European SWOT Analysis on Education for Environmental Citizenship

Edited by
Andreas Ch. Hadjichambis, Pedro Reis & Demetra Paraskeva-Hadjichambi

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European Network for Environmental Citizenship
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ENEC Cost Action Report

European SWOT Analysis on Education for Environmental Citizenship

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List of Main Abbreviations

CE: Citizenship Education
CoP: Community of Practise
DSP: Dominant Social Paradigm
EA: Environmental Attitudes
EB: Environmental Behaviour
EC: Environmental Citizenship
ECn: Environmental Citizen
EE: Environmental Education
EEC: Education for Environmental Citizenship
EfS: Education for Sustainability
ESD: Education for Sustainable Development
FCN: Frequency of Contact with Nature
NC: National Curriculum
NEP: New Environmental Paradigm Scale
PSAs: Public Service Announcements
SE: Science Education
SSIBL: Socio-Scientific Inquiry-Based Learning
STEM: Science Technology Engineering & Mathematics
TPB: Theory of Planned Behaviour
TPD: Teacher Professional Development
VBN: Values Beliefs Norms

Foreword

Environmental citizenship is crucial for the success of any environmental policy. Sustainable development, a circular economy, a low-carbon economy, and a bio-economy require an effective citizen engagement. Citizens are called upon to adopt environmental attitudes and behaviours, make green choices, increase civic participation, and to be aware of and apply their environmental rights and duties. The contemporary environmental crisis with climate change, biodiversity loss, air pollution and all other local and global environmental problems demand an education that is capable of empowering environmental citizens. Education plays a key role in shaping future environmental citizens; nobody is born environmental citizen but anybody can become so by education.

This report presents a SWOT Analysis of an integrated and holistic type of education in Europe "Education for Environmental Citizenship". The SWOT anlaysis is presented in two levels. In Part A a synthesis of the results of 157 experts from 28 European countries are presented. In Part B the reader can exlore the 23 European country reports.

It is important to clarify that this reseach regarding SWOT analysis was undertaken before any development on the concept of Education for Environmental Citizenship such as common definition and the pedagogical approach. In this fact it illustrates the experts' opinion in the different contexts through out Europe.

We hope that European stakeholders will find it useful.

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18. SWOT Analysis of Education for Environmental Citizenship in Romania

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Abstract: Education for Environmental Citizenship is a very new concept for Romania. Based on the experts' evaluations from the educational sector, this concept is complex enough to include all the other types of education and should be approached from an early age. Meanwhile, Education for Environmental Citizenship is also perceived to be built around the key term 'environment', this being the binder between several types of education. However, its uniqueness – what lies from its complexity and ability to include all the other types of education – will have to overrun the conservative main feature of Romanian education system, this being a 'sine qua non' condition for a successful implementation. Unfortunately, the conservative educational system in Romania is a major weakness in implementing this Education for Environmental Citizenship concept. This chapter also approaches several opportunities and threats regarding Education for Environmental Citizenship implementation in Romania, emphasising the important role of social media, high quality projects, and the lack of support from different Governmental levels. A successful implementation of Education for Environmental Citizenship in Romania can be approached through a start-up process at primary education level using non-formal education techniques.

Acknowledgments: This chapter is based on work from Cost Action ENEC – European Network for Environmental Citizenship (CA16229) supported by COST (European Cooperation in Science and Technology). We thank the participants in this SWOT analysis for devoting their time to answer the questionnaire.

18.1 Education for Environmental Citizenship in Romania – a state of art

Education for Environmental Citizenship in Romania is a new concept, constantly confused with other concepts like ecological education and Education for Sustainable Development (ESD), concepts that have so far known a certain consecration.

Approaching a new concept like Education for Environmental Citizenship is a process that must be done in correlation with an educational system structure and needs to consider both its strengths and its weaknesses. This harmonization of terms like the 'environment' and 'citizenship' provides a new definition for the relation between people and nature, emphasising that we are all responsible for a good state of environmental conservation (Dobson, 2007; Meerah et al., 2010). David Orr (2004) considers that the educational process "emphasizes theories on the natural world and not on values; abstraction instead of consciousness; answers ordered instead of questions and technical efficiency on consciousness. [...] education is not a guarantee of decency, prudence, or wisdom. Not education but education of a certain type will be our salvation" (Orr, 2004).

The contact with ecosystems generally starts from a young age, thus being necessary to introduce basic concepts into the education process in order to minimise the impact that we can have on the environment throughout our lives. How can be this be achieved in the Romanian educational system?

First of all the authors would like to mention that the Romanian education system is organised on several levels, many of which are not compulsory. The first education level in Romania, and which is not compulsory, is kindergarten. At this level, educators propose that pre-school children should understand nature as being modifiable by the human beings with whom they interact. In this respect, the frame-reference objective of the 'science' domain at the kindergarten level is to train and practice habits of care and protection for the environment in order to educate a positive attitude towards it. However, the impact of this educational level can be reduced because it is not mandatory, being more accessible in urban than in rural areas.

The next education level, which is mandatory in Romania, is primary education for children between 6 and 11 years old. Since 2013, the curriculum for primary education is centered on competence training, offering the advantage of structuring the contents in a modular, interdisciplinary, original and creative vision, enabling each child to conduct activities at their own pace, according to their interests, age and individual peculiarities, and at the same time motivating the pupil to learn. According to the European Commission, the key competences were defined as transferable and multifunctional package of knowledge, skills and attitudes that all individuals need for personal fulfillment and development, social inclusion and professional insertion. These must be developed until the end of compulsory education and act as a foundation for further learning as part of lifelong learning (E.C., 2018)

In pedagogical terms, competence is the student's ability to mobilise an integrated set of knowledge, skills, attitudes and values to achieve learning task families. Competence is a potential to be proven/demonstrated by the student in concrete situations. Learning focused on competence development is not a teaching method, but an extended teaching approach. It may involve a wide range of methods, and some of them may take the form of traditional teaching. The essential aspect is that it focuses mainly on meeting the student's needs

National Education Law no. 1/2011 states that the national curriculum for primary and secondary education focuses on eight key competencies that determine the student's training profile. Four of them are strongly connected with Environmental Citizenship (EC) and Education for Environmental Citizenship: basic skills in mathematics, science and technology; social and civic competences; awareness and cultural expression skills; competence of learning to learn (National Law 1, 2011).

The specific competences that direct address Environmental Citizenship and Education for Environmental Citizenship are:

- Manifestation of care for correct behaviour in relation to the natural environment;
- Recognising the consequences of their own behaviour on the environment;
- Identifying ways to protect the environment;
- Acquiring an interest in understanding the role of the environment for the life and activity of society, including: understanding the need to protect the living environment, participation in environmental conservation activities and the formation of a civic attitude regarding the knowledge, the conservation and protection of the environment.

All these competencies are part of formal education system and they are acquired during five years of study (grades 0 to 4).

In Romania, schooling is compulsory until the tenth grade (usually corresponding to the ages of 16 or 17), including primary as well as part of secondary education. Alongside secondary education, the number of key competences passed on to pupils increases, their number being in correlation with the school type profile that is followed.

All of these key competences are part of ecological education/environmental education (these terms being interchangeable in Romania), a concept that was introduced in this country in the early 1990s. Only since 2007 has Environmental Education (EE) been introduced as an optional subject in the National Curriculum, as ‘Environmental education and environmental protection’ for preschool, primary and secondary (Öllerer, 2012). Environmental Education (EE) is a learning process that increases people’s knowledge and awareness about the environment and its associated challenges, it 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-UNEP, 1978).

Thus, the authors tried to emphasise that the Romanian education system has the necessary resources and created the premises for the successful introduction of the Education for Environmental Citizenship.

18.2 Strengths of the Education for Environmental Citizenship in Country

Education for Environment Citizenship, from the point of view of the Romanian experts, presents a series of advantages focused mainly on the term 'environment' (protection, problems, future, improvement etc.) and ranging from understanding the basic concepts of a pro-environmental attitude to an active participation in community for finding sustainable solutions. Education for Environmental Citizenship is seen by our experts as a key concept that can either include other types of education or can complete them, mainly by increasing the awareness that environmental responsibilities (resulting from the environmental rights) are a matter of natural justice. There also opinions from the primary sector which conclude that Education for Environmental Citizenship should be symbiosis of Environmental Education (EE) and Citizenship Education (CE).

The uniqueness of this term stays in its complexity and ability to include all other types of education, in its potential to include both the ecological and civic duty of individuals. Education for Environmental Citizenship seems to be very easily approached through educational projects even from small ages.

18.3 Weaknesses of the Education for Environmental Citizenship in Country

The conservative educational system in Romania is a major weakness in implementing this Education for Environmental Citizenship concept. Education for Environmental Citizenship is also a very complex term which, in some cases, may lead to confusions in relations with other similar terms like EE or CE. For some Romanian academics, itis somehow equal to EE and/or Environmental Citizenship. Another weakness is represented by the lack in the Romanian scientific (educational) literature of a clear delineation and a coherent representation of what Education for Environmental Citizenship represents.

Education for Environmental Citizenship needs to be very practical, to easily translate the different environmental theories into schools without endangering the development of new educational materials appropriate to the age and/or professional categories they are addressing. Education for Environmental Citizenship shouldn't lose its essence by focusing on a wide range of areas/activities, and should be developed through a smooth process based mainly on constructive criticism and experiences and not by widespread aggressive implementation.

The main weaknesses of Education for Environmental Citizenship mentioned by students and teachers are represented by its novelty (e.g. why should we apply something that we know (almost) nothing about?) On the other hand, in not understanding its practical concept and applicability in everyday life, Education for Environmental Citizenship can appear to be an unnecessary tool. There are several

factors that may eliminate the success of Education for Environmental Citizenship and could be considered as weaknesses of this concept: the lack of a viable and clear presentation in schools, a lack of interest in such a concept, or a lack of projects focused on this concept.

A major weakness is represented by the political influence in Romanian educational systems. This influence resulted in very poorly prepared staff, but which are in decision-making positions, without the necessary expertise to take viable decisions, and lacking in foreign language skills etc.

18.4 Opportunities of the Education for Environmental Citizenship in Country

A good opportunity for Education for Environmental Citizenship is the formation of ecological thinking by introducing this concept in schools from an early age. In addition, this measure should be accompanied by generating high-quality projects which can have a significant impact in changing ecological behaviour, and with the support of stakeholders can determine legislative changes at national level. Social media is strengthening cooperation at international level between young people (and schools) and is seen as one of the most important trends that will positively impact the opportunities for Education for Environmental Citizenship.

18.5 Threats of the Education for Environmental Citizenship in Country

As any new concept that intends to appear in the Romanian educational system, Education for Environmental Citizenship must handle a series of threats. One of the most important ones is the lack of support from the Governmental level as well as the repeated, sometimes very wrong, changes/modifications in the educational system. We should not forget the convenience from schools that makes the intention to introduce new concepts (which takes time and work to be better understood and promoted) to be not easily accepted. SE and CE are seen as potential alternatives because these types of education are already met, at different levels, in Romanian schools.

Romanian learning materials on Education for Environmental Citizenship are not often found, except in the online environment. The experts agree that changing technology is not a threat for Education for Environmental Citizenship; on the contrary, it can be a supporting element. Opinions are divided on identifying a greater potential threat to Education for Environmental Citizenship but we can identify several key terms such as: developing countries (more sensitive to these threats), cor-

ruption (if the concept it is not of material interest, it will be hardly accepted), punctual solutions for punctual problems (the range of weaknesses is too wide to set up a pattern to counteract them).

18.6 Additional aspects

As long as the core principles of Education for Environmental Citizenship are correctly transmitted to users, there should be differences in form and not in substance. The information will be presented differently, maybe with a greater success when we are talking about non-formal education because this system is more open in comparison with the formal type.

The key word here is 'age'. There is certainly a difference in the level of thinking and in using the correct terms deriving from the years of training. With proper support and coordination, primary education could have a more important role in setting up a solid foundation for the Education for Environmental Citizenship concept.

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Environmental Citizenship has been an influential concept in many different arenas such as economy, policy, philosophy, organizational and corporation management and marketing and could be better exploited and established furthermore in the field of education as well.

This report examines the Strengths, Weaknesses, Opportunities and Threats of Education for Environmental Citizenship in Europe. In the first part of the report, the need for Education for Environmental Citizenship, is examined along with the methodology and results of an extensive research from more than 157 experts in 28 European countries and Israel. In the second part of the report, the country chapters for the 23 European countries and Israel emphasise the similarities, differences and special features of these case studies.

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