

# EDUCATIONAL POLICY AND PRACTICE FOR SUSTAINABLE DEVELOPMENT

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## Summary

Education for sustainability involves approaches to teaching and learning in formal classrooms that integrate goals for conservation, social justice, appropriate development and democracy into a vision and a mission of personal and social change. It seeks to develop the kinds of civic virtues and skills that can empower all citizens and, through them, their social institutions, to play positive roles in the transition to sustainability. As such, education for sustainability encompasses a vision for society that is not only ecologically sustainable, but also economically and politically sustainable as well.

This article discusses ways in which learning experiences in schools may be re-oriented to support the social, ecological, economic and political goals of sustainability. A brief history of environmental education over the past 30 years reveals what has been achieved and what has been neglected in mainstream educational policy and practice. The impact of such neglect is manifested in the results of the world's largest survey of youth environmentalism. These results are used to argue that student levels of awareness of key concepts for sustainability are low, with few able to correctly define such essential concepts as the precautionary principle and sustainable development which underpin sustainability. Despite this lack of awareness, protecting the

environment was the most important issue for students. As a result, most expressed a strong desire to have much more frequent discussions of environmental topics in class than they were currently having. The desire for more opportunities to discuss environmental issues supports the need for a whole-of-school, cross-curriculum approach to education for sustainability. Key features of a curriculum for sustainability are explored, as well as the processes of educational reform essential for the achievement of this curriculum. The principles underlying the reforms outlined are, to varying extents, relevant to all levels of education, but need to be interpreted and focused for action in education systems and local community contexts.

## **1. Introduction**

For thousands of years human societies have proved that living sustainably as individuals and communities in harmony with the natural world is possible. The long-term sustainability of indigenous economic and cultural systems is the result of indigenous systems of education that established a human and natural ecology totally at one with each other. Unfortunately, indigenous knowledge and wisdom have been undermined by the experiences of colonisation, industrialisation and globalisation. By and large, indigenous priorities and systems of education have been supplanted by the somewhat narrow view that the environment and culture are valuable only in so far as they are economically productive. The consequent disregard for land and culture has meant that knowledge, values and skills for living sustainably have been underplayed in contemporary education. Indeed, in many cases, both the overt and the hidden curricula of schools play a major role in reproducing the socially and ecologically unsustainable values of our contemporary industrial, affluent, consumer-oriented society. These values include the desirability of economic growth through a competitive economy, the importance of self-advancement, and the correctness of allowing the market to determine economic and social priorities.

Berberet (in Fien, 1993, p.107) notes that, while the environment has been only “a minimal factor in mainstream educational thinking”, education has played a key role in perpetuating unsustainable practices:

Historically, the values of schools and colleges have mirrored those of the larger society. Not only has education uncritically accepted the association of progress and the unfettered growth economy, it has trained the engineers and managers, performed the research, and developed the technologies which in aggregate have had such a devastating impact on the environment. A fundamental reorientation now needs to occur with the development of new assumptions undergirding education which treat the interactions of ecological processes, market forces, cultural values, equitable decision-making, government actions, and environmental impacts of human activities in a holistic, interdependent manner.

Thus, it would be a mistake to think that education in schools can make a major contribution to the transition to sustainability unless major educational reforms are enacted. For example, the current emphases in education on grades, credentials, competition, individualised effort, personal success and hierarchical patterns of personal relationships and knowledge relations socialise young people into the values and practices of free-market capitalism.

Over the past two decades, however, numerous people around the world have become concerned about the interlocking issues of the environment and sustainable development, and many have become increasingly aware of the need for changes in lifestyle choices, and in national and global patterns of development, consumption and trade. In 1997, a UNESCO paper concluded that:

Most people in the world today have an immediate and intuitive sense of the urgent need to build a sustainable future. They may not be able to precisely define 'sustainable development' or 'sustainability' - indeed, even experts debate that issue - but they clearly sense the danger and the need for informed action. They smell the problem in the air; they taste it in their water; they see it in more congested living spaces and blemished landscapes; they read about it in the newspapers and hear about it on radio and television (p.7).

The central concern of this article is the implication of this growing awareness for the reform of educational policy and practice in schools. Education plays a major role in all processes of social continuity and change. Depending upon the choices made by education ministries, curriculum developers, teachers and parents, the education provided in schools can either serve to reinforce the unsustainable life lessons promoted by the consumerist ethos of popular culture and mass media, **or** it can serve as a source of critical reflection, ethical judgement and social justice, which may then motivate and empower young people to work towards a sustainable future.

If schools are to fulfil their potential and help in the transformation towards a sustainable future, teachers, curriculum developers and school administrators must come to a deeper understanding of the global realities that beset humanity. They need to appreciate the imperatives of reorienting education systems and curricula towards a future that can be sustainable, and they need to develop and promote a range of curriculum and teaching approaches that are committed, ethical and effective in empowering young people to dedicate their lives to sustaining a common future.

Education for sustainability is a broader and perhaps more challenging concept of environmental education introduced in the 1970s. Education for sustainability integrates the conservation of natural resources that is important in ecological sustainability with equally important concerns of equality, fulfilling work, human rights, justice, peace and democracy that underpin economic, social and political sustainability. The aim of education for sustainability is to develop skills that can enable all citizens and, through them, their social institutions, to play a role in the transition to sustainability. As such, it encompasses a vision for society that is not only ecologically sustainable, but also socially, economically, and politically sustainable as well.

## **2. From Environmental Education to Education for Sustainability: A Troubled History**

Support for environmental education developed in many parts of the world during the 1970s. The first journal of environmental education was published in the United States in 1969 and a national Environmental Education Act was passed in that same country in 1970. The World Conservation Union (IUCN) issued the first internationally accepted definition of environmental education at a conference in Nevada in 1970, and in 1972,

the United Nations Conference on the Human Environment (Habitat I) in Stockholm agreed to establish an International Environmental Education Programme coordinated by UNESCO and the United Nations Environment Programme (UNEP).

A UNESCO-UNEP sponsored conference in Belgrade in 1974 initiated a global series of national and regional meetings on environmental education, which resulted in an Intergovernmental Conference on Environmental Education in Tbilisi in 1977. The set of goals, aims, objectives and guiding principles agreed upon at that meeting (the 'Tbilisi Declaration') has proven to be not only enduring, but also a major catalyst to national education policies throughout the world. The Tbilisi Declaration called for education to:

- (a) foster clear awareness of, and concern about, economic, social, and political interdependence in urban and rural areas;
- (b) provide every person with opportunities to acquire the knowledge, values, attitudes, commitment and skills needed to protect and improve the environment; [and]
- (c) create new patterns of behaviour of individuals, groups and society as a whole towards the environment (UNESCO-UNEP, 1978, p. 3).

Five interrelated objectives were recommended to help achieve these goals:

**Awareness:** To help social groups and individuals acquire an awareness 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 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 toward the resolution of environmental problems (UNESCO-UNEP, 1978, p. 3).

The Tbilisi conference contributed to a wide spread adoption of various forms of environmental education in school systems throughout the world. Supporting this growth of environmental education were general initiatives such as the development of curriculum guidelines and new teaching materials, the revision of syllabuses to infuse an environmental perspective, the adoption of whole-school approaches to curriculum planning for environmental education, and the establishment of specialised environmental education centres. Unfortunately, the objectives of informed understanding, ethical commitment, critical thinking, and active citizenship in environmental contexts were not given a high priority. Indeed, they counted for little in mainstream education policy and practice in most countries during this first wave of environmental education. Most telling, these developments were generally ignored by educational theorists. Lacking support, such objectives gradually became 'diluted' and, in many cases, 'deleted' from the curriculum, and environmental education came to be seen largely as the prerogative of subjects such as science and geography, where social

and political values were seldom critically examined. The Tbilisi approach to environmental education was left to small bands of enthusiasts in each country. Studies in many countries point to this situation continuing throughout the 1980s and 1990s.

However, a major rethinking of the contribution of education to sustainability took place in the 1990s. Initiatives in global education – including a concern for issues of peace, human rights, development and citizenship – grew in many countries, but they seldom embraced a concern for the natural world or for the interdependence of social, economic, political and ecological sustainability. However, growing attention to poverty alleviation led to the emergence of a ‘second wave’ of environmental education. Focusing on the relationship between education and sustainability, this ‘second wave’ draws on the *Agenda 21* report of the 1992 United Nations Conference on Environment and Development (UNCED), the Earth Summit. *Agenda 21* devoted a whole chapter to the role of environmental education in relation to sustainability, arguing that:

Education is critical for promoting sustainable development and improving the capacity of the people to address environment and development issues...It is 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. (UNCED 1992, Chapter 36, p. 2.)

Directed towards such ends, education has a pivotal role to play in both building a supportive social context for sustainability and in empowering citizens to influence policy makers to hasten the transition towards sustainability. Indeed, without such education, even the most enlightened legislation, cleanest technology, and most sophisticated research will not achieve the long-term goal of sustainability.

To achieve this vision, Chapter 36 called on governments, international agencies, businesses and civil society groups to:

- ensure that basic education and functional literacy for all is achieved
- make environmental and development education available to people of all ages
- integrate environmental and development concepts, including those of population, into all educational programmes, with analyses of the causes of the major problems
- involve school children in local and regional studies on environmental health, including safe drinking water, sanitation, food and the environmental and economic impacts of resource use.

Following the Earth Summit in 1992, much has been done to promote this new vision of education at the international level. Under the leadership of UNESCO, which was designated as the United Nations Task Manager for Chapter 36, much has been accomplished. The key concepts and messages of education for sustainable development have been clarified and communicated through the initiatives of UNESCO, and investment in basic education and literacy has been extensively promoted through its Education for All (EFA) programme. Innovative educational practices were identified and shared through international conferences and regional workshops. Demonstration projects and sample curriculum and training materials were developed, and an international network of schools (the Associated Schools Project

Network), committed to the principles of peace, human rights, equity and conservation, was created. UNESCO has also developed partnerships with many UN agencies, including the United Nations Fund for Population Activities (UNFPA), the World Health Organisation (WHO) and the International Labour Organisation (ILO) to promote population education, WHO to develop new approaches to health education, the Food and Agricultural organization (FAO) to promote education and food security in rural areas, WHO and UNAIDS to combat the AIDS epidemic, and many more.

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### **Biographical Sketch**

**John Fien** is Professor of Environmental Education at *RMIT University, Melbourne, Australia*. He is a consultant for UNESCO, and UNEP in the areas of education for sustainable development (ESD) and environmental education has been a Resource Person for UNESCO in ESD at meetings of the UN Commission for Sustainable Development, PrepCom meetings for the 2002 World Summit on Sustainable Development and at the World Summit. He is the author of the UNESCO-UNEP teacher education programme *Teaching for a Sustainable World* (1995) and the UNESCO programs, *Learning for a Sustainable Environment* (1997) and *Teaching and Learning for a Sustainable Future* (2003).

Professor Fien has facilitated training in ESD in Japan, China, Thailand, Indonesia, Korea, Taiwan, the Philippines, Kenya, and South Africa (for 13 SADC countries) and has undertaken research and training activities for WWF International (conservation education), WWF-USA (biodiversity education), and the OECD (education for sustainable consumption)