A Long, Winding (and Rocky) Road to Environmental Education for Sustainability in 2006

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Abstract This article charts the history of environmental education over four decades - from the 1960s to 2006 - as a rocky road of determined chocolate with the possibilities of rocks (nuts) and easy passage (marshmallow). There were distractions such as suggestions of changing names and new directions (add fruit?) along the way but the road has continued to be well travelled. The article concludes that there is much in common with where we have come from (the 1975 Belgrade Charter) and where we stand now (in year 2 of the United Nations Decade of Education for Sustainable Development). Where next?

The path that has led us to being in the United Nations Decade of Education for Sustainable Development (2005-2014) has its origins in the 1960s, and there have been many hills, potholes and detours along the way. In this article I trace the international pathway from the 1960s to 2006 to provide a context for developments in Australia over the same period.

The Beginning

In the 1960s scientists around the world were calling for recognition that there was an international environmental crisis caused by the growth in world population, the continuing depletion of natural resources and the increasing contamination of air, land and water. These environmental problems were often seen as scientific problems which science and technology could solve, but increasingly even the scientists themselves were arguing that science and technology were not enough. They wanted more information about the environment for the general public: for example, Rachel Carson (1962, p. 30) argued that "(t)he public must decide whether it wishes to continue on the present road, and it can do so only when in full possession of the facts". Scientists also saw education as essential for providing students with an awareness of the threats to the human species and stimulating thinking and discussion on the social and biological problems of humankind (Boyden, 1970, cited in Gough, 1997, p. 4).

The term "environmental education" was first used around 1965 in the United States and the United Kingdom. For example, in March 1965 at a conference at the University of Keele it was agreed that environmental education "should become an essential part of the education of *all* citizens, not only because of the importance of their understanding something of their environment but because of its immense educational

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potential in assisting the emergence of a scientifically literate nation" (Wheeler, 1975, p. 8). The descriptions of the objectives of environmental education which emerged in the late 1960s and early 1970s were concerned with introducing ecological (environmental) content into educational curricula at all levels, promoting technical training and stimulating general awareness of environmental problems. These statements were more exhortations than specifications which made environmental education seem vague, as Helgeson et al. (1971, quoted in Lucas, 1979, p. 6), in a review of environmental education for school administrators, commented: "The reluctance of persons concerned with environmental problems and environmental education to define the area of their concerns has led to a diffuseness in the discussion which is unlikely to lead to useful analysis of the problems or to the successful resolution of them". Thirty-five years on similar discussions abound around the vagueness of education for sustainability/ sustainable development!

Governments began to respond to the scientists' and general public's calls with clean air and clean water legislation, for example, and, in some instances, with environmental education policies and programs. These included the U.S. Environmental Education Act (1970) and a range of programs in England, Canada, the United States, the USSR and Sweden (see Linke, 1980, Chapter 3).

In 1972 the United Nations Conference on the Human Environment was held in Stockholm. This conference "probably marked the most significant achievement for many years with respect to international cooperation and commitment to environmental conservation" (Linke, 1980, p. 23), and here the importance of education was also recognised. In the prelude to the conference's recommendations for international action it stated (as quoted in Linke, 1980, p. 25) that,

Education and training on environmental problems are vital to the long-term success of environmental policies because they are the only means of mobilising an enlightened and responsible population, and of securing the manpower needed for practical action programmes.

Agreeing on a Direction

The Stockholm Conference produced a sense of urgency about environment and development issues and, as a result, the United Nations Environment Programme (UNEP) was established. Other recommendations from the Conference included that environmental education be developed "as one of the most critical elements of an allout attack on the world's environmental crisis" (*Belgrade Charter*, UNESCO, 1975) and that UNESCO – working in collaboration with other UN agencies, non-government organisations and member states – should take the leadership in developing an international environmental education program.

The UNESCO-UNEP International Environmental Education Programme (IEEP) was established in 1974 under the directorship of Bill Stapp, one of the key figures in the environmental education movement in the United States (Gough, 2001). The IEEP's goal was to "develop an overall framework and direction for a co-operative international programme to further environmental education" (Greenall & Womersley, 1976, p. 19) and its activities in the first three years included two pivotal events in the history of the development of environmental education: the Belgrade International Workshop on Environmental Education (1975) and the Intergovernmental Conference on Environmental Education held in Tbilisi (USSR) in 1977 (UNESCO, 1978).

The goals and objectives of environmental education recommended at the Tbilisi intergovernmental conference on environmental education (UNESCO, 1978, pp. 26-27) continued to be endorsed at subsequent UNESCO and UN meetings. For example,

the report of the 1987 UNESCO Moscow International Congress on Environmental Education and Training states that "Recommendations of the Tbilisi Conference (1977) on environmental education goals, objectives and guiding principles are to be considered as providing the basic framework for environmental education at all levels, inside or outside the school system" (UNESCO-UNEP, 1988, p. 6). Similarly, the education chapter of Agenda 21, the strategy plan from UNCED, states that "The Declaration and Recommendations of the Tbilisi Intergovernmental Conference on Environmental Education organised by UNESCO and UNEP and held in 1977, have provided the fundamental principles for the proposals in this document" (UNCED, 1992, para 36.1). These are the goals and objectives from the Tbilisi conference (UNESCO, 1978, pp. 26-27):

1. The goals of environmental education are:

- (a) to foster clear awareness of, and concern about, economic, social, political and ecological interdependence in urban and rural areas;
- (b) to provide every person with opportunities to acquire the knowledge, values, attitudes, commitment and skills needed to protect and improve the environment;
- (c) to create new patterns of behaviour of individuals, groups and society as a whole towards the environment.
- 2. The categories of environmental education objectives:

Awareness: to help social groups and individuals acquire an awareness of and sensitivity to the total environment and its allied problems.

Knowledge: to help social groups and individuals gain a variety of experience in, and acquire a basic understanding of, the environment and its associated problems.

Attitudes: to help social groups and individuals acquire a set of values and feelings of concern for the environment, and the motivation for actively participating in environmental improvement and protection.

Skills: to help social groups and individuals acquire the skills for identifying and solving environmental problems.

Participation: to provide social groups and individuals with an opportunity to be actively involved at all levels in working towards the resolution of environmental problems.

During the 1970s and 1980s the UNESCO IEEP continued to support the development of environmental education through publications – such as the UNESCO-UNEP IEEP Environmental Education "green series" of books and the newsletter, Connect – and conferences, such as the Tbilisi + 10 meeting in Moscow in 1987, and regional meetings (including an Australian UNESCO seminar on Education and the Human Environment in 1975 (Linke, 1977)).

Renaming the Road

In 1980 the International Union for the Conservation of Nature and Natural Resources (IUCN) in collaboration with the United Nations Environment Program (UNEP) and the World Wildlife Fund (WWF) published the *World Conservation Strategy*. This document, subtitled "natural resource conservation for sustainable development", precipitated national and local conservation strategies around the world – including one in Australia in 1983 (DHAE, 1984). In the National Conservation Strategy for Australia (NCSA) one of the "strategic principles" was to "educate the community

about the interdependence of sustainable development and conservation" (DHAE, 1984, p. 16).

The report of the World Commission on Environment and Development (also known as the Brundtland Report) was released in 1987. Here it is argued that "the world's teachers ... have a crucial role to play" in helping to bring about "the extensive social changes" (1987, p. xix) needed for sustainable development to be achieved.

In Agenda 21, the global action plan from the United Nations Conference on Environment and Development, held in Rio de Janeiro in 1992, the Education chapter has as its first priority "reorienting education towards sustainable development" which is described in the following terms (UNCED, 1992, para 36.3):

Education is critical for promoting sustainable development and improving the capacity of the people to address environment and development issues ... It is also critical for achieving environmental and ethical awareness, values and attitudes, skills and behaviour consistent with sustainable development and for effective public participation in decision-making.

In 2002 the United Nations World Summit on Sustainable Development (UN WSSD) was held in Johannesburg. It also declared education as critical for promoting sustainable development. However, the vision from Agenda 21 had broadened from focusing "the role of education in pursuing the kind of development that would respect and nurture the natural environment" to encompass "social justice and the fight against poverty as key principles of development that is sustainable" (UNESCO, 2004, p. 7).

Following proposals from Japan and Sweden, the United Nations General Assembly, at its 57th Session in December 2002, adopted a resolution to start the Decade of Education for Sustainable Development (DESD) from January 2005, following the Johannesburg Plan of Implementation. UNESCO was designated to be the lead agency for the Decade and it has developed a draft International Implementation Scheme (IIS) for the DESD (UNESCO, 2004).

The UNESCO Scheme brings together a range of international initiatives that are already in place – in particular, the Millennium Development Goal (MDG) process, the Education for All (EFA) movement, and the United Nations Literacy Decade (UNLD) – with education for sustainable development.

All of these global initiatives aim to achieve an improvement in the quality of life, particularly for the most deprived and marginalised, fulfillment of human rights including gender equality, poverty reduction, democracy and active citizenship. If the MDGs provide a set of tangible and measurable development goals within which education is a significant input and indicator; if EFA focuses on ways of providing educational opportunities to everyone, and if the UNLD concentrates on promoting the key learning tool for all forms of structured learning, DESD is more concerned than the other three initiatives with the content and purpose of education. Conceiving and designing ESD challenges all forms of educational provision to adopt practices and approaches which foster the values of sustainable development. (United Nations University, 2006)

It would appear, at least on the surface, that we have reached a different destination from that intended when environmental education was first conceived of four decades ago. But have we really?

Following a Parallel Pathway?

In preparing this article I found it interesting to revisit the Belgrade Charter Framework for Environmental Education (UNESCO, 1975) and read that,

It is absolutely vital that the world's citizens insist upon measures that will support the kind of economic growth which will not have harmful repercussions on people – that will not in any way diminish their environment and their living conditions...

Millions of individuals will themselves need to adjust their own priorities and assume a "personal and individualised global ethic" – and reflect in all of their behaviour a commitment to the improvement of the quality of the environment and of life for all the world's people...

The reform of educational processes and systems is central to the building of this new development ethic and world economic order...

This new environmental education must be broad based and strongly related to the basic principles outlined in the United Nations Declaration on the *New Economic Order*.

The Belgrade Charter was written 30 years ago – but the statements could have been written as part of the framing of the Decade. There are many elements in common between these last two quotations: in both there is a concern with reforming educational processes and with balancing quality of human life, environmental protection and economic growth. Perhaps, despite a few curves, detours and potholes, we are still travelling a similar path to that which environmental educators embarked upon forty years ago.

Keywords: education for sustainable development; UN Decade of Education for Sustainable Development.

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