

# 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

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Andreas Ch. Hadjichambis<sup>1,2</sup>, Pedro Reis<sup>3</sup>, Demetra  
Paraskeva-Hadjichambi<sup>1,2</sup>

1: Cyprus Centre for Environmental Research and Education, CYCERE,  
Agiou Andreou 306, P.O. Box 56091, 3304 - Cyprus University of Tech-  
nology, Lemesos, Cyprus, e-mail: a.chadjihambi@cytanet.com.cy

2: Cyprus Ministry of Education and Culture, Kimonos & Thoukididou,  
1434, Nicosia, Cyprus, e-mail: demhad@ucy.ac.cy

3: Instituto de Educação – Universidade de Lisboa, Alameda da Univer-  
sidade, Lisboa, Portugal, e-mail: preis@ie.ulisboa.pt

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***Address***

Cost Association Address: Avenue Louise 149, 1050 Brussels, Belgium  
Postal Address: Cyprus Centre for Environmental Research and Education  
– CYCERE, Agiou Andreou 306, P.O. Box 56091, 3304, Lemesos, Cyprus.

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## Table of Contents

	page
<b>PART I: European Synthesis of SWOT Analysis</b>	1
<b>Chapter 1:</b> European Synthesis of SWOT Analysis for Education for Environmental Citizenship Andreas Ch. Hadjichambis & Demetra Paraskeva-Hadjichambi	3
<b>PART II: European Countries' Reports</b>	23
<b>Chapter 2:</b> Short Country Report AUSTRIA Katharina Lapin & Florian Leregger	25
<b>Chapter 3:</b> Country Report BOSNIA AND HERZEGOVINA Mirjana Zabic & Gekic Haris	35
<b>Chapter 4:</b> Education for Environmental Citizenship: An opportunity for Flanders BELGIUM? Results of the Flemish SWOT analysis for ENEC Jelle Boeve-de Pauw	51
<b>Chapter 5:</b> Short Country Report for BULGARIA on the SWOT Analysis of Education for Environmental Citizenship Boris Manov & Dilyana Keranova	59
<b>Chapter 6:</b> Education for Environmental Citizenship in CROATIA Slaven Gasparovic & Ivan Sulc	73

<b>Chapter 7: Education for Environmental Citizenship in CYPRUS: A SWOT Analysis</b> Andreas Ch. Hadjichambis & Demetra Paraskeva-Hadjichambi	83
<b>Chapter 8: ENEC Country Report: DENMARK</b> Danielle Wilde, Bjørn Bedsted, Lucas Larsen & Susanne Dau	95
<b>Chapter 9: SWOT Analysis of Education for Environmental Citizenship – Country Report: GREECE</b> George Farangitakis & Themistoklis Sbarounis	111
<b>Chapter 10: SWOT Analysis of Education for Environmental Citizenship – Short HUNGARIAN report</b> Adrienne Csizmady, Imre Kovách & Boldizsár Megyesi	121
<b>Chapter 11: SWOT Analysis of Education for Environmental Citizenship – Short ISRAELI Report</b> Daphne Goldman	133
<b>Chapter 12: ITALY: Short Country Report</b> Daniela Conti & Luca Baglivo	145
<b>Chapter 13: SWOT Analysis of Environmental Citizenship Education in LITHUANIA</b> Mykolas S. Poskus, Audra Balunde & Lina Jovarauskaite	155

<b>Chapter 14: SWOT Analysis of Education for Environmental Citizenship – Short LATVIA Report</b> Maris Klavins	165
<b>Chapter 15: SWOT Analysis of Education for Environmental Citizenship – Short Report for THE NETHERLANDS</b> Frans van Dam & Marie-Christine Knippels	171
<b>Chapter 16: Education for Environmental Citizenship in NORWAY</b> Finn Arne Jørgensen, Lihong Huang & Eli Melby	181
<b>Chapter 17: Education for Environmental Citizenship in PORTUGAL – A SWOT Analysis</b> Pedro Reis	189
<b>Chapter 18: SWOT Analysis of Education for Environmental Citizenship in ROMANIA</b> Rareş Hălbac-Cotoară-Zamfir & Cristina Hălbac-Cotoară-Zamfir	201
<b>Chapter 19: Short Country Report SERBIA</b> Mirjana Lenhardt, Marija Smederevac-Lalić & Vesela Radović	207
<b>Chapter 20: SWOT Analysis of Education for Environmental Citizenship – Short Country Report SLOVAKIA</b> Vladislav Kaputa & Hubert Paluš	219

<b>Chapter 21:</b> SPANISH SWOT Analysis of Education for Environmental Citizenship Marta Romero Ariza	227
<b>Chapter 22:</b> SWOT Analysis of Education for Environmental Citizenship – Short SWEDISH Report Per Sund & Niklas Gericke	245
<b>Chapter 23:</b> Short Country Report Switzerland ENEC COST Action CA16229 Country Report SWITZERLAND Ralph Hansmann, Jérôme Duberry & Nicole Bauer	249
<b>Chapter 24:</b> Short Country Report UNITED KINGDOM Andri Christodoulou & Ralph Levinson	267

## **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.

Dr Andreas Ch. Hadjichambis  
Prof Pedro Reis  
Dr Demetra Paraskeva-Hadjichambi

*European Network for  
Environmental Citizenship  
ENEC Cost Action CA16229*



## 15. SWOT Analysis of Education for Environmental Citizenship – Short Report for the Netherlands

Frans van Dam<sup>1</sup> & Marie-Christine Knippels<sup>2</sup>

1: Freudenthal Institute, Utrecht University, Princetonplein 5, 3584 CC Utrecht, The Netherlands, e-mail: F.W.vanDam@uu.nl

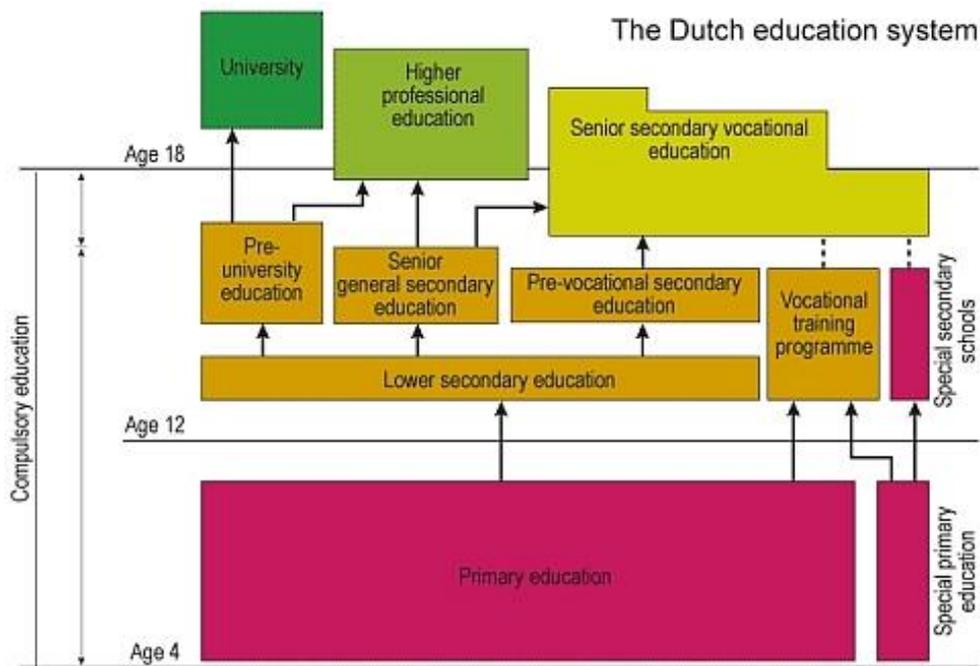
2: Freudenthal Institute, Utrecht University, Princetonplein 5, 3584 CC Utrecht, The Netherlands, e-mail: M.C.P.J.Knippels@uu.nl

**Abstract:** In the Netherlands, over the next few years, the theme of sustainability will be given increasing attention in both primary and secondary education. This is reflected in the increasing attention on the national level, for citizenship and sustainability education. The SWOT analysis shows what respondents regard as strengths: the introduction of new knowledge and skills in the classroom, dealing with planet, people and politics. Education for Environmental Citizenship may support change of attitude of students and introduce new pedagogies in the classroom. It is unique in the sense that it teaches skills and values, and makes students think about real world problems on a global level. However, Education for Environmental Citizenship is not part of formal school curriculums and teachers, who struggle with available time, lack the knowledge and skills required to teach Education for Environmental Citizenship. In addition, respondents questioned whether Education for Environmental Citizenship positions itself inside or outside politics and pointed at the existing gap between citizenship education and sustainability. A threat for Education for Environmental Citizenship concerns the previous ponderous experiences of implementing Environmental Education (EE), Education for Sustainable Development (ESD) and Citizenship Education (CE) in education. Opportunities for Education for Environmental Citizenship include the introduction of critical questioning in education, uncertainty, real world problem solving and twenty-first century skills. The weakness and threats for Education for Environmental Citizenship mainly concern formal education. In non-formal education, fewer obstacles exist. Crossing the boundaries between the two would foster Education for Environmental Citizenship. Although secondary school students are better at problem solving and designing research projects, the integral teaching in primary education offers more opportunities for school-wide topics, such as the environment.

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## 15.1 Introduction

The Netherlands has about 17 Million inhabitants of which approximately 3.75 million are between 4 and 18 years old. The Dutch school system is divided in primary education (age 4-12), secondary education (age 12-18), and higher education. Secondary education is divided into four main tracks: a) pre-university education (a total of 6 years); b) senior general secondary education (a total of 5 years); c) pre-vocational education (a total of 4 years); and d) vocational training programme (a total of 4 years). Each level gives access to different higher education institutes, (i.e. university (a), higher professional education (b), senior secondary vocational education (c & d), (see Figure 15.1).



**Figure 15.1: Overview Dutch education system**

The current division of students over the different educational levels is depicted in Table 15.1 (school year 2016-2017).

**Table 15.1 Overview number of institutes in the Dutch School System and number of students per education level in 2016-2017.**

<b>Educational level</b>	<b>Nr of institutes</b>	<b>Students 2016-2017</b>
Primary education	6 894	1 528 422
Secondary education	648	995 725
Senior Secondary Vocational Education	66	483 922
Higher Professional Education	37	446 585
University	19	267 905

Source: CBS, 2018

As indicated in the Seventh Netherlands National Communication under the United Nations Framework Convention on Climate Change report (p. 198-199) [Ministry of Economic Affairs and Climate Policy, 2018]:

In 2014, youth organisations joined forces and urged for an increase in education for sustainable development (ESD). Together with multinational corporations, teacher unions and research institutes, the youth organisations managed to sign an agreement with a majority of Parliament to take the next step in education for sustainable development. The government reacted to this agreement with a request for comprehensive research on two points: 1) how are we currently doing in terms of education for sustainable development and 2) what is needed to take things forward?

The report<sup>6</sup>, published in 2015, notes that one of the areas where the Netherlands is performing well (in an international perspective) is taking an integrated approach to education for sustainable development. Research by UNECE, among others, shows that education for sustainable development in many countries is restricted to “green themes” within the realm of nature or the environment and is focused on primary education. In the Netherlands, there tends to be a more comprehensive view of education for sustainable development. Having said so, the report notes that – especially in the formal education system – there is limited support for schools to move forward on this topic. Furthermore, structural implementation is far from optimal.

The research found that only a very limited number of schools effectively integrated education for sustainable development. The classification “sustainable educational institution” was awarded to 4% of schools in primary education, 9% in secondary education, 7% of higher education institutions and 11% of research universities.

Over the next few years, the theme of sustainability will be given increasing attention in primary and secondary education. It will also be included in the comprehensive review of the formal primary and secondary education curriculum, launched in 2016. The ideal situation is when

<sup>6</sup> Rapportage Onderzoek Duurzaam Onderwijs, 2015

<https://www.rijksoverheid.nl/documenten/rapporten/2015/06/29/rapportage-onderzoek-duurzaam-onderwijs>

schools apply the curriculum content alongside sustainable operational management and integration of sustainability concepts in their own policies as well as in their relationships with local sustainability partners. Both the ACE National Focal Point (climate envoy) and the Dutch youth representatives are involved in this process to ensure that sustainability is properly integrated.

This is reflected in the increasing attention on the national level (Onderwijs 2032, curriculum.nu) for citizenship education and to adhere more to fostering twenty-first century skills and make the substance of the education system more future proof. ‘Onderwijs 2032’ (Education 2032) was a large consultative process launched by the Dutch government on the future for education. The importance of citizenship education (for sustainability) is also reflected by the Dutch national science curriculum for both lower and upper secondary education (SLO). For instance, the curricular aim A9 ‘waarderen en oordelen’ (‘to value and evaluate’) – which asks for evaluation of situations in nature and technological applications, using scientific arguments, normative considerations, and personal opinions – is incorporated in the national examination requirements for upper secondary curriculum of biology, chemistry, and physics since 2016 (CvTE, 2016). For lower secondary education, the ‘Kennisbases’ (‘Knowledge base’) included sustainability thinking (‘denkwijze duurzaamheid’) as a specific way of thinking to the science curriculum.

## 15.2 SWOT analysis

In the period January to March 2018, a total of eight persons were approached by the authors and responded to the online survey by ENEC:

**Table 15.2** Characteristic of respondents.

Nr	Type of expertise	Gender	Age	Education
1	Decision-maker in educational professional society	F	41-50	Master
2	Decision-maker in educational professional society	M	41-50	Master
3	Educator/teacher secondary school	M	51-60	Master
4	Educator/teacher secondary school	F	31-40	Master
5	Decision-maker in educational professional society / NGO	M	51-60	Master
6	Policy-maker	M	51-60	Master
7	Researcher	M	51-60	PhD
8	Researcher	M	>60	PhD

In this report, the following abbreviations are used:

EEC Education for Environmental Citizenship

ESD Education for Sustainable Development

EE Environmental Education  
 CE Citizenship Education

### ***15.2.1 Strengths***

#### **Knowledge**

According to one respondent, the ‘environment’ constitutes a new element in citizenship education. Other respondents summed up the types of knowledge that Education for Environmental Citizenship would introduce: to become acquainted with real wicked problems, understand the world learners / citizens live in, and learn twenty-first century skills. Students get a wider perspective of sustainability, including social justice and poverty alleviation. In summary, bringing the three dimensions – planet, people, and politics – together is of vital importance in moving towards sustainability.

#### **Attitude**

In terms of attitude, students become aware that their actions impact the environment. They learn how to think critically, also about the consequences of and for their own behaviour. Through Education for Environmental Citizenship they could become ‘good citizens’ and acquire the competences to act.

#### **Pedagogies**

Education for Environmental Citizenship helps to change learning approaches, as it could introduce the whole-school approach, activity-based learning and discovery-based learning (starting from the curiosity of students). Finally, it combines social and ecological aspects. According to one respondent, Education for Environmental Citizenship can mobilise actors who apparently have not been mobilised by ESD, EE, development education, and other ‘adjectival’ educations.

#### **ESD as container concept**

Four respondents regarded ESD as the container concept of which Education for Environmental Citizenship is part. One respondent turned this around: Education for Environmental Citizenship as the container term for EE, ESD, SE and CE. The answers show that there is substantial overlap between ESD and Education for Environmental Citizenship, as is in accordance with Table 18.3.

One respondent stressed that Education for Environmental Citizenship combines the other concepts. However, in Education for Environmental Citizenship the social aspect is stronger than in the other areas and, so far, the aspects of citizenship have not been combined with EE or SE; this combination provides an opportunity. A second respondent remarked that the focus on citizenship could provide for a whole person/lifestyle approach which connects with community and solidarity, rather than a behavioural approach, which tends to be overly instrumental and lacks attention for values and assumptions.

### **Unique features**

Education for Environmental Citizenship is unique in the sense that it teaches skills and values and makes students think on the global level about real world problems. Moreover, students can do research taking various perspectives, e.g. their personal perspective, the perspective of a citizen, or a politician, and make choices based on values. Also mentioned were opportunities for multi- and transdisciplinarity, school-wide projects and system thinking skills.

## ***15.2.2 Weaknesses***

### **Practical shortcomings**

Most respondents indicated that Education for Environmental Citizenship and ESD are not traditional school subjects, there are no official exams, and the teachers or subjects do not feel responsible. Many teachers lack the competences and the ability to oversee the big picture; therefore, at present, teaching citizenship depends on the skills of individual teachers. Citizenship is not (enough) educated in teacher colleges and is not part of the formal curriculum tests. Therefore, the position of citizenship education is weak. Moreover, Education for Environmental Citizenship could be framed as another ‘social issue dumped at schools’.

### **Theoretical criticism**

Two respondents criticised current theoretical thinking on Education for Environmental Citizenship; it is exclusively focused on a radical idea of democratic citizenship, emphasising spaces of critical deliberative debate outside the political system, instead of positioning itself within the reality of an imperfect, but actually existing political system. Another respondent saw a gap between citizenship and sustainability: a regular content of citizenship education is ‘learning about the political system and parliamentary democracy’ rather than about one’s everyday choices and responsibilities. However, in practice, citizenship is seldom related to sustainability.

### **Improvements**

Improvements listed by the respondents were the following:

- teacher training,
- good practices for teachers,
- providing didactics for Education for Environmental Citizenship,
- connecting various subjects with each other,
- providing clear definitions of the terms used,
- stronger position in the curriculum.

The main change that should be avoided, according to several respondents, would be to start ‘a new thing’, like a new subject or sending schools glossy mate-

rials. Better to develop materials that teachers can adapt and integrate in their current teaching. Education for Environmental Citizenship should not compete with existing subjects such as ESD and EE. Moreover, moralising in teaching materials (or teachers) should be avoided.

### ***15.2.3 Opportunities***

Education for Environmental Citizenship could support different pedagogies such as context-rich teaching, learning in interdisciplinary settings, involving students in real-world problem solving, political debate of intercultural society at schools, and twenty-first century skills. It would also introduce critical questioning and how to deal with uncertainty, as well as systemic and personal responsibilities. In addition, Education for Environmental Citizenship could help to improve existing educational frameworks such as CE and EE. One respondent stressed the possibilities for treating topics, such as waste, climate change and food that is healthy for both people and planet.

#### **Trends strengthening Education for Environmental Citizenship**

A number of trends can improve the opportunities for Education for Environmental Citizenship. In addition to trends in climate change as such, the following were mentioned:

- secondary education: sustainability competences are part of the new exam programmes for science subjects,
- higher education: growing number of academic studies (bachelor and master) that focus on environmental issues,
- transitions in food, energy and economics – towards more shared, localised and circular systems,
- ‘the energetic society’ in which social innovation requires individual action and collective effort,
- increased awareness among political and business leaders that citizen engagement is crucial in successfully bringing about environmental change,
- increased speed of changing environmental issues after the Paris treaty.

### ***15.2.4 Threats***

Respondents mentioned a variety of obstacles, mostly similar to the points seen as weaknesses of Education for Environmental Citizenship. One respondent said that political choices need to be made first. Another one stressed the fact that technocratic view on environmental change is the biggest obstacle.

Respondents also mentioned the following obstacles: curriculum overload/lack of time, lack of teacher awareness and motivation, lack of support by school leadership, lack of teacher competences, overlap with related educational programmes such as ESD, and the absence of formal exams. From previous experiences of implementing EE, ESD and CE in education, implementing Education for Environmental Citizenship in formal education will be hard. It could also be regarded as a set of ideas that can be taken up in EE, CE or ESD, and in this way, they will all benefit.

Teaching materials for Education for Environmental Citizenship are scarce, according to two respondents, while another refers to an overload of EE materials for primary, secondary and vocational education. At the same time, many of these materials are scattered over schools, publishers and NGOs.

### ***15.2.5 Differences between formal and non-formal education***

Formal education has the advantage that all youngsters can be reached, as in non-formal education only 'believers' are engaged. Other respondents said that many Education for Environmental Citizenship aspects are non-formal at present, where it does not encounter that many difficulties, and could be made more formal. This is confirmed by some else who says that the weaknesses and threats are mainly related to formal education. Non-formal and informal education are important as in these, Education for Environmental Citizenship is part of 'social innovation'. Moreover, in non-formal education, politicians, teachers and policy-makers in particular should be role models. Finally, one respondent stressed the need to cross boundaries and create ecologies of learning with an ethic of care and empathy; this will inevitably mean that the boundaries between formal and non-formal will be blurred.

### ***15.2.6 Differences between primary and secondary education***

Learning objectives in primary education would be more orientated at awareness, and in secondary at problem solving. Several respondents stressed the advantages for primary education, where teaching is more integral and ethical questions are more implicit, while in secondary education the fragmentation in different subjects limits Education for Environmental Citizenship. On the other hand, in secondary education, more options for doing research exist and values related to the developing/existing situations around school or in (local) politics can be discussed. This is reflected in the (Dutch) concept-context methodology in secondary science teaching, which offers opportunities for Education for Environmental Citizenship.

**Table 15.3 Similarities between Education for Environmental Citizenship and related concepts.**

Question on a scale of 1-5	Min	Mean	Max
In what degree the Education for Environmental Citizenship (EEC) is similar with Environmental Education (EE)?	3	3.8	5
In what degree the Education for Environmental Citizenship (EEC) is similar with Education for Sustainable Development (ESD)?	4	4.5	5
In what degree the Education for Environmental Citizenship (EEC) is similar with Science Education (SE)?	1	2	3
In what degree the Education for Environmental Citizenship (EEC) is similar with Citizenship Education (CE)?	3	3.8	5

### 15.3 Conclusion

In The Netherlands over the next few years, the theme of sustainability will be given increasing attention in both primary and secondary education. This is reflected in the increasing attention on the national level for citizenship and sustainability education.

The SWOT analysis shows what respondents regard as strengths: the introduction of new knowledge and skills in the classroom, dealing with planet, people and politics. Education for Environmental Citizenship may support a change of attitude of students and introduce new pedagogies in the classroom. It is unique in the sense that it teaches skills and values and makes students think about real world problems on a global level.

Many weaknesses, threats (and possible improvements) for teaching Education for Environmental Citizenship are of a practical nature. Education for Environmental Citizenship is not part of formal school curriculums and teachers, who struggle with available time lack the knowledge and skills required to teach Education for Environmental Citizenship. In addition, fundamental critique should also be taken into account relating to the question whether Education for Environmental Citizenship positions itself inside or outside politics and the existing gap between citizenship education and sustainability. A threat for Education for Environmental Citizenship concerns the previous ponderous experiences of implementing EE, ESD and CE in education.

In line with the strengths, many opportunities for Education for Environmental Citizenship exist, such as introducing critical questioning in education, uncertainty, real world problem solving, and twenty-first century skills. Moreover, a number of trends, inside and outside (secondary and higher) of education support Education for Environmental Citizenship, from increased political awareness to the introduction of sustainability competences at school.

The weaknesses and threats for Education for Environmental Citizenship mainly concern formal education. In non-formal education on the other hand, there are fewer obstacles explaining why most Education for Environmental Citizenship activities are non-formal, at present. Crossing the boundaries between the two would foster Education for Environmental Citizenship. Although secondary school students are better at problem solving and designing research projects, the integral teaching in primary education offers more opportunities for topics that overarch school subjects, such as the environment. According to the respondents, Education for Environmental Citizenship largely resembles ESD and to a lesser extent EE and CE. However, they hardly see similarities with Science Education.

## 15.4 Reference

- SLO, <http://handreikingschoolexamen.slo.nl/biologie-hv/toetsen-in-het-schoolexamen/de-eindtermen-van-het-schoolexamen/domein-a-vaardigheden/natuurwetenschappelijke-vaardigheden/subdomein-a9-waarderen-en-oordelen>.
- CBS, Centraal Bureau voor de Statistiek, 2018: [www.cbs.nl/https://opendata.cbs.nl/statline/#/CBS/nl/dataset/03753/table?dl=3DE0](http://www.cbs.nl/https://opendata.cbs.nl/statline/#/CBS/nl/dataset/03753/table?dl=3DE0).
- College voor Toetsen en Examens (CvTE) (2016) *Examenblad 2019*. Available at: <https://www.examenblad.nl/>
- Ministry of Economic Affairs and Climate Policy, 2017 [http://unfccc.int/files/national\\_reports/annex\\_i\\_natcom/submitted\\_natcom/application/pdf/seventh\\_netherlands\\_national\\_communication\\_under\\_the\\_unfccc.pdf](http://unfccc.int/files/national_reports/annex_i_natcom/submitted_natcom/application/pdf/seventh_netherlands_national_communication_under_the_unfccc.pdf).
- Onderwijs 2032, [www.curriculum.nu](http://www.curriculum.nu).

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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