

# Stand Up, Stand Up and Be Counted: Undermining Myths of Environmental Education

John Fien

Centre for Innovation  
and Research  
in Environmental  
Education  
Griffith University  
Brisbane



## A B S T R A C T

This paper explores some of the ideas that underlie different conceptions of sustainable development. It suggests the notion of 'sustainable living' may provide direction for the role of environmental education in the transition towards a sustainable society. Aspects of the emerging concept of 'education for sustainable living' are used to analyse some widely-held assumptions about environmental education practice. In doing so the paper seeks to contribute to the process of identifying a vision and practice appropriate to environmental education for a new millennium.

The purpose of this paper is to reflect on three assumptions that I believe have been accepted uncritically for so long in environmental education that they should be relegated to the status of 'myths'. These assumptions relate to the roles in environmental education of the *practice of nature study*, of *direct experience of nature* and of the *generation of responsible environmental behaviour* in individuals. These assumptions have been analysed by many others, for example Huckle (1990) and Hicks (1992) who encouraged us to adopt socially critical and futures-orientated perspectives. Similarly, in this issue of *AJEE*, Angelina Galang and Stephan Harding emphasise personal commitment and eco-spirituality as essential dimensions of environmental education while Peter Posch and Bill Lucas explain that schools need to interact closely with their communities in order to build a sustainable world from the local level up. What makes the analysis in this paper distinct is that I try to relate the three 'myths' to the emerging notion of education for sustainable living.

The expanded visions for environmental education referred to above are in line with notions of environmental education that arose from the Earth Summit in Rio de Janeiro in 1992. For example, the formal resolutions from the conference, titled Agenda 21, called for environmental education to abandon its perhaps all-too-naïve preoccupation with natural systems in order to incorporate the concept of sustainable development—especially in the way it should be concerned as much with issues of peace, human rights, gender, race and social equity as it is with nature conservation. The Earth Summit's Non-Government Organisation Forum Treaty on Environmental Education for Sustainable Societies and Global Responsibility proposed that environmental education:

- should be grounded in critical and innovative thinking, promoting the transformation and construction of society.
- is both individual and collective aiming to develop local and global citizenship.

- is not neutral but is *value-based*. It is an *act for social transformation*.
- must *acknowledge, use and value the historical perspective of native peoples* as a way to change ethnocentric approaches and to recover and *promote cultural, linguistic and ecological diversity*.
- should *empower all peoples* and *promote opportunities for grassroots democratic change and participation*.
- must help develop an *ethical awareness of all forms of life* with which humans share this planet.  
(adapted from NGO Forum 1992, emphases added)

In providing suggestions towards a post-Rio definition of environmental education, I shall consider the role of nature study topics such as biodiversity, the ultimate objectives of environmental education and what is meant by education for sustainable living.

### Education for sustainable living

Education for sustainable living is a response to the 1987 United Nations Commission on Environment and Development report called *Our Common Future* which popularised the concept of sustainable development. The term was first used in the 1980 World Conservation Strategy published by the International Union for the Conservation of Nature (IUCN), the World Wide Fund for Nature (WWFN) and the United Nations Environmental Program (UNEP). The then Director of IUCN, in describing how the term evolved,

*wrote of the first draft of the strategy as a wildlife conservation textbook, for at the time many conservationists regarded development as the enemy to be opposed and many developers regarded conservationists as at best something to be ignored, or at worst as an obstacle to progress. With each*

*draft the two sides were brought closer and involved in a process of education.* (cited in Yencken 1994)

Sustainable development is not one of those terms that has a simple agreed meaning because it is the result of discussion between parties who come from essentially quite distinct paradigms or world views. Many conservationists argue that ecological sustainability “should be a goal in its own right, unshackled to development” (Yencken 1994). On the other hand, some representatives of business, industry and commerce argue that it is necessary to put economic sustainability ahead of ecological sustainability because environmental regulations and conservation principles are expensive and businesses need to be profitable to be able to afford them.

---

***‘Interpretations of sustainability...serve particular social and economic interests’***

---

Interpretations of sustainability are, therefore, value-laden, and serve particular social and economic interests; all need to be critically assessed. Although definitions of sustainability do vary, the heart of sustainable development is the goal of reducing the impacts humans make on the Earth, of “meet[ing] the needs of present generations without compromising the ability of future generations to satisfy their needs” (World Commission on Environment and Development 1987). An important role for environmentalists and environmental educators searching for educational pathways supporting social transformation is one in which we contest with these interests in order to help make spaces for our students and communities to find their own pathways.

In planning the second World Conservation Strategy, published as *Caring for the Earth*, the IUCN, UNEP and the WWF tried to avoid the debate over the meaning of sustainable development. In its place, they coined the term ‘sustainable living’ and proposed that governments, industry and families needed to live by a new *world ethic of sustainability*. This ethic contained eight values which fall into two groups, those related to our responsibility to care for nature, or ecological sustainability, and those related to our responsibility to care for each other, or social justice. I consider that they provide a curriculum focus for environmental education. In summary form, these eight values are as follows, adapted from IUCN, UNEP & WWF (1991) and Fien (1993).

***People and nature: Ecological sustainability***

**Interdependence:** People are a part of nature and depend utterly on it.

**Biodiversity:** Every life form warrants respect and preservation independently of its worth to people.

**Living lightly on the Earth:** All persons should take responsibility for their impact on nature.

**Interspecies equity:** People should treat all creatures decently, and protect them from cruelty and avoidable suffering.

***People and people: Social justice***

**Basic human needs:** The needs of all individuals and societies should be met, within the constraints imposed by the biosphere.

**Intergenerational equity:** Each generation should leave to the future a world that is at least as diverse and productive as the one it inherited.

**Human rights:** All persons should have the fundamental freedoms of conscience and religion, expression, peaceful assembly and association.

**Participation:** All persons and communities should be empowered to exercise responsibility for their own lives and for life on Earth.

When the implications for environmental education of the world ethic of sustainability and the concept of sustainable living are considered they require a fundamental rethinking of the roles of environmental educators.

*Respect for the environment alone will not be enough to save our common future. A sense of solidarity with the world's underprivileged will be equally important. There is no way we can win the battle to save the global environment unless we deal squarely with the issue of world poverty. We must teach the next generation the necessity of caring for the poor and the dispossessed.*  
(Brundtland 1991)

---

***‘education for sustainable living has direct links with issues of development, human rights and peace’***

---

The emerging conception of education for sustainable living has direct links with issues of development, human rights and peace and therefore aligns environmental education as an integral partner with development education, citizenship education, human rights education and peace education. The World Conservation Union (the more recent name for IUCN) first described this new direction for environmental education as “education for sustainable living” defining it as a process which:

*...develops human capacity and creativity to participate in determining the future, and encourages technical progress as well as fostering the cultural conditions favouring social and economic change to improve the quality of life and [produce] more equitable economic growth while living within the carrying capacity of supporting ecosystems to maintain life indefinitely.*  
(IUCN Commission on Education and Communication 1993)

This definition is problematic. For example, questions may be asked about the meaning of "technical progress" and ways in which "carrying capacity" may be defined and measured. However, it avoids both the ambiguity of many definitions of sustainable development that have concerned some environmental educators (see, for example, Jickling 1992) and the focus on individualism and behaviour modification that underlie some conceptions of environmental education (Robottom & Hart 1993).

Problems of ambiguity and individualism are also avoided in the following:

*Education for sustainability is a process which is relevant to all people, and that, like sustainable development itself, it is a process rather than a fixed goal.*

*Education for sustainability is a process which:*

- *enables people to understand the interdependence of all life on this planet, and the repercussions that their actions and decisions may have both now and in the future;*
- *increases people's awareness of the economic, political, social, cultural, technological and environmental forces which foster or impede sustainable development;*
- *develops people's awareness, competence, attitudes and values, enabling them to be effectively involved in sustainable development at local, national and international level;*
- *affirms the validity of the different approaches contributed by environmental education and development education, and the need for integration of the concepts of sustainability into these other related cross-disciplinary approaches, and in established disciplines.* (adapted from Sterling/EDET Group 1992)

### Implications of 'Education for sustainable living'

If the emergence of education for sustainable living is seen as a reconceptualisation of the mission of environmental education what implications does it have for some of the traditional assumptions we have followed in the past? The three assumptions to be explored in what follows relate to the roles in environmental education of the practice of nature study, of direct experience of nature and of the generation of responsible environmental behaviour in individuals.

#### *The place of nature study in education for sustainable living*

Nature study has a very important place in education for sustainable living. Its more sophisticated sibling, ecology, has

been described by some as the foundation discipline of environmental education (Hungerford, Peyton and Wilke 1980). The primacy for nature study and ecology, and the often apolitical contexts in which they are often taught, now need to be questioned. Two different approaches to teaching about biodiversity illustrate this.

---

#### *6 environmental educators need to expand the range of concepts they teach<sup>9</sup>*

---

Biodiversity is one of the central concepts of environmental education and is also one of the values in the world ethic of sustainability described above. Traditionally, the approach adopted to teaching the topic of biodiversity involves helping students increase their appreciation of ideas such as:

- During the next 20 to 30 years, the world may lose perhaps hundreds of thousands of species—primarily because of environmental changes due to human activities.
- Australia has lost 75% of its rainforests and 40% of total forest cover since European settlement 208 years ago. Native vegetation is still being cleared at the rate of over 600,000 hectares per year.
- A rate of extinction of this magnitude poses a global problem which has kindled world-wide interest in 'biological diversity' or 'biodiversity'. Biodiversity includes the number of species inhabiting the planet and the ecosystems upon which the single human species depends for its survival.
- Biodiversity provides ethical and spiritual inspiration for many societies, and vital services such as renewing the earth's atmosphere, absorbing pollution and so on. (adapted from Hillig 1993, Department of the Environment, Sport & Territories 1996)

Guided by the concept of sustainable living and the full set of values in the world ethic of sustainability, environmental educators need to expand the range of concepts they teach about biodiversity. The former Director-General of UNEP gave us a clue to what we should also consider when he wrote:

*Poverty is locking the people of the Third World into a dismal cycle of events; in their efforts merely to meet needs of food shelter and heat, they are being forced to destroy the very resources on which their future survival (and the future prosperity of all) depend.* (Tolba 1987)

In assisting our students to develop their understanding of a comprehensive concept of biodiversity, we need also to consider the following social, political, historical and economic ideas:

- Developed countries are relatively poor in biodiversity because they have gained their current quality of life at the expense of their biodiversity and, in most cases, at the expense of the biodiversity of developing countries.
- Without food for their survival little thought can be

given by many poverty-stricken citizens of developing nations to conservation of the environment for future generations.

- Countries which have not yet reduced their biological resources to critical levels should not stop the exploitation of their biodiversity stores because this would impair their long term economic development. The cost of preserving biodiversity for the globe should be shared between the rich and the poor countries. (adapted from Hillig 1993)

The ways in which we teach about biodiversity and other nature-based themes need to be immersed in the concepts of human rights, equity and democracy which are core issues in education for sustainable living. Studies of the geophysical and biophysical world are a necessary—but not sufficient—prerequisite for learning to live sustainably.

#### *The place of nature experience in education for sustainable living*

---

***‘Encouraging students to focus their attention on nature without providing for an equally strong focus on wider social and economic contexts can lead students to limited and uninformed perspectives’***

---

Like nature study, nature-based learning experiences are necessary, but not sufficient, for learning to live sustainably. Nature-based work has provided many wonderful experiential teaching methods and has led to many innovations in environmental education. It has also led to what Knapp and Goodman (1981) call “the humanisation of environmental education” and helped us to provide learning experiences, especially in the outdoors, which contribute to students’ confidence and self-esteem, and their sense of oneness with nature.

However, our growing understanding of the scope of education for sustainable living alerts us to several dangers if this is the only approach to environmental education we provide. First, it may ignore many of the questions, issues and problems facing students and their communities. Encouraging students to focus their attention on nature without providing for an equally strong focus on wider social and economic contexts can lead students to limited and uninformed perspectives rather than towards divergent views in which links between nature, the individual and society are appreciated. Environmental educators should also be careful that nature experiences do not become a form of escapism. It is often argued that close contact with nature can help students to develop a strong personal bonding with the Earth and therefore to increase their desire to act for it. However, it is difficult to see how this such a personal view of nature would automatically lead to

this result unless a degree of political conscience-raising occurred as well.

A focus on personal development and nature-based experiences are some of the characteristics of New Age thinking. This philosophy tends to over-emphasise the importance of personal transformation at the expense of seeing personal and broader social transformation as interdependent, and to ignore the notion that the journey to sustainability requires both for sustained social change. Mary Mellor (1992) warned that the focus on the individual in this approach to environmentalism may prove to be less helpful than its advocates intend:

*The problem in New Age thinking is the relationship between personal transformation and wider communal change... While I would not want to argue about the development of a spiritual dimension to our lives and a displacement of the emphasis on materialism,... it risks diverting us into an inappropriate self-obsession. While this may help us individually to develop a wider spiritual awareness and ‘bring together’ parts of ourselves that have become divided in modern society, it will not necessarily lead to any wider social transformation. That must be done by transforming the materialism of our culture, not running away from it. In many ways New Ageism can be seen as just another manifestation of the ‘me’ generation: a movement for the powerful, not the powerless.*

According to one prominent Danish health and environmental educator, both the environmental and the New Age aspects of nature-based education run the risk of romantic escapism—the first into romanticism with nature and the second into romance with ourselves—neither of which can effectively solve environmental problems. While “such activities... have value in themselves or for other purposes, ... they do not solve the paradox of increasing anxiety and the currently increasing action paralysis” of the modern world (Jensen 1992). They need to be balanced by a social and political engagement with the root causes of unsustainability that people face in their communities.

#### *The place of developing responsible environmental behaviour in education for sustainable living*

---

***‘the case for responsible environmental behaviour... tends to be defined in narrow, individualistic terms’***

---

I have described nature study and nature-based learning experiences as necessary but insufficient aspects of education for sustainable living. The development of responsible environmental behaviour does not have such importance, however. Many curriculum documents and journal articles, especially from the United States of

America, often begin with the assumption that the goal of environmental education is to create at an individual environmentally responsible behaviour (see, for example, Hines, Hungerford & Tomera 1986). And they are correct—to a point. Of course it would be useful if people behaved responsibly in the environment. However, this is a very limited and restrictive goal for environmental education and a sustained case has been made against this movement in environmental education (Jensen 1992, Hart & Robottom 1993). I offer comment on two of the points that are made in these critiques. First, the case for responsible environmental behaviour as a goal of environmental education tends to be defined in narrow, individualistic terms which ignore the many types of decisions and actions needed to live sustainably—and even to live in an environmentally responsible way. It ignores the individual and collective actions needed to create a sustainable world.

Second, the teaching methods advocated for developing responsible environmental behaviour are behaviouristic. They may lead to compliance in the short term, but do not create the social analysis and critical thinking skills needed to develop action potentialities for the long term.

Alternative approaches are needed, ones based upon developing the critical thinking, reflection and action skills needed to make life-long decisions about the nature of a better world. The development of such alternative approaches requires a refocussing of environmental education away from education merely for responsible environmental behaviour to education for political literacy, for active and informed citizenship.

## Conclusion

In this paper, I have sought to make a case for a broadening of the agenda of environmental education by exploring the emerging conceptualisation of education for sustainable living and its integration with development, citizenship, peace and human rights education. Through contrasting traditional and newer approaches to the topic of bio-diversity I have explored some of the implications of this for the content of learning encounters. I have asked that environmental educators think beyond nature study and nature-based experience as primary foci in environmental education.

Those who wish to be involved in education for sustainability will not find it easy. We will need to be involved in social issues in the local and global communities—to “stand up, stand up and be counted”. We will need to convince our supervisors that conservation goals cannot be achieved without attention also to values of appropriate development, human rights and democracy as work.

We will also need to examine the extent to which principles of sustainable living operate in our schools and workplaces. Are they community demonstration models not only of

ecological sustainability and conservation principles, but also places where the buildings and the products we use model the principles of appropriate development? And do management and personnel practices model the principles of social sustainability, human rights, and equal opportunity and outcomes for all employees? It may be that our first task in education for sustainable living is the education of our colleagues and supervisors. It certainly is for people like me who work in universities and colleges.

Giroux (1988) argued that educators live and work effectively for a just society if they seek to be “transformative intellectuals”. Central to the task of being a transformative intellectual is recognising the “necessity of making the pedagogical more political and the political more pedagogical”. Making the pedagogical more political means consciously working with others to foster democratic values and a deep and abiding faith in the struggle to overcome economic, social and ecological barriers to sustainable living, and to further educate and humanise ourselves as part of the struggle. Making the political more pedagogical means applying the principles of education for sustainable living in developing learning experiences which will encourage the students and communities with whom we work to inquire into and to take up ways allowing them to become part of society’s transitions to sustainability. A love of nature and a knowledge about biodiversity are important—but only as starting points. ☺

## References

- Brundtland, G. 1991, ‘Foreword’, in Benedict, F. (ed.), *Environmental Education for Our Common Future: A Handbook for Teachers in Europe*, Norwegian University Press, Oslo.
- Department of the Environment, Sport and Territories 1996, *Executive Summary: Australia—State of the Environment, 1996*, CSIRO Publications, Collingwood, Victoria.
- Fien, J. 1993, *Education for the Environment: Critical Curriculum Theorising and Environmental Education*, Deakin University Press, Geelong, Victoria.
- Giroux, H. A. 1988, *Teachers as Intellectuals: Towards a Pedagogy of Learning*, Bergin & Garvey, South Hadley, Massachusetts.
- Hart, P. & Robottom, I. 1993, *Evaluation and Research in Environmental Education: Engaging the Debate*, Deakin University Press, Geelong, Victoria.
- Hicks, D. 1992 ‘The Global Futures project: exploring alternative futures in the classroom’, paper presented at ‘Linking the Community’, AEEE biennial conference, Perth, Western Australia.
- Hillig, J. 1993, Opening address, unpublished paper to ASEAN Regional Conference on Environmental Education, Jakarta.

- Hines, J., Hungerford, H. & Tomera, A. 1986–87, 'Analysis and synthesis of research on responsible environmental behaviour: a meta-analysis', *Journal of Environmental Education*, vol. 18, no. 2, pp. 1–8.
- Huckle, J. 1990, 'Education for sustainability: assessing pathways to the future', paper presented at 'Our Common Future: Pathways for Environmental Education', AAEE biennial conference, Adelaide, South Australia.
- Hungerford, H., Peyton, R. B. & Wilke, R. J. 1980, 'Goals for curriculum development in environmental education', *Journal of Environmental Education*, vol. 11, no. 3, pp. 42–47.
- International Union for the Conservation of Nature (IUCN) Commission on Education and Communication 1993, *Education for Sustainability: A Practical Guide to Preparing National Strategies*, draft copy, Gland.
- International Union for the Conservation of Nature (IUCN), United Nations Environment Program (UNEP) & World Wide Fund for Nature (WWFN) 1991, *Caring for the Earth*, International Union for the Conservation of Nature, Gland.
- Jensen, B. 1992, 'Current research in environmental and health education', unpublished paper to Australian Association for Research in Education Conference, Geelong, Victoria.
- Jickling, B. 1992, 'Why I don't want my children to be educated for sustainable development', *Journal of Environmental Education*, vol. 23, no. 4, pp. 5–8.
- Knapp, C. & Goodman, J. 1981, *Humanising Environmental Education: A Guide for Leading Nature and Human Nature Activities*, American Camping Association, Martinsville, Indiana.
- Mellor, M. 1992, *Breaking the Boundaries*, Virago, London, UK.
- NGO Forum 1992, *Environmental Education for Sustainable Societies and Global Responsibility*, International Council for Adult Education, Toronto.
- Robottom, I. & Hart, P. 1993, *Research in Environmental education: engaging the debate*, Deakin University Press, Geelong, Victoria.
- Sterling, S./Environment Development Education Training (EDET) Group 1992, *Good Earth-Keeping: Education Training and Awareness for a Sustainable Future*, EDET Group, UNEP-UK, London.
- Tolba, M. K. 1987, *Sustainable Development: Constraints and Opportunities*, Butterworths, UK.
- World Commission on Environment and Development (WCED) 1987, *Our Common Future*, Oxford University Press, Oxford.
- Yencken, D. 1994, 'Values, knowledge and action', in Grove, L., Evans, D. & Yencken, D., (eds), *Restoring the Land: Environmental Values, Knowledge and Action*, Melbourne, University Press, Melbourne.

This paper is a revision of a keynote address presented to the national conference of the Australian Association for Environmental Education/Marine Education Society of Australasia, Hobart, 13–17 January 1997. Some of the ideas were first explored in a keynote address presented to a conference of the Environmental Education Association of South Africa, Pretoria, August 1993 and subsequently published in Fien, John 1993, 'Education for sustainable living: an international perspective on environmental education', *South African Journal of Environmental Education*, vol.4, pp. 7–20.

---

John is Director of the Centre for Innovation and Research in Environmental Education in the Faculty of Environmental Sciences, Griffith University and co-ordinator of the Master of Environmental Education course. He co-ordinated production of *Teaching for a Sustainable World*, one of the core units in AAEE's contribution to Australia's recently completed National Professional Development Program and has overseen its revision and expansion into an international edition for UNEP and UNESCO. He has represented Australia at several UNESCO conferences and organised UNESCO training workshops and seminars on environmental, global and teacher educations, and is Co-director of the UNESCO Asia-pacific Project Learning for a Sustainable Environment. He has recently written the draft back-ground paper 'Reorienting formal education towards sustainability' for the UNESCO International Conference on Environment and Society "Education and Public Awareness for Sustainability" held in Greece, December 1997.

---