoting sustainable development and improving the capacity of people to address environmental and development issues" (UNCED, 1992:2).

Education for Sustainability is difficult to define but, in effect, it is environmental education that has evolved to include a strong social dimension and, as such, incorporates social issues such as poverty and its causes. In fact, ideally, EfS should empower individuals to make their own decisions about their behaviour and attitudes to the environment, society and economy.

Educating for a sustainable future is not so much about a destination as about the process of learning to make decisions that consider the long-term economy, ecology and equity of all communities. Its goal is to build an enduring society. This involves learning how to anticipate the consequences of our actions, envision a sustainable future and create the steps needed to achieve the vision. Individuals and societies will perpetually have to make choices. How those choices are made and the information and ethical discernment used in making them will determine whether our visions of a sustainable future are achieved (http://www.unesco.

Some components of EfS

Although EfS is difficult to define, it is possible to identify some of its key components. These are summarised below.

Relevance and Action Orientation

Relevance must be a central principle underlying EfS. It must encourage students to explore links between their personal lives and wider environmental and development issues. Where possible, EfS should relate first to the local economic, social and ecological context and community, followed by regional, national, international and global contexts. Involvement with real problems and issues is seen as the most effective way of developing the skills needed to investigate, evaluate

and implement solutions to problems. This form of learning empowers students to exercise responsibility for their own lives and the environment.

Education for sustainability offers the opportunity for students to use active learning approaches to develop critical thinking; linking curriculum content with real life; developing forward thinking and involving children in planning, monitoring and evaluation.

Values Orientated and Socially Critical

It is not realistic to regard any EfS teaching as neutral or value-free. The decision to participate in EfS is stimulated by a sense of responsibility that results from the development of personal beliefs. The nature of the debate about sustainability means that students will be faced with a number of diverse, but linked issues such as poverty and consumerism. Thus it appears that there is little benefit in presenting children with lots of information about what impacts upon sustainability, rather we need to challenge their thinking about issues such as consumerism in a way which forces them to make value judgements about such questions.

Symons (1996) has argued that, for real EfS to take place, opportunities for critical enquiry must be built into the mainly descriptive and practical nature of much current environmental education.

Holism

Wholeness is a defining characteristic of living systems and according to Tickell (1996), at the root of education for sustainability is the notion of interconnectedness. In most discussions of the curriculum, people put environment into the box labelled science, or the box labelled geography, or the box labelled biology, or in some cases the box labelled technology. But the environment is equally relevant to the boxes labelled economics, history, sociology, politics and all except the most extreme specialisations.

Agenda 21 (UNCED, 1992) also emphasised the need to integrate 'sustainability' into all areas of learning. Thus, if it is to achieve its goals, education for sustainability needs to draw from all the disciplines. A holistic curriculum approach combines and develops scientific enquiry, social science thinking and practical skills, together with the creative and aesthetic sensibilities of the language and arts. Thus, it contributes to the education of the 'whole person'.

In conclusion, perhaps Webster (1996:84) best encapsulates the key principles of EfS with his comments that the key to successful EfS is "developing critical faculties and exploring alternatives in the context of all forms of resource use, systems and technologies encountered via the curriculum", and he suggests that trusting teachers and students to co-

operatively review their work and intentions, to provide them with time and space to reflect and experiment with sustainability is a very powerful strategy. However, clearly this requires a dramatic shift away from teacher-centred delivery of the curriculum to a much more student-centred approach. Simply telling children about consumerism is much less likely to have an impact than having them analyse their own consumption patterns and examine the social and environmental consequences of these.

How relevant is the concept of EfS to the Pacific?

The potential ecological problems facing many of the Pacific Island nations are clearly not all of their own-making. For example, at present, they contribute very little to global warming, ozone depletion or acid rain, all of which result mainly from outputs by more industrialised nations. However, with increasing populations and growing levels of consumption there is clearly a place for making students aware of the key issues involved in sustainability. So the question is not really whether EfS is appropriate for the Pacific region – it would be difficult to argue against this – but whether the education systems as they exist, are ready to embrace it. By its very nature, EfS should involve a very learner-centred approach, with children analysing, thinking critically, and debating issues that are sometimes controversial. Unfortunately, teaching and learning styles in the Pacific do not always lend themselves to this

kind of approach. In some instances, this may be because of cultural reasons but more frequently it is for practical reasons, such as accommodating large classes. However, perhaps the major impediments to teachers delivering the key components of EfS are the fiercely competitive examination systems that exist in many of the countries.

In Pacific nations, as in many other developing countries, the content and style of national examinations tend to be more important determinants of the content and process of teaching than syllabuses (Vulliamy, 1988). He goes on to point out that the vast majority of questions asked in school examinations in developing countries test factual recall rather than comprehension or application skills. This encourages rote learning of factual information that is promoted by a formalistic, didactic style of teaching. Unfortunately, this places a low premium on the relevance of such teaching to the students' own lives. This point has also been made by Ingle and Turner (1981:361) who believe that intense pressure for university places and jobs in many developing countries puts a premium on examination success:

In these circumstances, rote-learning appears to pay dividends, and the pupil expects the teacher to be the 'transmitter of knowledge.' Thus, even if the aims of the curriculum state otherwise, in the absence of teachers that are able to adjust to the demands of the curriculum, the new program can easily become sterile.

This type of learning environment is clearly an anathema to the principles of EfS.

EfS is not easy to deliver in any context because of its cross-curricular nature. In systems where teachers and students are caught up in highly competitive selective examinations, it would appear to be almost impossible. However, the introduction of elements of continuous assessment into examination systems would allow for greater freedom and creativity. In such circumstances, important components of EfS could be incorporated into the learning environment, and may influence children's values in a way that results in more sustainable lifestyles.

References

- Ingle, R. B., & A. D. Turner (1981) 'Science Curricula as Cultural Misfits'. European Journal of Science Education: 357-371.
- Worldwide Fund for Nature (1991) Caring for the Earth: A strategy for sustainable living. London, Earthscan Publications Ltd.
- **Symons, G.** (1996) 'The Primary Years'. In J. Huckle and S. Sterling (eds) *Education for Sustainability*. London, Earthscan Publications Ltd.
- **Tickell, C.** (1996) 'Education for Sustainability'. *Annual Review of Environmental Education* 7 pp. 15-20.
- United Nations Conference on Environment And Development (1992)
 Promoting education and public awareness and training, Agenda 21,
 Conference on Environment and Development. Conches, Chapter 36.

- Webster, K. (1996) 'The Secondary Years'. In J. Huckle and S. Sterling (eds) *Education for Sustainability*. London, Earthscan Publications Ltd.
- Vulliamy, G. (1988) 'Third World Schools'. In S. Briceno and D. C. Pit (eds) *New Ideas in Environmental Education* (pp. 143-157). London, Croom Helm.
- http://www.unesco.org/education/tlsf/intro/uncofrm 0.htm

Editor's Note:

Readers can read more on this topic in *Pacific Curriculum Network*, Vol. 9, No. 2 Dec. 2000 which has an article by R.R. Thaman entitled *'Education for Environmentally Sustainable Development in the Pacific Islands: thoughts and ideas for teachers'*.