

# 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  
Cost Action CA16229





ENEC Cost Action Report

# **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



## 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 analysis 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 explore the 23 European country reports.

It is important to clarify that this research 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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## 16. Education for Environmental Citizenship in Norway

### A SWOT Analysis

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**Abstract:** This chapter summarises and discusses the knowledge and experience on Education for Environmental Citizenship in Norway, based on the analysis of nine responses to a standardised set of SWOT survey questions. The nine Norwegian respondents include two academic researchers on environmental education, three policy makers from the Norwegian Ministry of Education, one decision maker from an NGO working in the field of environmental issues, one decision maker from an education professional society, one primary school teacher, and one secondary school teacher. The questions (including the survey introduction text) were translated into the Norwegian language and sent to the respondents beforehand. Some responses were obtained through telephone interviews, the rest through a Google Documents form.

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### 16.1 Introduction: Framing the Norwegian Context

Norway is a country with approximately 5.5 million inhabitants and a fairly dispersed population pattern. Like the other Nordic countries, Norway went through a rapid industrialisation, urbanisation, and economic growth after World War II. Norway is characterised by public health care, relatively high trust in government, high standards of living, and high levels of social cohesion, though this image is increasingly coming under pressure. Since 1973, Norway has become increasingly dependent on the high income that the oil industry provides. This dependency also creates some significant cultural and social ambivalences relating to environmental values

and citizenship, especially thanks to Norway's image as a 'green state' (Dryzek et al. 2003).

Political scientist John Barry (2003) argues that states do not become green by themselves; they have to be pushed towards environmental practices by green citizens. Norwegians face the challenges and opportunities that such forms of Environmental Citizenship open up in a number of arenas. Jørgensen (2013:500) has argued that "the idea of the green consumer-citizen is central to the Norwegian vision of a sustainable society". The consumer-citizen does not, however, act completely independently from surrounding institutions, norms, and other factors. Environmental Citizenship is something that needs to be facilitated, nurtured, and developed over time. Education for Environmental Citizenship is one of the main arenas for achieving this development.

One could argue that education is a particularly relevant field for developing Environmental Citizenship in Norway. In general, Norway has a fairly high educational level, above the OECD average. Women have slightly more education than men. The educational system is largely funded by the Norwegian state. Please refer to Eurydice website for a more detailed description of the education system in Norway: [https://eacea.ec.europa.eu/national-policies/eurydice/content/norway\\_en](https://eacea.ec.europa.eu/national-policies/eurydice/content/norway_en).

Norway has an education system that consists different levels of schooling:

- Daycare ('barnehage') for children aged 1-5 years, who have a legal right to a place in daycare. Daycare has a pedagogical activity.
- Compulsory school ('grunnskole') is for children aged 6-15 years. It consists of primary school from grades 1-7 and lower secondary school from grades 8-10. Children from grades 1-4 also have an after-school programme which offers out-of-school activities organised by non-school personnel using school facilities.
- Upper secondary school ('videregående opplæring') is statutory and normally for three years, building on the compulsory school to prepare students for either vocational professions in the labour market or higher education.
- Higher education ('høyere utdanning') builds on the general study competence developed in upper secondary school, structured after a three-cycle model, with a three-year bachelor degree, two-year master, and a three-year PhD education.
- Adult education ('voksenopplæring') can be at different levels, including the elementary and high school levels, adult education associations ('studieforbund') offers courses; folk high schools ('folkehøgskole'), which are independent and general schools with integrative goals. In addition, there are online education programmes.

In 2016, 282,649 children were in daycare; 629,275 in elementary school; 243,414 in high school; 288,989 in higher education; the numbers for continued education are varied: 7,540 were in folk high schools, 12,918 were in elementary school education, 27,135 in high school education, and 504,898 participated in some way in adult education associations. These can be single courses, and a person

can be registered several times if they participated in more than one course (SSB 2018).

### **How is Education for Environmental Citizenship defined?**

There is no established direct equivalent term to education for Environmental Citizenship in Norwegian. This does not mean that these issues are not high on the agenda. Sustainable development (“bærekraftig utvikling”) is a term that is particularly well-established, in part due to the history of the concept, originating from the Brundtland commission. When it comes to the questions on Education for Environmental Citizenship and its relation to other types of education — Environmental Education (EE), Education for Sustainable Development (ESD), Science Education (SE) or Citizenship Education (CE), Norwegian respondents typically see Education for Environmental Citizenship as broader and more holistic than other approaches, and even with a focus on empowerment. They are most in agreement that Education for Environmental Citizenship is similar with ESD and least in agreement that Education for Environmental Citizenship is similar with SE (see Table 16.1).

There is still some uncertainty about the meaning of Education for Environmental Citizenship, which is not an established term in Norway. Some see it as a particular vocational training, giving students knowledge about a subject and an education in general civic participation. The UN development goals also cover a lot, so in these cases sustainable development works better as a term. Several respondents argued that Education for Environmental Citizenship distinguished itself from other approaches in its appeal to the individual, as a personal commitment and a call to action. This is not wholly unproblematic, as we will see later.

**Table 16.1. Responses on a Likert scale of lowest 1 to highest 5 on similarities of Education for Environmental Citizenship with other related education subjects (n=9 respondents)**

	Average	Maximum	Minimum
In what degree (1-5) the Education for Environmental Citizenship (EEC) is similar with Environmental Education (EE)?	3	5	1
In what degree (1-5) the Education for Environmental Citizenship (EEC) is similar with Education for Sustainable Development (ESD)?	4	5	3
In what degree (1-5) the Education for Environmental Citizenship (EEC) is similar with Science Education (SE)?	2.1	3	1
In what degree (1-5) the Education for Environmental Citizenship (EEC) is similar with Citizenship Education (CE)?	3.3	5	1

## 16.2 Strengths of Education for Environmental Citizenship in Norway

The Norwegian respondents indicated that Education for Environmental Citizenship, and similar approaches with other names, has an important role in school curricula. Most importantly, Education for Environmental Citizenship's holistic approach provides a way of thinking across the different subjects in school. It gives students the possibility to analyse and solve problems using an interdisciplinary perspective where environmental, economic, natural and social conditions are taken into consideration. It is multi-level as individual and collective, local and global.

As an individual approach, "it is like a personal commitment, it is a kind of personal 'call' to be and to become an environmental citizen," as one respondent stated. This does not only apply to students, but also to teachers, where Education for Environmental Citizenship can be a way of instilling a sense of ownership in different subjects and among teachers. Education for Environmental Citizenship can serve as a foundation in steering documents (such as curricula and syllabi) for schools (school education).

As a collective approach, "Education for Environmental Citizenship can serve to prevent sustainable development from being disconnected to studying subjects at school", and to highlight "environmental challenges facing the future, so it will be

of critical importance for younger generations”. Education for Environmental Citizenship is considered to be a combination of “reflections and tools connecting knowledge to civic participation” and “helping students understand what they learn in a more holistic setting”.

### **16.3 Weaknesses of Education for Environmental Citizenship**

In a Norwegian school setting, curricula are designed at a national level. The students have much material to cover, and Education for Environmental Citizenship is only one of very many perspectives. One respondent stated that “sustainable development is an interdisciplinary subject, but it is often only integrated into one specific subject in school. It should be underlying in all of them.” Others saw this as both strength and weakness — Education for Environmental Citizenship is a cross-cutting perspective with big potential, but that does not fit into the ‘boxes’ of the school system.

At the same time, Education for Environmental Citizenship is a very broad term that could easily end up without real content. As one respondent said, “According to the UN Sustainable development goals, education will contribute to a sustainable development. This means that education should not only be theoretical or on the present situation, but it should contribute to development. There is not a sufficient understanding on this point today, we do not have a clear plan for how education will help us reach the development goals.”

While Education for Environmental Citizenship is in many ways a call to action, as previously mentioned, it can also be hard to translate into concrete action. What complicates this issue is that several respondents addressed the normative character of Education for Environmental Citizenship and similar approaches as something to be avoided. Education for Environmental Citizenship cannot provide simple solutions to complex problems; instead, it must inform and enable the Environmental Citizens of tomorrow to navigate the world they live in.

One respondent brought up that the term ‘citizen’ is too human-centric. Education for Environmental Citizenship needs to also recognise that we live in a more-than-human world. This point aligns with much scholarship in recent environmental humanities (Rose et al, 2012).

### **16.4 Opportunities for Education for Environmental Citizenship**

As mentioned, the curricula (‘læreplaner’) that serve as guidelines for the whole school sector in Norway are currently under a major national revision, involving experts from a number of fields. This initiative, called ‘Fagfornyelsen’, involves both academics and practitioners in school and aims to make the school subjects more relevant for the future, and to strengthen the connections between the different

subjects (UDIR, 2018). The Norwegian government has decided that the new plans will feature three cross-cutting interdisciplinary themes, 'democracy and citizenship', 'sustainable development' and 'public health and coping with life' (Sinnes and Straume, 2017: 2). These provide unique possibilities for Education for Environmental Citizenship perspectives.

The respondents stressed how Education for Environmental Citizenship allowed education to connect the national and the global. The NGO decision maker argued that this connectivity is something that characterised modern society and that education needs to involve this. New information technologies connect people living completely different lives and who face different environmental issues in their day-to-day lives. Education for Environmental Citizenship can benefit from crossing social and working boundaries through cross-sectoral collaboration, maybe including schools and NGOs. By establishing collaborative projects across boundaries, one can strengthen the education and understanding of the challenges we face. Finally, Education for Environmental Citizenship allows for cross country learning, where students can see how different countries in different parts of the world deal with environmental issues and what solutions they choose. This could be the foundation for comparative analyses.

Furthermore, the new curricula under development create an opportunity to work with Education for Environmental Citizenship through the entire educational run.

## **16.5 Threats for Education for Environmental Citizenship**

The threats for Education for Environmental Citizenship are highly related to the weaknesses. Respondents point out how these cross-cutting perspectives are very dependent on the teacher's initiative. While curricula are developed nationally, the actual integration in the subjects is highly variable. The literature used in schools is also limiting, as cross-cutting perspectives that are supposed to be integrated across disciplines may or may not be successfully included in subject-specific literature. This puts even more pressure on teachers to tie together different subjects and demonstrate connections.

Education for Environmental Citizenship can also be demotivating if it addresses subjects that the students can't actively change. Some respondents also meant that one should avoid complicating subjects.

The evaluation system in schools can oppose the work on sustainable development. As one respondent stated, "partial emphasis on easily measurable quantitative variables in education, f.ex. national exams, with a short term perspective instead of the education's broad social mandate embodied in the objects clause." It is therefore important to "avoid that the system of evaluation leads to a goal supply in education, which entails that the education turns to quantitative variables that are easy to measure."

## 16.6 Conclusion

Norwegian respondents are in agreement of the similarity between Education for Environmental Citizenship and ESD approach which is currently very much in use in school education. In addition, they also recognise that Education for Environmental Citizenship has its ‘human’ aspect/element and its holistic approaches (by the term citizenship including knowledge, attitudes and behaviour both at individual and collective levels) in relation to the environment, which we consider is the strength of Education for Environmental Citizenship beyond ESD.

Perspectives and themes related to Education for Environmental Citizenship is well-integrated in the Norwegian school system due to the importance of national curricula, though the actual implementation is highly dependent on local efforts by teachers. Experts and practitioners in the field who were interviewed for this article stressed the relevance of Education for Environmental Citizenship in preparing students for society. Yet, Education for Environmental Citizenship cannot provide simple solutions to complex problems; instead, it must inform and enable the Environmental Citizens of tomorrow to navigate the world they live in.

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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.

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