

ENVIRONMENTAL EDUCATION IN EUROPE

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Abstract. *eNews – European Environmental News* is a project financed by the European Union, through the SOCRATES – Minerva Programme. The project aims to promote the trans-European cooperation in the field of environmental education having as priority objectives: An increased awareness of the society related to environmental issues; Students cooperation in what regards environmental aspects; Developing information and communication technologies skills in working with environmental issues (through GIS, web-based information, etc.). The main product will be the creation of a virtual forum, available on-line, that shall allow students from all over Europe to exchange information, ideas, opinions related to environmental aspects in their countries or at a regional or global level. The forum and tools to be created will encourage students and teachers to foster their own consciousness and responsibility for environmental and economic topics in close contact with both the surrounding society and international peer groups in multimedia-based workspaces. Assisted by teachers, the pupils shall be guided to adopt principles that will recognise the importance of environment conservation and protection: 'I am not alone, my actions affects the others too: my parents, my neighbours, or, in the future, my children'. The project joins together partners from universities in Finland, Greece, Austria, UK, Hungary and Romania.

Keywords: environmental education, cooperation, virtual forum.

EUROPEAN CONTEXT

Environmental politics in the European Commission began in the 1970's. In 1988 the Commission agreed the first resolution on environmental education (EE), which still exists today and is vigorously agreed on and adopted by all member states¹.

Articles 126 and 127 of the Third Treaty of Maastricht of 1992 stipulate that it is the role of the European commission to develop, coordinate and facilitate cooperation between all member states and institutions in order to ensure that all pupils have the same educational background. This opens new perspectives for cooperation in the EE domain. In 1992 all the member states signed the 5th Action Program for the protection of environment and the promotion of sus-

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tainable development. From this program, environmental protection and conservation must form a part of all political action and be integrated into all sectors. One of the Commission Directorates (DG XI) has a mission to successfully bring this about through the development of EE at an international level.

DG XI established a working group from the different Ministries of Education in 1992 in order to be kept up-to-date with EE in different countries. The first report on the situation was published in 1992. Following this report, the Council of Education Ministers of all member states insisted on the importance of the training of teachers if EE was to become a reality. That is why DG XI included teacher training as one of its priorities between 1993 and 1996. DG XI then proposed to create an information base of all the available EE materials. This task was given to the Environment Agency opened in Copenhagen in 1995. In May 1996, DG XI presented to the Council of Ministers a report on all EE matters produced since 1988. One of the propositions was to integrate EE into all the education systems and at all levels from the year 2000 (Ref. 1).

'The 1999 Environment Eurobarometer organised by DG Environment of the European Commission has revealed that the European public does not feel satisfactorily informed on environmental issues'. This was the conclusion of a poll on the environment carried out in the 15 Member States of EU and 16 000 Europeans. The report shows that people seek information through TV programmes (24.6%) and newspapers (20.3%) (Ref. 2). The same report states that the major source of environmental information is television (74.6%), newspapers and magazines (59.7%), radio (34.6%) and everyday discussions (26.9%), while Internet attracts only 6.2% for environmental information².

The European Consultative Forum on the environment and sustainable development states that one of the initial steps towards an action responsive to the needs and interests of the people requires *'the education system and, in particular, the agendas for teaching and learning in schools, but also the curricula for teachers, should be adapted to the requirements of public environmental awareness and sustainability'*³. These two reports reveal the necessity of a more or less overall view of the situation formed in the EU countries on teaching and learning on sustainable development.

According to the principle of sustainable development, every state is responsible for its citizens' welfare. Sustainable development is also a challenge in international and national co-operation. Ultimately, every human being should be able to observe his environments, to acquire and process information of environmental conditions and threats, and to make decisions concerning aims and actions of environmental issues. Further, EE should be seen as a strategy towards rational and responsible action and it should inculcate thinking and acting in the direction of sustainable development⁴⁻⁸.

Increased awareness by Europeans about their common cultural heritage

has led the Member States to confer on the Community a specific role in the field of cultural affairs⁹. There is thus a clear movement towards European unity through a multi-cultural, multi-lingual European society requiring understanding, tolerance and solidarity between diverse national, ethnic and migrant communities and one in which work, study and leisure are characterised by mobility, interchange and communication^{10,11}; in short, a society in which the daily lives of Europeans will increasingly take on a 'living European dimension'. The European Union thus aims to build a cohesive and inclusive society based on solidarity seeking to reduce economic disparities leading to a democratic and peaceful Europe. Member States are thus encouraged to stimulate the development of European Citizenship¹².

Donert and Bosschart¹⁰ identified *environmental citizenship* as one of the components of European citizenship, together with European regions, people in Europe and European activities. Several environmental experts defined the term 'environmental citizenship'. Environment Canada¹³ consider it as a personal commitment to learning more about the environment and to taking responsible environmental action or as responsible environmental action based on knowledge and understanding about the environment (Enquiry Centre Environment Canada). Environmental Citizenship Learning Program considers environmental citizenship a convenient way of describing the ethical obligations that link us with other members of the biosphere. Specialists of international organisations involved in environmental protection showed their interest in issues, using for environmental citizenship the term 'stewardship for the natural environment' in order to engage people's sense of responsibility for the natural environment¹⁴. Barcena¹⁵ thinks that environmental citizenship is about asserting the ethical responsibilities of individuals, organisations, countries and corporations to create new forms of solidarity to protect all life on Earth.

Matache and Donert¹⁶ identified seven possible levels of environmental citizenship, displayed in the scheme below:



People included in the first category are a serious threat for the sustainable development of the human society. In some countries, people do not hesitate to farm, log and mine into protected areas because they believe that 'everybody' owns governmental land. Also considered must be the correlation between the economical state of the people from one region and the efforts they make for natural environment conservation. Conservation made for people and with people showed to have the highest rate of success. Opposite, people aware of the value of their environment will act as responsible citizens in crisis situation¹⁷.

ENVIRONMENTAL EDUCATION

According to Finnish National Commission on Environmental Education, the main goal of EE is to confirm attitudes, knowledge, values, and skills to protect and improve the environment. All school levels should stress ethical growth, nature protection, civic skills, and connections between theory and practice. The students should have a good holistic understanding about the environment and its dynamic relationships. They should learn to act and influence in their community⁵. They should also understand the following dimensions of sustainable development:

- Ecologically sustainable development what means harmony with nature, organic and inorganic processes, biological diversity and conservation of natural resources;
- Socially sustainable development what means promotion of equal possibilities of welfare and participation and safeguarding individual basic rights in everyone's own country and all over the world;
- Culturally sustainable development, what establishes intellectual liberty, ethical development and cultural diversity¹⁸.

EE is essential to the well being of all young people¹⁹ and to the future of our society. It is a complex area of study with many themes usually requiring contributions from a number of different curriculum areas²⁰.

According to Hindson et al.²¹, the purposes of studying the environment might be described as including:

- 1) the development of knowledge and understanding, enquiry methods and values, opinions and judgements through studies of the environment;
- 2) the promotion of quality, sustainable life-styles and interactions with the environment, equality of access to resources, control of the environment, personal and public action in order to recognise the significance of the environment;
- 3) the inclusion of regular first hand studies of nearby localities and other visits to a range of localities, including those further afield if appropriate and the use of secondary sources of information about more distant environments²².

EE is a process that aims to develop an environmentally literate citizenry that can compete in our global economy, has the skills, knowledge and inclinations to make well-informed choices and exercises the rights and responsibilities of community members.

The main goal of EE is for people of all ages to know enough about environmental science and related social issues to make sound and well-reasoned environmental decisions²³.

EE aims at increasing environmental awareness and should make everyone act responsibly. The individual citizen has to realise his duty towards our nature. It is an alarming fact that in the past ten years interest in, and responsibility for our environment has drastically decreased. Teenagers seem to be less affected by or

interested in environmental problems. As a consequence, education for this has to be fostered specifically by using young people's enthusiasm for ICT (Ref. 24).

NATIONAL SITUATION – USER NEEDS

In all six countries represented in the eNews Project (Finland, Greece, United Kingdom, Austria, Hungary, Romania), the EE does not exist as an independent discipline in the curriculum, issues related to it being integrated in several disciplines such as Geography, Biology, Chemistry, Physics, Natural Sciences, etc. It appears the problem that 'Everybody is doing it, but nobody is doing it!'

In some cases, non-governmental organisations are developing local, national or international campaigns for raising awareness of people on a specific environmental aspect, such as wastes, forest destruction or threatened species conservation.

The themes that are more frequently considered and discussed in the classroom are sustainable development, waste management, climate changes, and human impact on environment components.

Both pupils and teachers expressed their desire to communicate with teachers from other countries in order to obtain information about the environmental problems those countries are dealing with from a less specialised perspective. Also interested would be some kind of 'contest' between pupils or groups of pupils from various countries on environmental issues. This activity will strongly stimulate the competition spirit that sometimes leads to unexpected benefits, resulting from the ambitions of obtaining both interesting and useful information.

Another aspect that the study has revealed is that although a lot of resources exist in some countries (e.g. UK), the access to high quality materials is sometimes difficult.

ICT in supporting environmental education. One of the chances that EE can benefit of is a combination of the experimentation and reflection processes with learning and teaching strategies that use Modern Information and Communication Technologies (ICT). Such initiative is the SOCRATES Minerva Project *eNews – European Environmental News*. The main objectives of the Project are *to raise a sense of community and motivate communication on across the European dimension* and also *to raise awareness of environmental problems* (see also www.e4news.net). About the first aspect, the project will enhance through its website cross national/cultural student discussions of leading environmental issues.

Pupils are learning more easily about other countries and region and about their problems by discussing with people of their age. Related to people's degree of awareness on environmental and cultural issues, Donert and Boschaart¹⁰ no-

ticed that when we are talking about Europe, we are usually discussing economical and political aspects rather than cultural and natural heritage and problems. Children would be more interested in discussing and learning about national and European identity and changes that affected them, about biodiversity conservation initiatives or human activities destroying natural monuments.

ICT can help in developing each person stage of environmental awareness. Thus, the people with no knowledge on environmental issues should be guided to websites with rich content related to problems like sustainable development, global changes, water pollution, holes in the ozone layer, waste depositing. People having certain knowledge on environmental issues have to be involved in collaboration and discussion activities (chat rooms, forums, mailing lists) that will help them become more conscious about everybody's responsibility on environmental heritage and finally to act as responsible environmental citizens.

CONCLUSIONS

The importance of EE for the educational system in Europe is rather low. Issues related to EE are divided in several subjects of the curriculum such as Biology, Chemistry, Environmental sciences, etc. Isolated initiatives of non-governmental organisation can not cover the necessity for responsible citizens. Reduced resources to be used in the classroom for teaching EE are available or no guidelines for their use exist. In some cases access to resources is also difficult. Distance learning mediated by ICT proves to be an opportunity for an easy access to resources (even in remote areas) and interactive and attractive learning processes.

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