

**THE EVOLUTION FROM
ENVIRONMENTAL EDUCATION TO EDUCATION FOR SUSTAINABLE DEVELOPMENT:
A GRAPHIC REPRESENTATION**

The development of the present visual organiser intends to help people understand the scope of Education for Sustainable Development (ESD) not as an entirely new concept but as a result of the dialectic evolution of both the Environmental Education (EE) and the Education for All.¹

Starting from the Stockholm UN Conference on the Human Environment (1972) and continuing with its follow up for EE in Belgrade (1975) and Tbilisi (1977), throughout the process of setting the foundations of EE most of the critical issues of today were already recognised as “route causes” of the environmental problems necessary to be addressed. However, the political context was different then than today. Similarly our knowledge and understanding of the environmental issues and their interconnections with social, cultural, ethical and economic issues were considerably less developed than now.

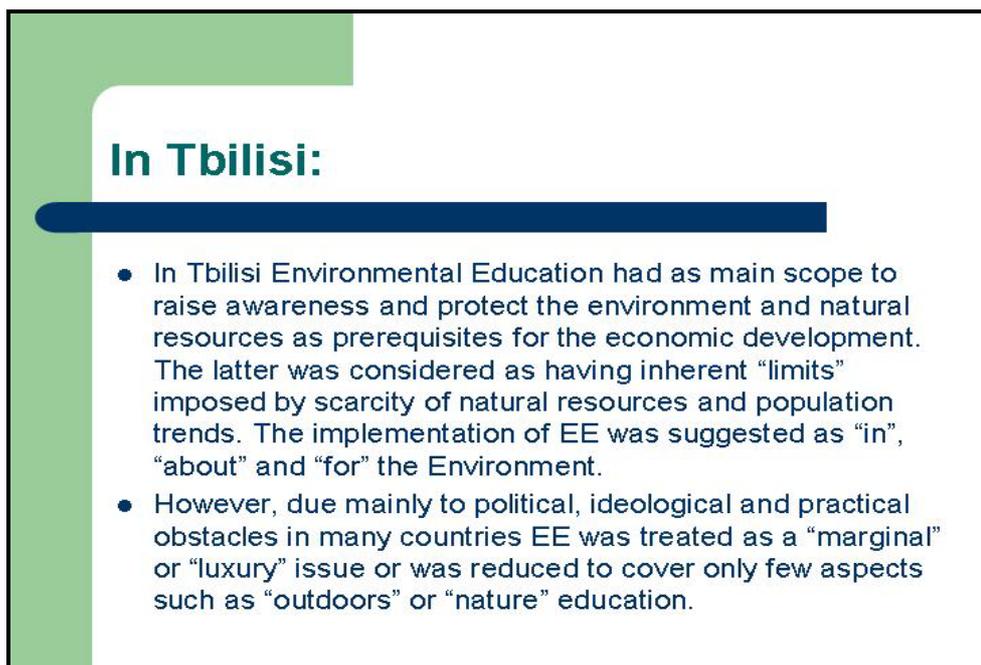


Fig. 1

Developing the concept of Sustainable Development (SD) (see the Brutland report “Our Common Future” -1987) and moving to the Rio UN Conference on Environment and Development (1992) and the adoption of Agenda 21 and Chapter 36 an appropriate kind of Education is needed which will be able to contribute substantially to sustainable

¹ Based on a series of papers of Prof. M.Scoullos: University of Athens, 25-26 October 2003; University of Indiana USA, 30 November 2003; 12th Session of CSD, Side Event on Education for Sustainable Development, New York, 28 April 2004.

development. The “famous” module of SD is based on three pillars: Environment - Ecology, Economy and Society. (Fig.2)

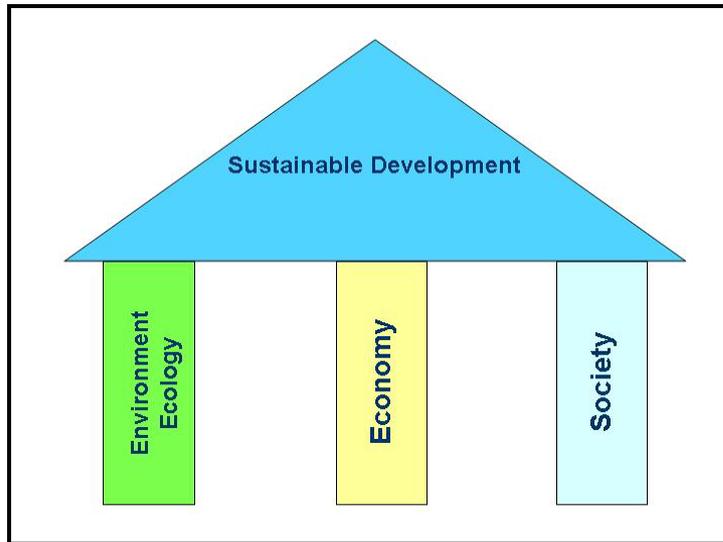


Fig. 2

... Which is the role and place of education in the above figure? Is EE the kind of Education which could satisfy our new needs and contribute to the achievement of SD?

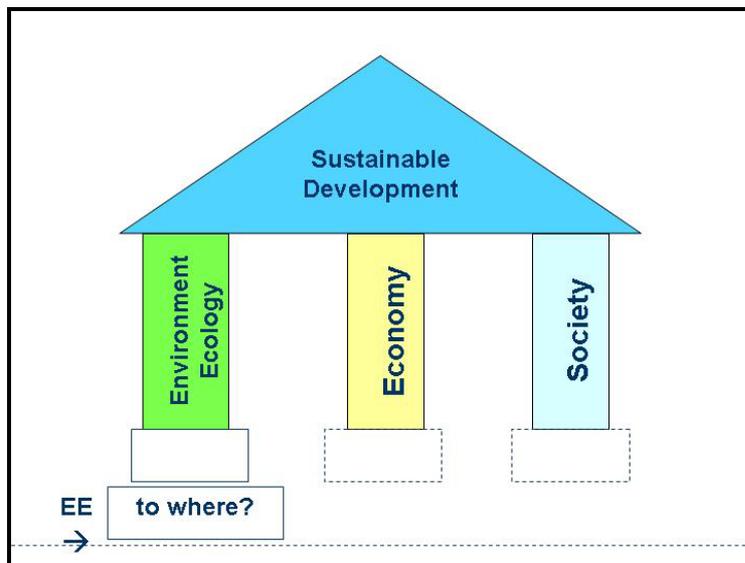


Fig. 3

Here we have two opposite views in the extremes and a wide spectrum in between: The one extreme suggests that EE serves only the one pillar (Environment) and therefore we need similar “balancing” educational components for Economy and Society. The other extreme claims that EE already from the beginning covered fully the economic and social concerns through the recognition of the complex relations between “socioeconomic development and the improvement of the environment” and the analysis of the route causes of global problems and their

interdependence in which decisions and actions can have international repercussions.

Moving to the Thessaloniki Conference approach (1997) where the three pillars of SD remained independent and separate the EE was acknowledged as including in many cases many more elements of socioeconomic character and it was accepted as the extended basis of SD, expressed as “Education for Environment and Sustainability” (EfES). (Fig.4)

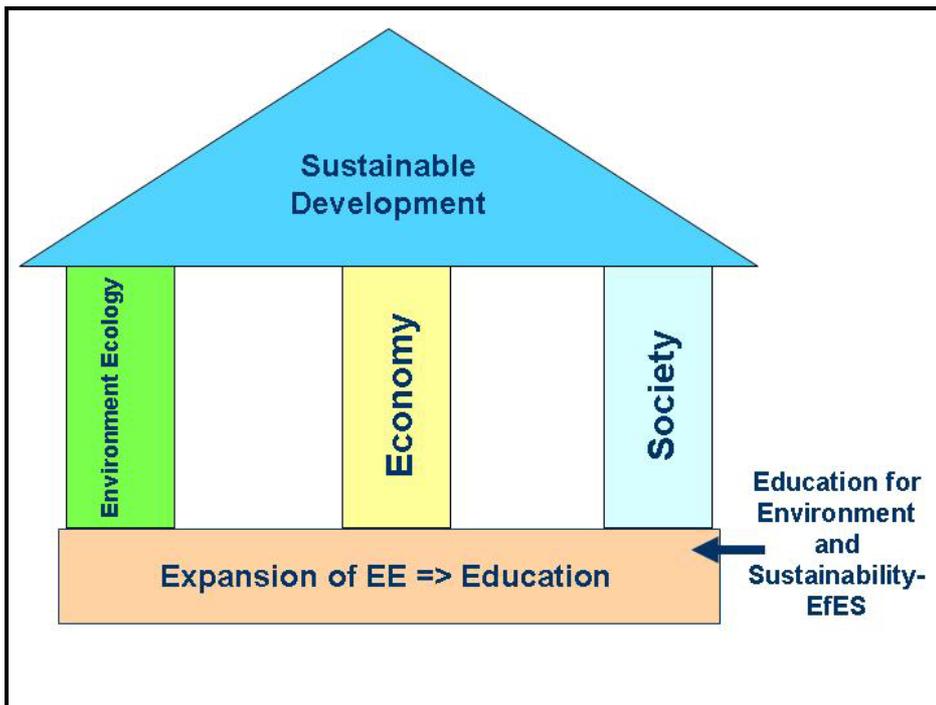


Fig. 4

The above scheme (Fig.4) still does not present the interdependence and interrelationships between the three pillars of SD while it recognises appropriate Education as the cross-cutting basis of it

To this end the following representation for sustainable development is proposed (Fig.5) in which the SD module takes the three-dimensional shape of a pyramid as much closer to the reality. This pyramid has as facets Environment, Society and Economy and is based on Education that is the Education for Sustainable Development (ESD), an education which should combine specific components to enhance the learning about Environment, Society and Economy while it will permeate and change the entire Education for All towards sustainability. (Fig.5)

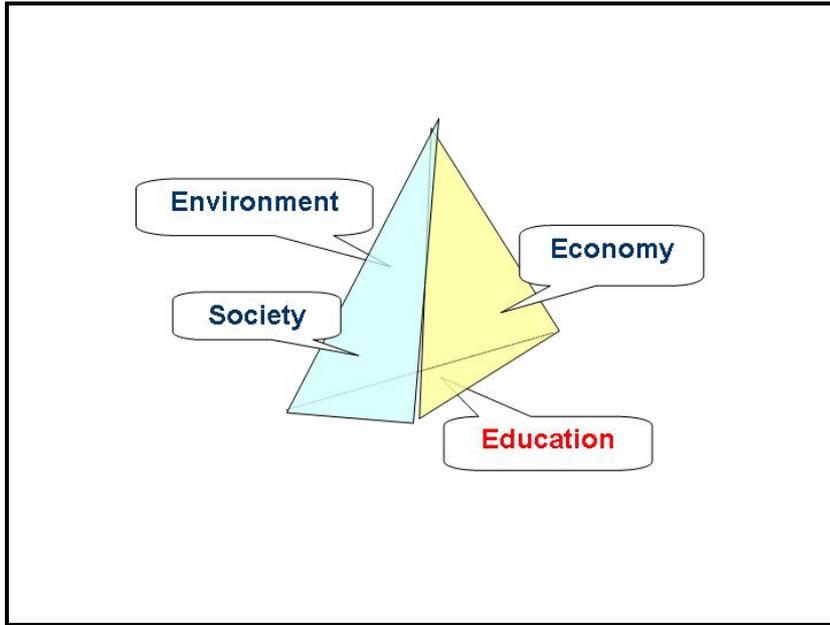


Fig. 5

Though for simplicity reasons the above representation could be sufficient for most educators a further elaboration is needed in order to attribute to Education its true dimensions and responsibilities in approaching SD. This is necessary because, unfortunately, it is obvious that with Education alone it is impossible to transform the current development patterns into sustainable development. In fact in Thessaloniki we attempted to address this problem by proposing other three components together with Education, namely Legislation, Economy and Technology. In other words, Education is one of the components of the overall “Governance” needed. To this end, the basis of the SD pyramid has become now Governance instead of Education.

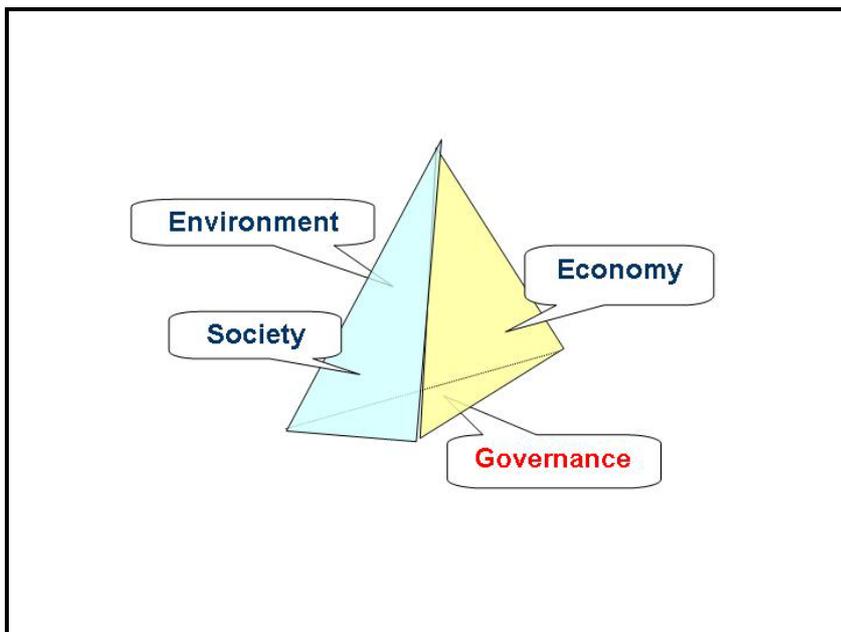


Fig. 6

If we simply “turn” the above pyramid we produce the scheme below (fig.7) where environment is the “natural basis” while all other three facets are “human over-structures”. In this respect this scheme is very close to the original starting point of EE, though it is still different indicating both the proximity and the natural evolution of the relevant ideas and concepts.

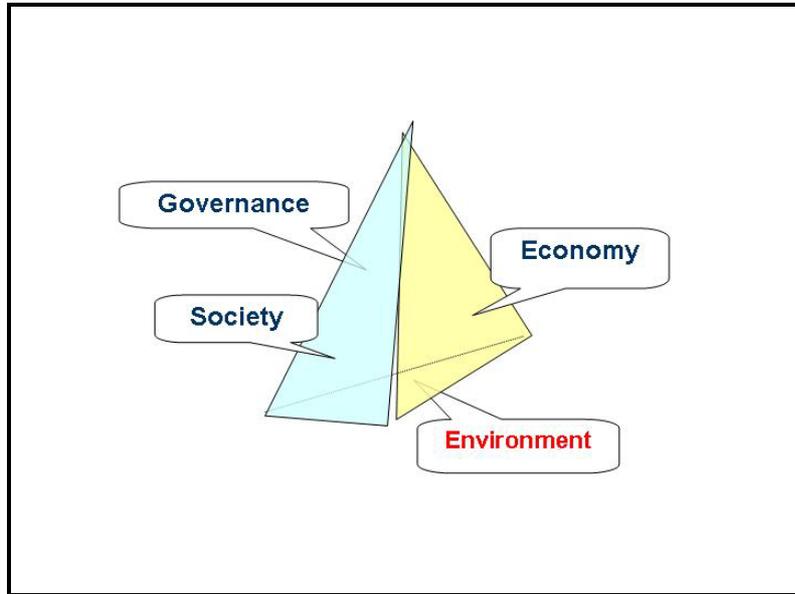


Fig. 7

Keeping in mind the results of Thessaloniki and in order to clearly indicate the place of Education in the system it is necessary to take a closer look into the analysis of the Governance concept.

Analysing the main components of Governance in the implementation of SD we need to use appropriate Institutions, Technology and Education.

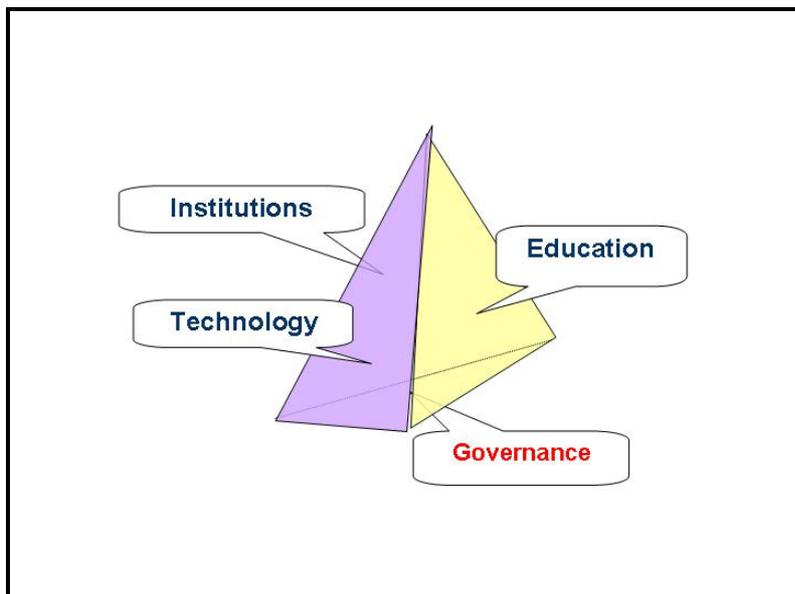


Fig. 8

If we now combine figures 6 and 8 we come up with the following scheme for SD (Fig.9)...

... a model of SD as a double pyramid.

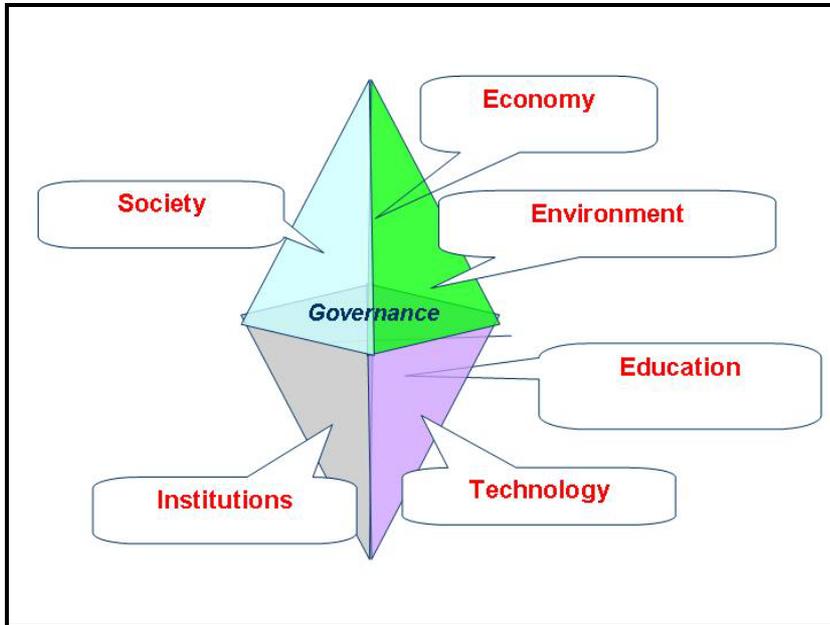


Fig. 9

The upper part of the double pyramid represents the three interlinked components of sustainable development (Economy, Environment, Society) while the lower part represents the prerequisites and tools for its implementation (Institutions, Education, Technology).

If we wish to explore a little bit more the facets of the double pyramid one could say that in order to obtain SD we need :

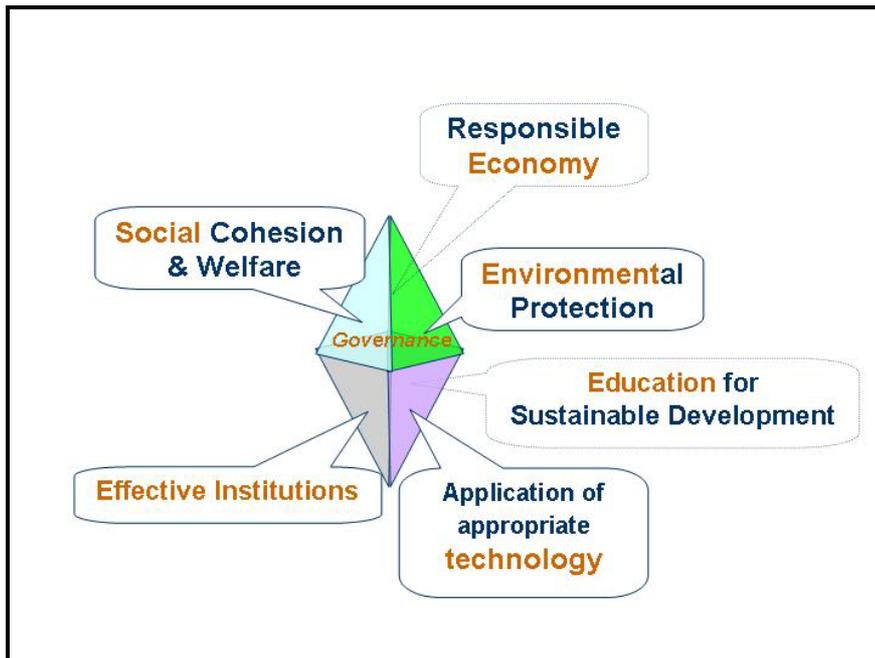


Fig. 10

social cohesion and welfare, responsible economy, environmental protection, effective institutions, application of innovative and appropriate technology, and Education for Sustainable Development.

On the other hand, the Delors Report(1996) and the Framework for a Draft International Implementation Scheme of the UN Decade on Education for Sustainable Development (DESD) (2003) rightly emphasise the importance of culture as a “fourth” pillar of sustainable development.

If we wish to best combine all the aforementioned elements to a concise whole we may propose that the components of Education for Sustainable Development (ESD) could be represented with the double pyramid of the following scheme (Fig. 11) where the naming (position) of its facets is random and therefore all interlinkages are possible, real and important. The Education for Sustainable Development should enhance our knowledge, our ability and skills to understand them and act accordingly for the benefit not only of our generation but also for the unborn ones.

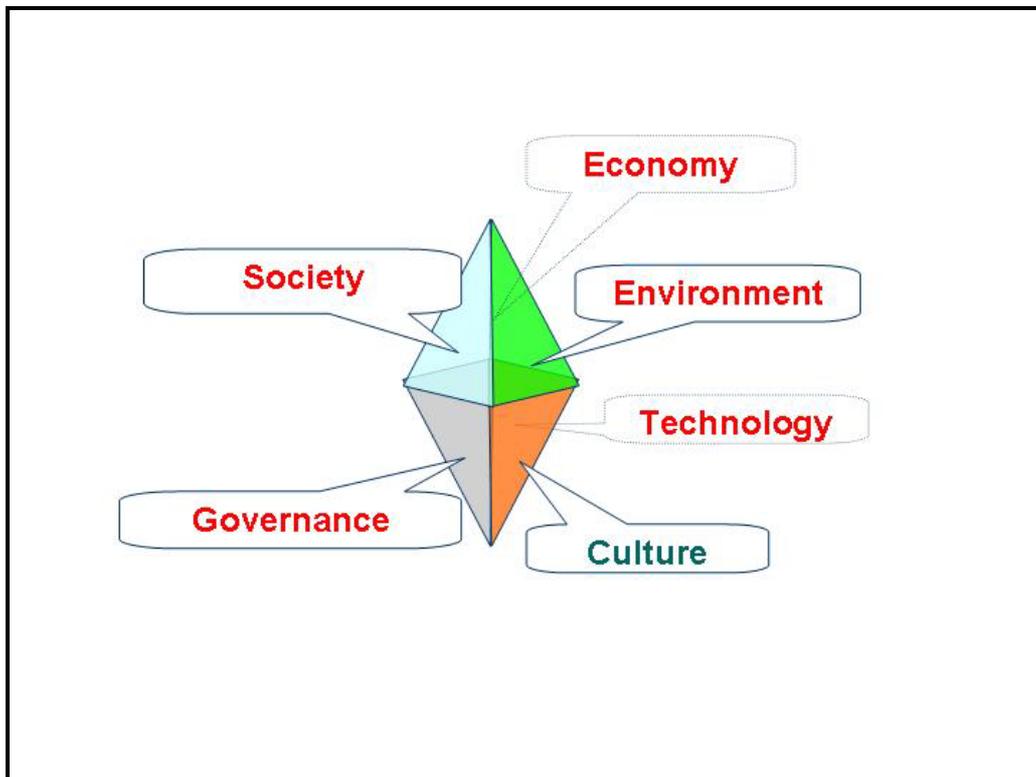


Fig. 11

References

- Report of the UN Conference on the Human Environment, Stockholm, (5-16 June 1972), New York 1973, A/CONF 4/8/14/Rev.1.
- Final Report of the International Workshop of Experts on Environmental Education, Belgrade (13-22 October 1975), Paris.
- UNESCO “Environmental Education in light of Tbilisi Conference”, Paris, 1980.
- World Commission on Environment and Development, “Our Common Future”, Oxford University Press, 1987.
- “Promoting Education, Public Awareness and Training” Chapter 36, Agenda 21, UN Conference on Environment and Development, Rio de Janeiro, 1992.
- “Environment and Society: Education and Public Awareness for Sustainability”, Proceedings of the Thessaloniki International Conference, organised by UNESCO and the Governance of Greece, (8-12 December 1997), (ed. by M.Scoullos) Athens, 1998.
- J. Delors et al. (1996) “Learning: the Treasure within”, Report to UNESCO of the International Commission of Education for the Twenty First Century, UNESCO.
- UNESCO “The Framework for a Draft International Implementation Scheme of the UN Decade on Education for Sustainable Development” (January 2005 – December 2014), Draft, 2003.