European SWOT Analysis on Education for Environmental Citizenship
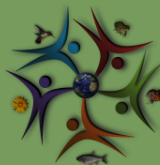
Edited by

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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

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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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European Network for
Environmental Citizenship
ENEC Cost Action CA16229

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12. Italy: Short Country Report

European Network for Environmental Citizenship (ENEC)

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Abstract: Environmental Education (EE) has been present in the Italian context since 1989 with the establishment of the national system INFEA. It was only in 2005, with the UNESCO Decade for Education for Sustainable Development, that there was a switch from EE to Education for Sustainable Development (ESD). Particular attention was paid to Citizenship Education (CE) in order to foster competencies for sustainability, though these three types of education are often still used interchangeably, especially EE and ESD. The responses of six experts to the questionnaires show that Education for Environmental Citizenship encourages and empowers citizens for active and democratic participation on environmental challenges. The most important strength of Education for Environmental Citizenship is the empowerment of people towards sustainability and to develop the values, skills, and competencies necessary to be and act as proactive citizens. The weakness that Education for Environmental Citizenship could face is the outline of the educational and learning approaches to embrace the complexity of the environmental problems and to empower young people for actions towards sustainability. Opportunities of Education for Environmental Citizenship relates to the presence of an increasing number of active and responsible citizens who are able to tackle the contemporary environmental dares and existing education alliance between the school system and the non-formal education organisations on ESD, EE and CE. The major threat of Education for Environmental Citizenship is the difficulty of carrying out a profound and deep cultural and pedagogical changes at the school system level.

12.1 Introduction: Environmental Education, Education for Sustainable Development and Education for Environmental Citizenship in the Italian context.

The aim to promote policies on the environment and on education resulted in the development of the national system INFEA (Information, Learning and Environmental Education) in 1989. This national system facilitated the collaboration and the networking between Regional Ministry of Education Offices and non-formal education organisations to promote and combine knowledge and respect for the environment with a global, systemic and complex vision of the world and its relations.

In 2005, Italy joined the UNESCO DESS (Decade for Education for Sustainable Development) and fostered the switch from Environmental Education (EE) to Education for Sustainable Development (ESD). During the period 2005-2014, the Ministry of Education (MIUR) promoted ESD programmes and initiatives throughout the national territory under the UNESCO leadership for the purpose of spreading values, awareness and lifestyles that were oriented towards the respect for others, the planet and for future generations.

In 2009, the Ministry of Environment (MATTM) and the Ministry of Education (MIUR) jointly implemented the 'Guidelines for environmental education and sustainable development' with the aim of providing some innovative guidelines for the development of school curricula rather than for formal education organisations (MIUR, MATTM, 2009). This document emphasises and fosters the previous 'Guidelines for the experimentation of Citizenship and Constitution' for the promotion of citizenship competencies, skills and knowledge with disciplinary specifications, for the first time linking EE and ESD with Citizenship Education (CE). (MIUR, 2009).

More recently, successive national indications have revealed the deep interconnection between CE and ESD: the indications for the fulfilment of CE in 2010 (MIUR, 2010), the new guidelines for EE and ESD with indications of school programmes considering the environmental challenges and referring to the different dimensions of sustainability in 2015 (MIUR, 2015). The Ministerial Decree in 2012 on the national indications for the curriculum for primary and secondary schools (MIUR, 2012) indicates the following points to be crucial for development:

- Learning about the principle of knowledge – the universe, the planet, nature, life, humanity, society, the body, the mind, history – in a complex perspective, overcoming the fragmentation of disciplines and integrating them into new frameworks;
- Promoting a new humanism: the abilities to grasp the essential aspects of problems and to understand their complexity, to evaluate the limits and possibilities of knowledge, to be able to live and act in a constantly changing world;
- Spreading the awareness that the great challenges (the environmental degradation, climate change, energy crises, unequal distribution of resources, health and disease, bioethical dilemmas, quality of life) can be dealt with and resolved

through close collaboration not only between nations, but also between disciplines and between cultures, through participation.

Education for Environmental Citizenship has made its first appearance in a document of the Lombardy Regional Office of the Ministry of Education in 2016, where it is reported that "Environmental Education and Education for Environmental Citizenship are considered coincident expressions, with the intention to underline that Environmental Education can be integrated in Citizenship Education in an interdisciplinary perspective" (MIUR, 2016).

Education for Environmental Citizenship, in the sense described by Dobson (Dobson, A., 2010), is reported for the experts in the introduction of the questionnaire as "pro-environmental behaviour, in public and private, driven by a belief in fairness of the distribution of environmental goods, participation, and co-creation of sustainability policy; it is about the active participation of citizens in moving towards sustainability". It is not clearly reported in any official documents and guidelines, even though in all recent indications both CE and ESD are referred as being essential for the development of an active and responsible citizen able to tackle the new challenges of the modern world.

This short report on Education for Environmental Citizenship in Italy introduces the views of six Italian experts on Education for Environmental Citizenship. Before analysing strengths, weaknesses, opportunities and threats on Education for Environmental Citizenship, it is interesting to analyse their opinions on the differences and relationships between all the types of education presented so far (synthesized in Table 12.1 and Chart 12.1).

While the experts make a clear distinction between Education for Environmental Citizenship and Science Education (SE) (mean=2.3), the same is not true for ESD (mean =3.7), for CE (mean 3.7) or for EE (mean 3.2), underlining the Italian present background where EE and ESD are often still used interchangeably and in the case of CE, most competencies for active citizenship are congruent with competencies for sustainability.

Chart 12.1. Responses to SWOT questionnaire (n=6 Experts).
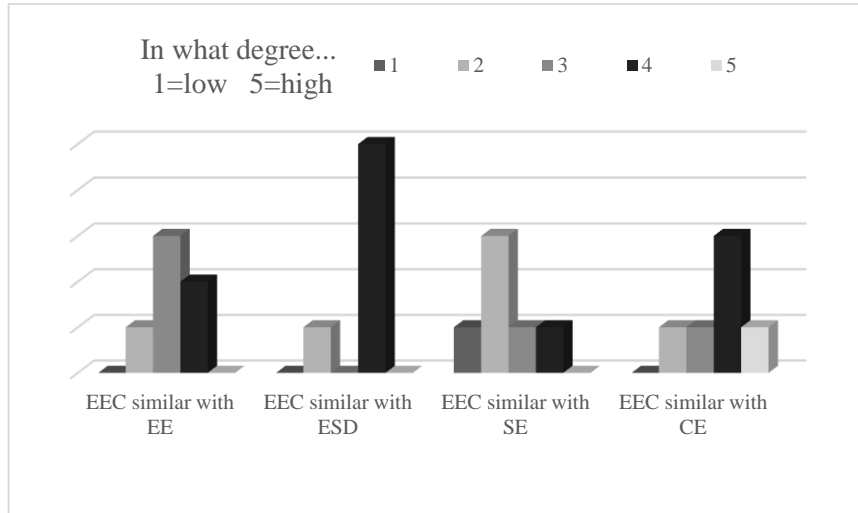
Table 12.1. Responses to SWOT questionnaire (n=6 Experts)

Questions 7-10	Mean
To what degree (1-5) is Education for Environmental Citizenship (EEC) similar to Environmental Education (EE)?	**3.2**
To what degree (1-5) is Education for Environmental Citizenship (EEC) similar to Education for Sustainable Development (ESD)?	**3.7**
To what degree (1-5) is Education for Environmental Citizenship (EEC) similar to Science Education (SE)?	**2.3**
To what degree (1-5) is Education for Environmental Citizenship (EEC) similar to Citizenship Education (CE)?	**3.7**

12.2 Strengths of Education for Environmental Citizenship

According to the respondents, Education for Environmental Citizenship encourages and empowers citizens to have an active and democratic participation on environmental challenges.

Therefore, the most important strength of Education for Environmental Citizenship is people empowerment for a change towards sustainability. Education for Environmental Citizenship entrusts the future of the planet to the next generation who have to develop values, skills and competencies in order to be and act as proactive citizens and take part in the political and social debate about contemporary environmental issues.

Experts agree on the role of Education for Environmental Citizenship in the development of a scientific and ecological literacy to be able to understanding, sharing ideas and practices, and taking decisions on issues related to energy, water, transport and mobility, waste management, and use of land and ecosystem services.

It emerges that Education for Environmental Citizenship drives to consider the ethical and moral dimension of the environmental problems in particular, highlighting the belonging of the individual to the planet with rights and duties that such a relationship entails, linking the environment issues with topics like human rights, social justice and equity.

12.3 Weakness of Education for Environmental Citizenship

For the experts, one of the most important points that Education for Environmental Citizenship should face is the outline of effective educational and learning approaches to embrace the complexity of the environmental problems and to empower young people towards actions for sustainability. It is crucial to design curriculum, methods, approaches, teaching and evaluation tools to provoke behavioural change, to link the local dimension of the individual experience and the global dimension of the environmental challenges, and to fill the gaps between the current social, economic, and cultural development and sustainability's requirements.

Moreover, the complexity, uncertainty and the unclear solutions for environmental challenges could cause Education for Environmental Citizenship to be only theoretical, raising disheartenment and frustration instead of empowerment.

With a strong focus on the environment, another point to be aware of for Education for Environmental Citizenship is the involvement of the social and economic dimensions of environmental problems.

Education for Environmental Citizenship requires an alliance between schools, families, communities, organisations, and policy makers, all processes that need to be fostered and catalysed and require resources.

12.4 Opportunities of Education for Environmental Citizenship

Accordingly to the responders, the opportunities of Education for Environmental Citizenship relate to the presence of an increasing number of active, mature, aware

and responsible citizens who are able to tackle the environmental challenges that the planet is facing.

Interesting trends that could improve opportunities of Education for Environmental Citizenship are the following:

- The connection with the Index for Inclusion Approach for Education for Environmental Citizenship to foster inclusive values for promoting participation and action. The Index for Inclusion (Booth, T. and Ainscow, M., 2002) has been designed to support the inclusive development of schools to enhance learning and participation. Frameworks in learning according to these inclusive values (such as equity, respect for diversity, sense of community, participation, pacifism, compassion, honesty, courage, joy, love, optimism, hope, beauty) are decisive in supporting active involvement of children and young people, and empowering them to realise their own humanity and ability to take action for positive change.
- The increase of outdoor learning and place-based learning in education. Outdoor learning and real-world learning both play an important role for developing environmental sensitivity. (Bögeholz, S., 2006; Chawla, L., 1998; Vadala, C. E. et al., 2007)
- The existing alliance between formal and non-formal education in EE and ESD as a fertile contest where pilot Education for Environmental Citizenship programmes can be explored.
- The current changes in economic policies and social patterns that could require more active and responsible citizens and foster the need of a more inclusive society.
- Stronger connection between researchers and teachers and between researchers and students, for example with citizen science programmes;
- Network experiences available for schools (exchange and travel experiences, real tasks for students as in citizen science).
- Shared knowledge on environmental challenges available for schools, such as all the work on planetary boundaries of the Stockholm Resilience Centre (Rockstrom, J. et al., 2009)

12.5 Threats of Education for Environmental Citizenship

The major threat of Education for Environmental Citizenship is the difficulty of making a profound and deep cultural and pedagogical change at the school system level.

For CE, EE and ESD in Italy, the gap between goals and practices can be crucial and the lack of networking between institutions, policy makers, schools, society and organisations could produce only interesting experimental programmes and experiences for Education for Environmental Citizenship instead of a necessary reconsideration and an innovation of the school system.

There is a need to weave together Education for Environmental Citizenship with a cultural and social transformation, as Edgar Morin states (Morin, E., 1985), to be effective:

> The great social, environmental and educational challenges pass through the ability to connect and integrate. Political, economic, educational reforms conceived and perceived alone have been, are and will be condemned to self-sufficiency and failure. Each reform can progress only if the other ones progress, the reforming pathways are interrelated, interacting, interdependent.

Another point to be aware of is the need to share common values for the well-being for all – humans and nature – in order to frame Education for Environmental Citizenship. Without a common set of values, the process of being involved and taking action and responsibility could lead to the boomerang risk of feeling not relevant.

Other issues to address relating to the school system are:

- the lack of background knowledge and Education for Environmental Citizenship training among teachers;
- the resistance towards change;
- a general pessimism to tackle big issues related with environmental challenges;
- the pressure on teachers to teach in a standard way;
- conceptual, organisational and economical obstacles to carry out education experiences on environmental citizenship.

Technology isn't a default threat. As well as for all tools, effectiveness and potentiality largely depend on their type of use, assigning once again a key role to training and learning for a sharp and smart use of technology for Education for Environmental Citizenship.

12.6 Formal and non-formal education for Education for Environmental Citizenship

Experts highlight the relevance of the networking between formal and non-formal education for Education for Environmental Citizenship.
While formal education offers more opportunities for Education for Environmental Citizenship in terms of resources and curriculum, non-formal education provides a more flexible conceptual and organisational framework.

In non-formal education, participation isn't compulsory and students may get a chance to experiment responsibility, choosing and self-directing actions and processes.

Formal education struggles with providing concrete, real and democratic situations to develop a student's skills, knowledge, motivation and self-confidence in

taking decisions. This difficulty is due especially to organisational and standardisation issues. Therefore, non-formal education could offer more effective contexts where students could learn together and practice democratic decision-making and negotiations for a real situation and change.

Moreover, the network between formal and non-formal education could improve a more complex learning environment that allows cultural, intergenerational, social exchange between participants.

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The European Network for Environmental Citizenship (ENEC) – funded as a COST Action (CA16229-Horizon 2020) – brings together more than 120 experts from 37 countries with the objective to improve the understanding, the practice and the assessment of Environmental Citizenship in Europe and the participating countries.

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.