

An Overview of ESD in European Countries: What is the Role of National Governments?

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Abstract

Education for Sustainable Development (ESD) is and will continue to be vital to national efforts to pursue the goal of sustainability. The problems posed by increased CO₂ emissions, the depletion of the rainforests, increased levels of pollution, to name a few, require a search for solutions to capitalize on various advantages derived from education, awareness and training on sustainability. The importance of ESD is particularly pertinent in Europe, the continent with the highest concentration of industrialized nations, where awareness of environmental problems has not always been translated into action. This paper describes the current status of ESD in Europe and introduces the state of affairs in a number of European countries. It presents the results of a survey involving member countries of the UN Economic Commission for Europe (UNECE), outlining some of factors that hinder progress at implementing ESD at the national level. Finally, it lists some measures for implementing ESD in practice.

Key words: deficiencies, education programmes, Europe, sustainable development, training

1. Introduction

Sustainability is commonly defined as the ability to meet the needs of the present while living within the carrying capacity of supporting ecosystems, without compromising the ability of future generations to meet their own needs (WCED, 1987). However, the goal of managing today's resources so that they may be available to future generations will not be easy to reach. Indeed, in order to achieve this ambitious goal, it is important that government agencies and education institutions become engaged in the sustainability debate (UNESCO, 2007), not superficially as it has largely been the case until now, but in a manner not seen before.

The importance of ESD is particularly pertinent in Europe, the continent with the highest concentration of industrialized nations in the world, where awareness of environmental problems has not always been translated into action. In Europe, discussion of ESD has taken place at different degrees of depth at different speeds across the region (Leal Filho & Littledeyke, 2004; Sandell *et al.*, 2005). There are complex and interlinked factors that lead to divergent conceptualizations and receptions of ESD in different countries.

The heterogeneous nature of European history and culture, combined with current financial constraints, has had and still has an impact on the ways countries perceive

environmental issues as a whole, which affect national perceptions and interpretations of ESD. For example, in some countries there are extensive efforts towards incorporating ESD into urban design and development in order to communicate solutions effectively to planners, developers and policy-makers (Cooper *et al.*, 2009). It is regrettable, however, that such efforts are still limited, since there is indeed a need for a new system which uses sustainability and quality of life, rather than GDP and shareholder returns as indicators of development (Corrigan *et al.*, 2009).

Although many northern European countries have embraced the concept of ESD, in eastern and southern Europe, discussions on ESD as such (that is, outside the context of traditional environmental education) are still limited and take place only unsystematically and irregularly. In addition, many eastern and southern European countries have no structures in place to support it. This is partly due to the fact that in most cases there are no specific budget provisions for ESD. The lack of financial resources, however, is not the only problem. Further barriers to the implementation of ESD in both formal and non-formal education include logistical problems (*e.g.*, lack of means to organize field trips, difficulty of fitting ESD into curricula, inadequate teacher training for ESD) and limited resource materials on ESD, to name a few. Indeed, the barriers to promoting ESD in Europe are to a

large extent long-standing problems in furthering the cause of better preparing Europeans to live in a more sustainable way.

Despite this mixed background, it is meaningful to talk about “ESD in Europe” as the European region has a history of developing joint strategies to promote ESD. In 1991 the first pan-European “*Environment for Europe*” Ministerial Conference was held in Dobris, Czech Republic. The *Environment for Europe* conferences have been held at regular intervals since then, and the third conference (1995, Sofia) endorsed an Environmental Programme prepared within the UN Economic Commission for Europe (UNECE) to make Agenda 21 more operational in the European context. The fifth conference (2003, Kiev) called for and led to the emergence of a UNECE initiative on ESD. At the conference, all of the ministers gave the green light to draw up a regional Strategy for ESD (UNECE, 2005). Progress was reviewed at the sixth conference (2007, Belgrade). At the seventh conference, which will take place in Astana, Kazakhstan, on 21-23 September 2011, current progress will be assessed and further action agreed upon, partly based and built on the results presented in this article.

The implementation of the regional Strategy for ESD was a challenging exercise for all those concerned. Both education *per se* and sustainable development as an issue, are complex topics. Therefore, it was crucially important to develop the Strategy through a participatory process involving governments, UNESCO, NGOs and other stakeholders. Environment and education ministries cooperated closely in the drafting process. Noting the political, economic and social diversity in the European region, the text of the Strategy had to be made flexible enough so that its implementation could be adapted to each country’s priorities, specific needs and circumstances.

In the Lithuanian capital, Vilnius, in early 2005, ministers and other officials from education and environment ministries from across the ECE region adopted the Strategy at their joint High-Level Meeting. Various stakeholders, including international organisations, businesses, non-governmental organisations, regional environmental centres and research institutions took part in the meeting and provided valuable contributions. The meeting also launched the United Nations Decade of ESD (UNESCO, 2003) in the region.

The objective of the Strategy is to incorporate key themes of sustainable development in all education systems. These themes include a wide range of issues, such as poverty alleviation, peace, ethics, democracy, justice, security, human rights, health, social equity, cultural diversity, economy, environmental protection and natural resource management.

As a milestone in the process of implementation of the Strategy, UNECE countries agreed to develop indicators to assess its implementation, organise thematic and sub-regional workshops and compile good practices in ESD.

2. ESD in Europe: The State of Affairs

There is a paucity of comparative research on ESD in Europe. This is a serious problem, since without proper research, no benchmarking can be made and no reliable assessments of progress may be undertaken.

Based on this acute research need and in order to gain an understanding of the extent to which the priorities governments have set themselves have been pursued, a benchmarking of the status of ESD among a set of European countries (Table 1) was conducted. Data were collected from each country based on a review of the latest documents, telephone conversations with government officials and consultations with international organisations, the UN and the Delegation of the European Commission in different countries. The key figures from the study are as follows:

- 1) number of countries: 53
- 2) number of people surveyed/consulted: 145
- 3) number of documents reviewed: 32

Due to the scope of the study and the nature of the information being requested, the survey can by no means be regarded as representative. Rather, it builds a rough profile of the status of ESD in Europe today and outlines some of the current problems and some areas where attention is needed.

The survey involving 145 persons from the listed countries investigated three main questions:

- 1) What is the status of ESD in the country in respect of its inclusion in educational programmes, provisions for pre- and in-service education, existence of organisations which support the implementation of ESD and public awareness?

Table 1 Countries surveyed (in alphabetical order).

Albania	Liechtenstein
Andorra	Lithuania
Armenia	Luxembourg
Austria	Moldova
Azerbaijan	Monaco
Belarus	Montenegro
Belgium	Netherlands
Bosnia and Herzegovina	Norway
Bulgaria	Poland
Croatia	Portugal
Cyprus	Romania
Czech Republic	Russian Federation
Denmark	San Marino
Estonia	Serbia
Finland	Slovakia
France	Slovenia
Georgia	Spain
Germany	Sweden
Greece	Switzerland
Hungary	Tajikistan
Iceland	The former Yugoslav Republic of Macedonia
Ireland	Turkey
Israel	Turkmenistan
Italy	Ukraine
Kazakhstan	United Kingdom of Great Britain and
Kyrgyzstan	Northern Ireland
Latvia	Uzbekistan

- 2) What problems hinder progress in the field?
- 3) What needs to be done in order to cater to the promotion of ESD?

As far as Question 1 is concerned, an analysis of the replies obtained enables the status of ESD in some European Union countries to be classified into three stages of development:

- i. Stage 1 (initial): the focus is limited to traditional approaches to environmental education; efforts to promote ESD at an early stage; little emphasis on public awareness.
- ii. Stage 2 (intermediary): ESD is progressively being included as part of educational programmes; training of multipliers available but rather limited; public awareness is not often fostered.
- iii. Stage 3 (advanced): ESD is already as part of educational programmes, including pre- and in-service education, in and out of schools; there exist many organisations and associations which pursue or support the implementation of ESD; public awareness is actively fostered.

Quantitatively, the distribution of countries according to each stage is summarised in Table 2. It is noted that many countries in eastern and southern Europe are still at the first two stages, but over half of the surveyed countries are at an advanced stage.

In reply to Question 2, the respondent was asked to choose factors that hindered progress in the field of ESD (multiple choices possible) in his or her country. The results are shown in Fig. 1. It is noticeable that lack of training is the most frequently mentioned problem across Europe, closely followed by lack of teaching materials. Lack of continuing education programmes (*i.e.*, in-service training) is also deemed an obstacle. Lack of sustained financial support is also acknowledged as a barrier, albeit to a lesser extent.

In terms of Question 3, which asked respondents to state what needed to be done in order to promote ESD, the most frequently provided responses (funding issues excluded) were as follows:

- more provisions for teaching and information materials (72%),

- increased provisions for training (61%),
- more regional cooperation (47%),
- better clarity in promoting ESD (32%),
- better engagement from government agencies (21%),
- more networking between players in the field of ESD (16%),
- others (*e.g.*, better legislation) (13%).

A further element identified in the interviews was a need to incorporate some themes related to sustainable development (*e.g.*, poverty alleviation, peace, ethics, democracy, justice, human rights, health, environmental protection, natural resource management) in education systems in a more systematic way.

Table 2 Distribution of countries at different stages of ESD implementation.

Stage 1 (initial)	Stage 2 (intermediary)	Stage 3 (advanced)
Albania	Bulgaria	Austria
Albania	Croatia	Belgium
Armenia	Israel	Cyprus
Azerbaijan	Liechtenstein	Czech Republic
Belarus	Luxembourg	Denmark
Bosnia and Herzegovina	Monaco	Estonia
Georgia	Romania	Finland
Kazakhstan	Russian Federation	France
Kyrgyzstan	San Marino	Germany
Moldova	Ukraine	Greece
Montenegro		Hungary
Romania		Iceland
Serbia		Ireland
Tajikistan		Italy
The former Yugoslav Republic of Macedonia		Latvia
Turkmenistan		Lithuania
Uzbekistan		Netherlands
		Norway
		Poland
		Portugal
		Slovakia
		Slovenia
		Spain
		Sweden
		Switzerland
		Turkey
		United Kingdom of Great Britain and Northern Ireland

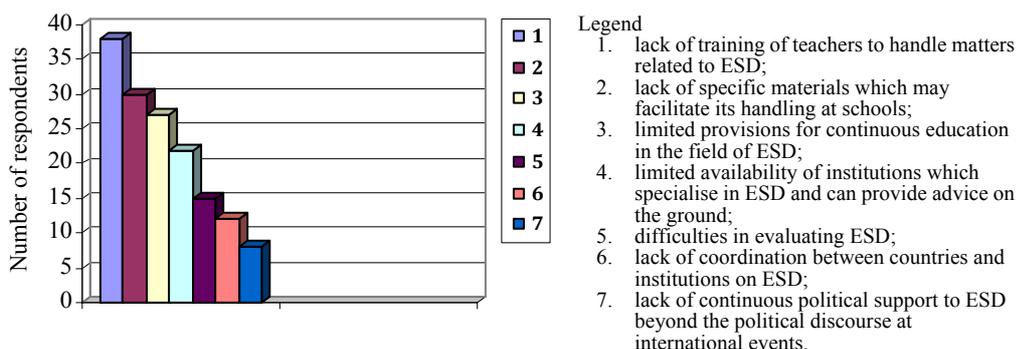


Fig. 1 Main factors which hinder the promotion ESD.

3. The Need for Further Education Programmes

Until now, most action in the field of ESD is seen at the school (Estyn, 2006; Ofsted, 2009) and university level (Leal Filho, 2009). The further education sector has, so far and for historical reasons, been largely overlooked. The problem is not new and was reiterated both at the Belgrade Charter (UNESCO-UNEP, 1975) and in the Declaration of the Tbilisi Intergovernmental Conference on Environmental Education in 1977 (UNESCO-UNEP 1977). This is an area where improvements are due, not only as a result of the perceived need to foster more sustainable values (Hossay, 2006), but also based on the many opportunities offered to foster awareness of sustainability at this level (Leal Filho, 2006).

At the CONFINTEA Conference held in 1997, UNESCO's Institute of Higher Education emphasised the need for a better integration of sustainability elements into further education programmes. A subsequent publication, titled *Lifelong Learning and Environmental Education* (Leal Filho, 1997) described some of the examples of ways via which ESD could be included in further education programmes.

"Tapping into the world's wisdom," as postulated by Nakashima *et al.* (2000), is certainly one of the means via which ESD may be better incorporated into further education programmes. Indeed, there is much further evidence that much could be gained by making provisions for ESD in the field of further education (*e.g.*, Pavlova, 2009).

On a European scale, interesting examples of the integration of ESD in further education are given by the Baltic University Programme (BUP), one of the world's largest sustainability networks, with over 200 member universities. Based at Uppsala University's Centre for Sustainable Development, in Sweden, BUP runs educational programmes and projects which have a strong cross-sectoral nature, reaching planners, architects, engineers, teachers and other stakeholders, bringing sustainability closer to their professions and, *inter alia*, to their professional lives.

Some examples seen across Europe which further testify to the usefulness of this approach are as follows:

In **England**, many further education programmes are focused on linking sustainability with professional education. In this context, builders, engineers, chemists and other professionals now access a wide range of educational programmes where aspects of sustainable development related to their professions are outlined. As a result of these efforts, the country is set to take a lead role in areas such as sustainable construction and regeneration.

In **Germany**, matters related to sustainable development are part of the majority of further education programmes. Not only in technical fields but also in respect of management programmes or even business education, sustainable development is an intrinsic part of most curricula in further education and is found in many

syllabi.

In **Finland**, which is officially acknowledged by the World Resources Institute as the world's most sustainable country, the subject matter of sustainability has been intensively pursued in various sectors, especially in design. This means that in large companies such as NOKIA, workers pay considerable attention to aspects of sustainability and eco-efficiency, in the design, use and disposal of products.

In **Sweden**, the inclusion of sustainability elements in further education programmes in the automobile sector has led to the development of more efficient fuel use and more environmentally-friendly cars. Here a key role has been played by Volvo and Scania. Bearing in mind that the automobile sector is a sector where jobs are often at risk, this represents a refreshing way of illustrating the economic benefits education for sustainability in a given sector can achieve.

In **Poland**, the Technical University of Lodz has incorporated sustainability elements across its whole programme both in further education and in conventional graduate training. Principles of ESD are now part of the core training of engineers at Lodz

This list is by no mean comprehensive and is meant solely to illustrate some of the concrete work taking place to date. Unfortunately, many examples of the implementation of ESD in the area of further education are, for various reasons, poorly or often not documented at all. However, the examples above offer a snapshot of potential benefits derived from including sustainability components in further education schemes, such as improved competitiveness and job creation, not to mention better understanding of sustainability principles.

4. Effective Approaches to ESD

Based on the so-called best practices and examples offered by each country, a set of effective approaches to ESD may be identified.

4.1 Better understanding of ESD for different stakeholder groups

This approach, currently used in the United Kingdom for instance, is aimed at explaining what sustainability is and what it means to various audiences. It goes over and above the conventional description of what environmental issues are and puts an emphasis on the economic and social value of sustainable development. Improved conceptual understanding allows sustainable development principles to be applied in different sectors of the economy with subsequent benefits.

4.2 Better public awareness

This approach is emphasised for example in Sweden, which was one of the first countries to have produced a "National Sustainable Development Strategy." The approach, pursued by Sweden's Ministry of Environment, aims at informing the public of the links between sustainable development goals and objectives and their

own lives. It encourages citizens, no matter from which region, profession or social background, to access information on sustainable development issues. It is assumed that better informed citizens understand the market mechanisms more easily and are prepared to pay the costs of measures leading to sustainable development.

4.3 More participation

An outstanding example of participation is from Finland. The Finnish public is asked to express their views, opinions and inputs in the decision-making process, bearing in mind the long-term implications of government decision making with respect to environmental affairs.

4.4 Cross-sectoral and cross-thematic collaboration

The key to sustainable development includes, among other things, addressing diverse pressing issues such as poverty alleviation, citizenship, peace, ethics, responsibility in local and global contexts, democracy and governance, justice, security, human rights, health, gender equity, cultural diversity, rural and urban development, economy, production and consumption patterns, corporate responsibility, environmental protection, natural resource management and biological and landscape diversity. Addressing such diverse themes in ESD requires a holistic approach. This approach is being pursued in France, where government authorities such as the Ministry of Environment and Ministry of Education are combining efforts to generate activities in various sectors. Cross-sectoral and cross-thematic approaches to ESD facilitate the implementation of both educational and more technical environmental initiatives.

5. Regional-Level Institutional Support Mechanisms

In addition to UNECE and its working group on ESD, there are agencies that have been supporting efforts in this field in Europe. For example, UNESCO Paris serves as the global secretariat of the UN Decade of ESD. The European Environment Agency runs a modest information service and produces a small set of educational materials for use in and outside a school context. The European Commission provides a substantial amount of funding for ESD-related research and capacity-development projects; between January 2002 and June 2010, an estimated € 95 million has been spent on projects involving ESD, *i.e.*, projects which have transnational importance and a practical application within programmes such as Socrates, ALFA III, Erasmus, Erasmus-Mundus and Interreg. The funding offered by the EU has also been instrumental to projects focusing on development of skills. Access to this funding is however quite competitive and it is unfortunate that participation of institutions across the region is quite limited, perhaps partly due to language barriers, but also due to the current problems observed with respect to promoting ESD beyond schools.

To give a few examples of EU-funded ESD projects, Socrates/Erasmus Programmes support INSPIRE (<http://www.inspire-project.eu/>), which is led by the author and involves Germany, Latvia and Poland. The Research and Transfer Centre “Applications of Life Sciences” at the Hamburg University of Applied Sciences, funded by the European Commission, contributes to integrating sustainable development into educational programmes, environment projects and policy-making in European countries. The centre organized the “World Sustainable Development Teach-In Day”, on 3 December 2010 (<http://www.sustainability-day.net>), which involved thousands of universities across Europe and the globe. It is recognized by UNESCO as a project in the framework of the United Nations Decade of ESD and was organized in partnership with many organizations in different countries.

Furthermore, much work has been undertaken by the Regional Centres of Expertise on Education for Sustainable Development (RCEs), which have been set up under the auspices of the United Nations University and which comprise a number of Centres in Europe, as well as in other parts of the world. The history of the RCEs is not a very long one (United Nations University, 2005), but is characterized by many success stories. As stated by Dam-Mieras (2005), RCEs play a key role in mobilising engagement in ESD.

6. Conclusions: What Can Governments Do?

The shift towards a sustainable society cannot be achieved without proper provision of ESD. In order to motivate people to reflect more carefully on their relationship with their environment (and not simply modify negative habits), it is necessary not only to provide them with the proper educational basis needed, but also to motivate them. In order to realize the potential of ESD in Europe, it is necessary that national governments act to address the barriers which currently exist in respect of the implementation of ESD. They can concretely do so by:

- a) producing a strategy, action plan or guidance document on ESD which gives a sense of direction as to the path a country intends to follow;
- b) establishing a formal structure at the Ministerial or Sub-Ministerial level, which takes responsibility for coordinating ESD. This can be set up, for example, at the Education or Environment Ministry, or as an independent inter-ministerial body, depending on the country’s context;
- c) making provision of financial support to ESD initiatives, not on an *ad hoc* basis as is largely the case today, but in a more structured manner and as part of annual or bi-annual plans.

The UNECE strategy acknowledges that, while implementing ESD, the following areas should be addressed:

- a) improving basic education,
- b) reorienting education towards sustainable development, and

- c) increasing public awareness and promoting training.

There is a lot of room for improvements given the current level of emphasis placed on ESD in Europe. In addition, the current gaps in ESD promotion seen between Eastern and Western Europe as well as between Northern and Southern Europe should be addressed. Overall, current trends related to ESD in Europe are quite optimistic. Not only can we now count on well organised structures in some countries, but also on institutional support not available before. It is now our task to take advantage of this momentum and push the cause forward, making sure that the debate on ESD goes well beyond a school or a higher education context, and find its ways to the heart of society.

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