



## EMPOWERING CITIZENS TO PARTICIPATE IN ENVIRONMENTAL DECISION MAKING

**MARK MIFSUD** offers a critical review  
of the global events that  
have shaped the development  
of education for  
sustainable development

### 1. Early environmental education definitions

**T**he term 'Environmental Education' has been continuously evolving through a period of five decades or more. The two words were most probably used together for the first time internationally in 1948 by Thomas Pritchard in a meeting of the International Union for the Conservation of Nature and Natural Resources (Disinger, 1983). An early definition of the term, which later served as a basis for many subsequent efforts was coined by Stapp in 1969:

'Environmental Education is aimed at producing a citizenry that is knowledgeable concerning the biophysical environment and its associated problems, aware of how to help solve these problems, and motivated to work toward their solution.' (Stapp *et al*, 1969).

There are three objectives stated in this definition: knowledge of environmental problems, awareness of potential solutions and motivation to work towards solutions. However, research evidently shows that acquisition of knowledge and information will not necessarily lead to positive changes in pro-environmental behaviour (Kollmuss & Agyeman, 2002).

A number of definitions of environmental education stress the importance of values and ethics that are essential for the nurturing of an environmental ethic. One of the initial attempts to define Environmental Education was an IUCN/UNESCO 'International Working Meeting on Environmental Education in the School Curriculum' held in 1970 at the Foresta Institute, Carson City, Nevada, USA. A classic definition of Environmental Education was formed in this working meeting, which is considered to be an important landmark in the evolution of Environmental Education:

'Environmental Education is the process of recognising values and clarifying concepts in order to develop skills and attitudes necessary to understand and appreciate the inter-relatedness among man, his culture, and his biophysical

surroundings. Environmental Education also entails practice in decision making and self formulation of a code of behaviour about issues concerning environmental quality' (IUCN, 1970).

Nonetheless, it is relevant to note that because of the multidisciplinary and interdisciplinary nature of Environmental Education, it is often challenging to define. The discipline can focus on ecology, outdoor education, environmental science or teaching (Ramsey, Hungerford & Volk, 1992). In addition, it focuses on developing responsible environmental behaviour in individuals and social groups (Ramsey & Hungerford, 1989).

A simple and relatively effective model to define Environmental Education describes its components as 'education in, about and for the environment'. This model was developed by Lucas in 1972, and was disseminated in the school sector by the United Kingdom Schools Council 'Project Environment' in 1974. In this model education 'about the environment' is mainly concerned with providing cognitive understanding and skill development. Education 'for the environment' refers to environmental conservation and preservation for particular purposes. Finally, education 'in the environment' means a special type of instruction that usually refers to the world outside the classroom (Lucas, 1980). Therefore, education here is seen as being a vehicle for the environment, while the environment is seen as a vehicle for education (Sterling, 1992). The model is based on a perspective analysis of the literature of Environmental Education and remains one of the most influential models in the local and global context.

### 2. Recognition at conferences

Environmental Education was given global recognition in 1972 at the United Nations Conference on Human Environment held in Stockholm. This conference was an important landmark in the history of Environmental Education and strongly expressed the need for an international framework for its development, as well as marking the beginning of global discussions on the subject. The most important outcome of the talks was the recognition that Environmental Education was one of the most important elements of a strategy to resolve the world's environmental crisis. This conference also led to the establishment of the World Environment Day and to the United Nations Environment Programme (UNEP) in 1975. The Stockholm Declaration includes 26 principles and explains major environmental goals that humans should strive to achieve: 'To defend and improve the human environment for present and future generations has become an imperative goal for mankind – a goal to be pursued together with, and in harmony with, the established and fundamental goals of peace and of worldwide economic and social development' (UNEP, 1972). In addition the conference encouraged 'Governments and peoples to exert





common efforts for the preservation and improvement of the human environment, for the benefit of all the people and for their posterity' (UNEP, 1972).

The International Workshop on Environmental Education took place in Belgrade in 1975, and through the 'Belgrade Charter' defined the aims and objectives of the discourse, established its principles and launched the International Environmental Education Programme (IIEP).

*The goal of environmental education is to develop a world population that is aware of, and concerned about, the environment and its associated problems, and which has the knowledge, skills, attitudes, motivations and commitment to work individually and collectively towards solutions of current problems and the prevention of new ones' (UNESCO-UNEP, 1976).*

The goals of the Belgrade Charter were internationally recognised at the Tbilisi Conference, the world's first intergovernmental conference on Environmental Education. The Tbilisi Conference (1977) established three broad goals for the discipline that can be seen to offer the foundation for much of the work that has been done in the field:

1. To foster clear awareness of, and concern about, economic, social, political and ecological interdependence in urban and rural areas,
2. To provide every person with opportunities to acquire

the knowledge, values, attitudes, commitment and skills needed to protect and improve the environment;

3. To create new patterns of behaviour of individuals, groups and society as a whole towards the environment.

Organised by the United Nations Educational, Scientific and Cultural Organisation (UNESCO) in partnership with the United Nations Environmental Programme (UNEP), the Tbilisi Conference is considered one of the main landmarks in the history of Environmental Education. It defined Environmental Education as 'a learning process that increases people's knowledge and awareness about the environment and associated challenges, develops the necessary skills and expertise to address the challenges, and fosters attitudes, motivations, and commitments to make informed decisions and take responsible action' (UNESCO, 1977).

The Tbilisi Conference was the first Intergovernmental Conference on Environmental Education ever held and resulted in a Declaration which established a framework for international Environmental Education. Since then, the event has become the main guide for the development of Environmental Education policies around the world. The guiding principles of the Tbilisi Declaration emphasised the importance of considering the environment in its totality and that Environmental Education be considered as a lifelong process and be interdisciplinary in its approach.



### 3. A change in emphasis

In 1983 the United Nations appointed an international commission to propose strategies to improve human well-being in the short term without threatening the local and global environment in the long term. In 1987, the outcome of these deliberations was published by the World Commission on Environment and Development (WCED). The report, known as 'Our Common Future' or the Brundtland Report, deals with the environmental and development issues which were facing the world as one common challenge that needs to be tackled through collective action rather than through the pursuit of national self-interest. It examines population and human resources, food security, ecosystems, energy, industry, and 'the urban challenge' of humans in their built environment through a holistic perspective. The Brundtland Report led the way to the emergence of international agreements such as the Montreal and Kyoto Protocols, and Agenda 21, as well as the UN Earth Summits in 1992 and 2002. The Brundtland Report popularised the term 'sustainable development' and created this classic definition: 'Development which meets the needs of the present without compromising the ability of future generations to meet their own needs' (WCED, 1987).

The new idea of 'sustainable development' probably influenced the methodology and epistemology of Environmental Education. It appears that Environmental Education didn't deal simply with conservation and preservation of natural areas, but challenged the very meaning of 'development'. In terms of content, Environmental Education broadened the concept of environment which was not restricted to the natural world, but also included built and social environments. Consequently, human beings and their social interactions were introduced to their surroundings, and Environmental Education gradually became the study of this new web of relations, in search of the elusive balance.

In 1988 the European Community, through the Council of Ministers, passed a resolution to 'take concrete steps for the promotion of Environmental Education so that this can be intensified in a comprehensive way throughout the community' (CEC, 1988).

The resolution included the following objective and guiding principles:

'The objective of Environmental Education is to increase the public awareness of the problem in this field, as well as possible solutions, and to lay the foundations for a fully informed and active participation of the individual in the protection of the environment and the prudent and rational use of natural resources. For the achievement of the objectives environmental education should take into account particularly the following guiding principles:

- ◆ the environment is a common heritage of mankind
- ◆ the common duty of maintaining, protecting and

improving the quality of the environment, as a contribution to the protection of human health and the safeguarding of the ecological balance

- ◆ the need for a prudent and rational utilisation of natural resources
- ◆ the way in which each individual can, by his own behaviour, particularly as a consumer, contribute to the protection of the environment' (CEC, 1988).

This resolution played an important role in promoting Environmental Education in a number of European countries (Palmer, 1998), but probably did not have such an effect locally.

Timeline	Key Events
1948	IUCN conference – first use of term Environmental Education
1949	Establishment of IUCN
1968	UNESCO Biosphere Conference
1972	UN Conference on the Human Environment, Stockholm, Sweden
1975	Founding of UNEP and IEEP UNESCO/UNEP International Workshop on Environmental Education, Belgrade. The Belgrade charter
1977	UNESCO – First Intergovernmental conference on Environmental Education, Tbilisi, USSR
1980	World Conservation Strategy (IUCN, UNEP, WWF)
1987	UNESCO/UNEP Educational Congress on Environmental Education and Training. Moscow (TBILISI Plus TEN) European Year of the Environment World Commission on Environment and Development – Our Common Future – The Brundtland Report
1988	European Resolution on Environmental Education
1992	The Earth Summit – UN conference of Environment and Development
1997	Thessaloniki Declaration. Environment and Society Conference: Education and Public Awareness for Sustainability, held in Thessaloniki, Greece
2002	World Summit on Sustainable Development (WSSD) in Johannesburg, South Africa
2005-2014	UN Decade of Education for Sustainable Development

**Figure 1: Key global events in the history and development of Environmental Education**



#### 4. Consolidation through the summits

In 1992, the UN organised a Conference on Environment and Development (UNCED), also called the Earth Summit (UNCED, 1992) in order to assess two decades of work in the field of environment following the 1972 Stockholm conference. The key issues discussed in the 1972 Stockholm conference such as desertification, marine and freshwater pollution, the destruction of habitats and wildlife and poverty had in many cases worsened (UNCED, 1992). In response to this, the outcomes of this conference were published as Agenda 21. One chapter which is directly related to Environmental Education is Chapter 36, entitled 'Promoting Education, Public Awareness and Training'. This chapter established three main areas of action in Environmental Education for Sustainable Development for the years to come including:

- ◆ Reorienting education towards sustainable development
- ◆ Increasing public awareness
- ◆ Promoting training.

Education infiltrates all of the above three areas and the document also recognises education as a 'process by which human beings and societies can reach their fullest potential. Education is critical for promoting sustainable development and improving the capacity of the people to address environment and development issues' (UNCED, 1992).

In 1995, the Mediterranean Information Office for Environment Culture and Sustainable Development (MIO-ECSDE), in cooperation with UNESCO and the University of Athens, organized the Inter-regional Workshop on 'Reorienting Environmental Education for Sustainable Development'. The results of this workshop were used as the basis for the organisation of the International Conference on 'Environment and Society: Education and Public Awareness for Sustainability' that was held two years later in Thessaloniki. The most significant outcomes of the Conference were the drafting and the unanimous acceptance of the 'Thessaloniki Declaration' and a series of positions included in the volume of the conference proceedings. These fundamental documents include principles and proposals on which the follow-up process was based. Some authors such as Knapp argue that the Thessaloniki Declaration is evidence that international support for Environmental Education is decreasing as it is only mentioned in two of the 29 statements of the Declaration (Knapp, 2000). On the other hand, as a follow-up to the conference, MIO-ECSDE organised a 'Mediterranean Workshop on the Promotion of Education and Public Awareness for Environment and Sustainability in the Mediterranean' in 1998. An apparent positive step brought about by the Thessaloniki Conference in the Mediterranean region was the creation of a network of Environmental Educators throughout the Mediterranean cooperating with NGOs.

The World Summit on Sustainable Development (WSSD) in Johannesburg, South Africa was organised ten years after Rio in September 2002, with the aim of assessing progress in the field of the environment in the direction of sustainable development. Poverty was expanding and environmental degradation was worsening and therefore limited progress had been registered in implementing sustainable development since the 1992 Earth Summit. There emerged the realisation that 'practical and sustained steps were needed to address many of the world's most pressing problems' (United Nations, 2002).

The Johannesburg summit established new targets which should be achieved by humanity including:

- ◆ to halve the proportion of people without access to basic sanitation by 2015;
- ◆ to use and produce chemicals by 2020 in ways that do not lead to significant adverse effects on human health and the environment;
- ◆ to maintain or restore depleted fish stocks to levels that can produce the maximum sustainable yield on an urgent basis and where possible by 2015;
- ◆ to achieve by 2010 a significant reduction in the current rate of loss of biological diversity.

The Johannesburg summit not only produced outcome documents but also resulted in the launch of more than 300 voluntary partnerships to ensure implementation and to support efforts on instigate sustainable development. These included commitments on expanding access to water and sanitation, on energy, on protecting biodiversity and improving ecosystem management, on improving agricultural yields and managing toxic chemicals.

In December 2002, the United Nations General Assembly proclaimed the years from 2005 to 2014 the Decade of Education for Sustainable Development (DESD). Governments from around the world were invited to strengthen their contribution to sustainability through focusing on education. Furthermore, the General Assembly 'invites Governments to promote public awareness of and wider participation in the Decade, *inter alia*, through cooperation with and initiatives engaging civil society and other relevant stakeholders, especially at the beginning of the Decade' (United Nations General Assembly Resolution, 2002).

There are a number of priority areas which the DESD tries to address: poverty alleviation, gender inequality, natural resources, health, rural transformation, human rights, peace, international understanding, cultural linguistic diversity and the potential of information and communications technology. The DESD emphasises the importance of education as a central strategy for sustainable development and the need to re-orientate educational policies towards sustainable living. The Decade also underlines the need to support local initiative and ensure that national, regional, and international structures provide



direction and guidance for local initiatives. The main objectives for the DESD include the facilitation of networking and interaction among stakeholders in education for sustainable development; the increased quality of teaching and learning in education for sustainable development; and the provision of new opportunities to incorporate ESD into education reform efforts.

## 5. Conclusion

A great deal of the work on Environmental Education at the global level has been guided by the Belgrade Charter (UNESCO-UNEP, 1976) and the Tbilisi Declaration (UNESCO, 1978). Although there has been evolution in the field of Environmental Education these documents remain a good foundation of the core concepts and processes that are inherent in Environmental Education. The Brundtland Report popularised the important connection between environment and development, and increased the area of influence of Environmental Education to the built and social environments. The much publicised Rio Summit resulted in the publication of a plan of action to promote sustainable development popularly known as Agenda 21. The Thessaloniki Conference was quite influential in the Mediterranean region and led to the creation of a network of Environmental Educators throughout the Mediterranean cooperating with NGOs. The need to re-orientate educational policies towards sustainable living is the main strategy of the DESD.

All this work in Environmental Education eventually needs to find its way in the local communities, schools and individual citizens, as the ultimate goal of Environmental Education, identified by a number of international documents, is the promotion of pro-environmental behaviour. Current research indicates that there is no significant relation between environmental knowledge and behaviour (Kuhlemeier *et al* 1999; Makki *et al* 2003; Negev *et al* 2008). Nonetheless, a number of efforts in Environmental Education are still aimed mainly at providing environmental information (Mifsud, 2008). Research and evaluation into the effectiveness of Environmental Education programmes in achieving pro-environmental behaviour should be enhanced in order to develop programmes, methodologies and curricular material that can attain this aim. These programmes should empower citizens to effectively participate in environmental decision making and management in sustainable development (Leff, 1997). 🌱🌿

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need to make 'sustainability literacy' a core competency for professional graduates.' (From Chapter 2, *Securing the Future – delivering UK sustainable development strategy*. HM Government 2005.) We hope the sustainable development SIG will help professionals to contribute to this effort.

A coordinating group has been established; this comprises members of the PP4SD network, one representative from PARN and three representatives from professional bodies. The role of the coordinating committee will be to propose topics for workshops, feed discussion topics into the forum, provide ideas for research activities. However, we hope that much of this will come from members through the online forum; as the SIG will be entirely member led and its development will depend on member participation. The sustainable development online forum can be found at [www.parnglobal.com](http://www.parnglobal.com)

In addition to the online discussion forum, PARN and PP4SD plan to organise workshops on various topics of interest to the members of the SIG. The first event will be in April 2009; it will be an opportunity for all those interested to inform how the SIG can be used to bring professionals together to exchange experiences, ideas and

advice about sustainable development.

PARN particularly supports learning through networks and cooperation so the relationship with PP4SD, a body that we have many interests and purposes in common with, will provide us and our members with valuable opportunities to share experiences and learn from others. One particular area of commonality is Continuing Professional Development. PARN has researched widely in the area of CPD and we have detailed knowledge of professional bodies' CPD policies, schemes and provision, how they support their members' CPD and how they relate to suppliers of CPD. More specifically, PARN's most recent research has looked at how professional bodies use online technologies to support their CPD policies, how universities and professional bodies are working together to create or accredit CPD provision, and how professional body members feel about their CPD and about learning online.

PARN believes the possibilities for the sustainable development SIG are vast and we look forward to developing this initiative with PP4SD and providing professional bodies with a resource on sustainable development. 🌱

◆ For further information or to join the online forum contact Sarah Ellis, Research Project Leader, PARN ([sarah@parnglobal.com](mailto:sarah@parnglobal.com)).