# European SWOT Analysis on Education for Environmental Citizenship



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



#### **ENEC Cost Action Report**

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Edited by

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٦	7

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

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

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

Chapter 21: SPANISH SWOT Analysis of	227
Education for Environmental Citizenship	
Marta Romero Ariza	
Chapter 22: SWOT Analysis of Education for	245
Environmental Citizenship –	
Short SWEDISH Report	
Per Sund & Niklas Gericke	
Tot build to Tilking Gottone	
Chapter 23: Short Country Report Switzerland	249
ENEC COST Action CA16229	
Country Report SWITZERLAND	
Ralph Hansmann, Jérôme Duberry & Nicole Bauer	
Raiph Hanshaim, serome Bucerry & Pricore Bucer	
Chapter 24: Short Country Report UNITED	267
KINGDOM	
Andri Christodoulou & Ralph Levinson	

#### **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 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.

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

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#### 8. ENEC Country Report: Denmark

## SWOT analysis on Education for Environmental Citizenship in Denmark

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Abstract: This chapter presents the strengths, weaknesses, opportunities and threats of Education for Environmental Citizenship in Denmark, identified through a survey of a select range of expert stakeholders. We received responses from seven experts: two decision-makers at national NGOs, two decision-makers in Educational Professional Society (EPS), an academic researcher, a Danish school teacher covering primary and lower secondary education, and a policy-maker representing the Danish Ministry of Education at the municipal level. Their responses provide a broad view of the strengths, weaknesses, opportunities and threats of Education for Environmental Citizenship in Denmark. To afford diffractive reading of our outcomes—and thus a plurality of perspectives on the relevance of how Education for Environmental Citizenship is perceived and practiced in Denmark—we have chosen to juxtapose our respondents' comments, rather than synthesise them into a singular perspective. We thereby invite the reader to consider our findings in light of their own particular contexts of practice.

**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).

#### 8.1 Strengths

We begin with an account of the respondents' opinions on the strengths of Education for Environmental Citizenship in terms of its advantages and uniqueness in comparison with other types of education.

#### 8.1.1 Advantages of Education for Environmental Citizenship

A number of significant advantages of Education for Environmental Citizenship have been highlighted by our respondents. According to the NGO decision-makers:

Education for Environmental Citizenship can offer a sense of meaning to citizens and engage young people in shaping the society of tomorrow, by encouraging them to actively protect the environment.

As the educator (a Danish school teacher) explained, Education for Environmental Citizenship enables students to become responsible and make qualified choices. The EPS decision-makers concur, stating that Education for Environmental Citizenship helps to educate active, informed and responsible citizens, who are willing and able to take responsibility for themselves and for their communities at the local, regional, national and international level in relation to the environment. It helps to educate citizens to interact effectively and constructively with others, think critically, and act in a socially responsible and democratic manner. It thus helps to celebrate participatory culture and co-creation of society—important values in Denmark; and helps to create a meta-narrative, such that sustainable development is possible.

In these ways, Education for Environmental Citizenship helps to foster the harmonious co-existence and mutually beneficial development of individuals and of the communities they are part of. As the EPS decision-makers stressed, such development is important for the next generation to learn about, get experiences of and internalise, environmental behaviour. Education for Environmental Citizenship also helps people grasp the fact that humans live in a new technological and geological era. Human societies evolve through different stages for better or worse, and Education for Environmental Citizenship assists people to take this evolution into account. It does so by framing sustainability and resilience as fundamental questions to all social life.

The academic researcher stressed similar advantages, and raised the issue of complexity, stating:

[Education for Environmental Citizenship brings] an awareness and understanding of the conflicting interests related to environmental issues, on a personal level, interpersonal level and on the structural level. Environmental issues are controversial and complex issues, not technical problems. There are no 'right' solutions to environmental issues; it all depends on the priorities of society and the citizens.

A plurality of perspectives must, therefore, be taken into account. Similarly, the EPS decision-makers underlined the fact that there are many different environmental citizenship identities in play at the same time. In their view, Education for Environmental Citizenship assists people in understanding this plurality, along with the fact that we have to take responsibility for sustainable development.

In terms of educating for Environmental Citizenship, the academic researcher suggested that Education for Environmental Citizenship can offer a focal point

among educators from different subject areas to come together with common goals and inspire each other in pedagogy: it simultaneously offers learners and citizens an existential perspective, enabling them to find personal relevance in the curriculum and context of learning. Education for Environmental Citizenship thus provides the means to consider—and make affordances for—this plurality. It also affords lifelong learning.

Building on these strengths, the policy-maker suggested that Education for Environmental Citizenship can both enhance citizens' knowledge about the environment and their skills and competences to participate through hands-on active citizenship—for example, through rubbish recycling. Such enhanced competencies, enacted through everyday real-world actions, enable citizens to take responsibility and involve themselves in the transition of the whole of society. As the policy-maker explains, a municipality or national government can have green goals and ambitions, but it cannot ensure a green transition on its own. Hands-on active citizenship is important.

### 8.1.2 Comparing education: building on a foundation of political Bildung

A key question for respondents relates to the aspects of Education for Environmental Citizenship that make it unique or better in comparison with other types of education such as EE, ESD, SE and CE. Tables 11.1 and 11.2 in Appendix A provide a visual overview of respondent's comparison of Education for Environmental Citizenship with each of these educations on a scale from one to five, where one is close and five is far apart. In this section we detail their comments, beginning with the academic researcher who draws on the historical development of the Danish educational system over the last 30 years to explicate environmental education in Denmark and its perceived benefits. The researcher does not discuss Education for Environmental Citizenship, as the term is not in common usage in the Danish context. Instead, they explicate the relation between the other forms of education:

In the Danish version of Environmental Education, we have since around 1985 seen EE as a mainly democratic educational effort, very near to political 'Bildung' with a focus on enhancing the 'action competence' of the learner. Therefore, it isn't that meaningful in the Danish context to compare the areas mentioned in the question. You will find many papers and school reports about these aspects from our Research Center for Environmental and Health Education at DPU (n.d.). In our view this Danish understanding of EE is very close to the latest understanding of ESD.

They go on to explain that they have one leg in EE/ESD and the other in science education and find EE/ESD relevant for many subject areas, including SE which,

<sup>&</sup>lt;sup>2</sup> Editor's note: *Bildung* is a German word, often used in both English and Danish to denote the acquisition of a cultivated outlook, or a Liberal Education. For a discussion of bildung in the Danish context, see (Olesen, 2011).

like any subject area, has many obligations and perspectives. They stressed that EE/ESD adds extra perspectives, knowledge and concepts to the whole school curriculum, and finish their comments with this powerful statement:

In my long-time engagement in EE and ESD in several countries the main conclusion is that these efforts MUST NOT TEACH SOLUTIONS but help engage students in issues of their own engagement of relevance for development and help them to do something meaningful about it according to their own visions.

The EPS decision-makers emphasised that Education for Environmental Citizenship is focused on subjective experience, social constructions, identity and values related to the environment. It can therefore be used to bring focus to and articulate different concepts of Environmental Citizenship identities, and assist people to see that humans in traditional, modern, post- and meta-modern societies have different identities and values. In bringing to light these differences, Education for Environmental Citizenship helps to bring focus to moral environmental questions based on different identities and values and build bridges between these identities and values. Furthermore, Education for Environmental Citizenship criticises existing environmental identities and their sources and supports learning experiences informed by diverse concepts of Environmental Citizenship and identity. The EPS decision-makers comments take us back to the issue of plurality of perspectives and how Education for Environmental Citizenship can equip citizens to engage with this plurality. As a final note, they offer the fact that education in the Danish public school system is based on a national curriculum, wherein environmental subjects are mostly based in the natural sciences. The EU project, Open Schools for Open Societies (n.d.), promotes partnerships between schools, private companies and organisations, and is offering a new frame for extending learning processes in Environmental Citizenship. They did not go deeply into these possibilities, which were not mentioned by any of our other experts.

In contrast to the general agreement among the other respondents, the two NGO decision-makers offered differing views to each other. The first stated that their organisation did not distinguish between the different types of education mentioned. Whereas, the other suggested that EE and ESD can lead to Education for Environmental Citizenship, which redefines the relationship of people and nature. Specifically, they said that Education for Environmental Citizenship provides a way of looking at one's entire life and how one interacts with nature at all times. The policy-maker concurred with this perspective, providing the view that Education for Environmental Citizenship could be both holistic and focused on practical use, as it brings focus to both environmental and social aspects of complex issues. They do caution, though, that to understand complex environmental issues and successfully associate active citizenship with environmental and sustainable development, basic knowledge of all aspects of classic education—including science and language—are a necessary prerequisite.

The educator pointed out that many of these educations (Education for Environmental Citizenship, Environmental Citizenship and ESD) are similar in the way that they make students critical consumers. Yet, Education for Environmental Citizenship is unique in the sense that it isolates different elements or factors—such as the individual, the citizen, the surrounding environment and the future—to assess them from a distance. It thereby helps stakeholders to see their overall responsibility.

#### 8.1.3 Strengths from the perspective of educators

When asked specifically about what respondents thought people in education would see as strengths of Education for Environmental Citizenship, many of the already mentioned advantages and strengths were revisited. The EPS decision-makers further suggested that the possibility to include identity and values, and work with cocreation in the educational praxis was a strength. By bringing focus to engagement, process and empowerment, they suggest Education for Environmental Citizenship not only illustrates problems, but offers an opportunity to develop solutions.

The NGO decision-makers posit that working with Education for Environmental Citizenship strengthens students' knowledge, attitude, skills and participation. The educator, with first-hand knowledge of education in classrooms, stated that the strength of Education for Environmental Citizenship is that it makes young people responsible—more aware of and likely to care for their future and the futures of their fellow human beings. The policy-maker saw a clearly favourable connection between what the government sees as necessary in modern education—in Denmark, holistic and case-oriented teaching—and what active citizenship (part of Education for Environmental Citizenship) brings with it: working together to find solutions to complex cases by drawing on and combining a wide array of classic topics.

Our respondents were very positive when discussing the strengths of Education for Environmental Citizenship, particularly in light of the complexity of the issues that humanity is facing, and how we might build more responsive and responsible citizens. Overall, they see it as a positive addition to the education landscape, with the policy-maker going so far as to say that, since COP21 in Paris (COP21, n.d.), businesses across Europe that have any intention of thriving have developed a sustainability charter and, when looking for employees, are looking for the kinds of competencies that Education for Environmental Citizenship brings (UNDP, n.d.).

#### 8.2 Weaknesses

In this section we lay out the respondents' thoughts on the weaknesses of Education for Environmental Citizenship in a Danish context. We first present the main weaknesses as seen from their perspectives. We then follow with areas for improvement and thoughts on what needs to be avoided.

#### 8.2.1 Challenges

Education for Environmental Citizenship is ambiguous, according to six of our respondents (the NGOs, the EPS decision-makers, the academic researcher and the policy-maker). It is comprised of complex concepts that can easily be misunderstood. The academic researcher explained that this ambiguity can be particularly problematic when we consider that, even in related fields, different understandings can exists side by side among different people, countries and organisations.

To illustrate their concern, the EPS decision-makers enumerated what they saw as three key tendencies of Education for Environmental Citizenship: 1) to relativise knowledge and turn everything into an identity project, 2) to overlook the fact that how science and technology are used shapes an agenda and logic, in turn shaping and steering people and history, and 3) there is a tendency within Education for Environmental Citizenship not to accept hierarchies within complexity.

The policy-maker pointed to the dilemma that Education for Environmental Citizenship tries to tackle broad and complex topics and issues, stating that one could be concerned about whether it would include specialists who are able to go into the kind of detail that deep learning of a topic requires. They suggest that people who are extremely specialised often lack a holistic understanding of an issue. At the same time, a generalist may inadvertently overlook important details. Education for Environmental Citizenship needs to be inclusive and balanced to truly be holistic. The policy-maker suggested that this weakness could be overcome by ensuring inclusion of different specialists in Education for Environmental Citizenship.

Finally, the educator pointed out that Education for Environmental Citizenship focuses too much on responsibility and too little on how to manage the future. They note that needs in Denmark may be different from those countries that lack environmental consciousness, however, they nonetheless see this aspect as a weakness.

#### 8.2.2 Room for improvement

When asked how Education for Environmental Citizenship could improve, the academic researcher suggested considering the Danish concept of 'miljøbevidsthed', which translates to concern for the environment, or being environmentally conscious. Instead of trying to focus on the behaviour of people, 'miljøbevidsthed' focuses on the intentions of the person and her or his framework for decision making, to know if the person behaves with environmental concern. An example is if a person takes an environmental perspective into account even when the situation does not require them to do so.

One of the EPS decision-makers suggested another way Education for Environmental Citizenship could improve is by drawing on and combining knowledge from other educations. For example, it could borrow from EE a larger focus on Science-Technology-Society-Environment relations; the environmental aspects of STEM

(Science, Technology, Engineering and Mathematics)(Breiner et al., 2012); and the historical and generational aspects of ESD.

The educator stressed that Education for Environmental Citizenship might improve by addressing the issue of how to manage in a world where not everybody is aware of environmental responsibility. This would require teaching individual students to see their own role in the big picture and not only the big picture.

The second EPS decision-maker proposed a practical improvement for people in Education for Environmental Citizenship, suggesting that they need to communicate their concepts more clearly and better coordinate their ideas with both curriculum- and policy-makers. Doing so would impact the underlying infrastructures that support knowledge generation and acquisition. In complement, the policy-maker believed that active citizenship (a key aspect of Education for Environmental Citizenship) should receive more focus in the curriculum in Danish schools. They suggested that a particular legacy of the Danish social system is that people often lack responsibility because they are used to being taken care of by the public sector. In this context, active citizenship needs to be 'reinvented' by, for example, introducing it through educations such as Education for Environmental Citizenship.

#### 8.2.3 What to avoid

When asked what Education for Environmental Citizenship should avoid and what students/teachers are likely to see as weaknesses, the educator mentioned the sometimes dominant focus on the 'right' way to live. They stressed that it is important that students understand why some people are forced to make other choices. The policy-maker touched upon the same theme, stating that the educational approach should not become some kind of religious mantra, but that Education for Environmental Citizenship needs to remain scientific:

The environmental sector should be run by reason, not by emotions, as some groups claim. Therefore, it is important to have ethics and moral aspects in place, as well as the scientific ones.

The policy-maker further emphasised that it is difficult and challenging for teachers to embrace a holistic approach in Education for Environmental Citizenship because it is not what they learned themselves in teacher training or at university. Working with a holistic approach takes a lot of preparation. For this reason, it is extremely important that societies support the teachers – otherwise they might perceive the need for a holistic approach in Education for Environmental Citizenship as too big a challenge. Similarly, the policy-maker pointed out that environmental topics can become complex and difficult for some students. They suggested that, to help students engage and thus overcome the barriers of complexity, the focus should be on a hands-on approach that deals with problems that are relatable to everyday life.

The second EPS decision-maker agreed, stressing that Education for Environmental Citizenship should not let go of the hands-on approach. Further, it should make visible to students and educators that their hands-on Education for Environmental Citizenship practices make a positive difference. They suggested that this affirmation would assist the students and educators in seeing that their efforts are worth it.

Coming from a slightly different perspective, the first EPS decision-maker suggested that Education for Environmental Citizenship should avoid its tendency to not take the world-making capacities of science and technology seriously enough. As noted above, the way we use science and technology does not have to be deterministic. Nonetheless, practices can shape an agenda and logic, in turn shaping and steering people and history. The academic researcher thought that teachers and student may consider it a weakness of Education for Environmental Citizenship that it has a 'blurred outline' through which it can be difficult to identify the central ideas. As the EPS decision-maker reported, science teachers may also view the tendency within Education for Environmental Citizenship to relativise knowledge as a significant weakness.

When asked about which factors may eliminate the success of Education for Environmental Citizenship, the two NGO decision-makers spoke to the same issue from divergent perspectives. The first suggested that if political decision-makers, organisations and society do not allow for newly Education for Environmental Citizenship-educated citizens to follow their dreams, ideas and projects, this will be a major impediment. Whereas, the second NGO decision-maker suggested that the students themselves need to be involved in the decision-making processes. If not, they caution, they will not be able to develop their newfound ability to make decisions and act upon them.

The policy-maker stated that in Denmark, despite a top-down directive to have a more holistic approach to education, there is a very high focus on testing pupils and politicians constantly want more control over children's education. As a result, schools waste a lot of time preparing children for tests and do not have time for holistic approaches such as Education for Environmental Citizenship. For Education for Environmental Citizenship to be successful, teachers and students need to undertake a process of learning by doing and finding their own, perhaps unique, solutions. The first EPS decision-maker also cautioned that Education for Environmental Citizenship should be sure to coordinate with the existing curriculum and focus areas. If it comes across as too different or oppositional, it may not be accepted, and would be difficult to implement in the established education system.

In contrast to the above concerns for integration, the second EPS decision-maker expressed concern that Education for Environmental Citizenship might simply become a new buzzword that does not integrate the best of EE or ESD or SE. The educator also feared that Education for Environmental Citizenship may lack coherence for people living in countries that are less environmentally conscious than Denmark.

#### 8.3 Opportunities

Building on the strengths and weaknesses of Education for Environmental Citizenship, the experts weighed in on how these may open up towards opportunities—now, with the current state of play, as well as in the future, through interesting trends that can improve the opportunities of Education for Environmental Citizenship.

One NGO decision-maker pointed out that Danish political society increasingly involves citizens in public solution-making, in particular in relation to environmental issues. They suggested that Education for Environmental Citizenship could be a helpful tool in helping participants develop the necessary sense of belonging to increase their participation in local democracy. The other NGO decision-maker highlighted the widespread adoption of the UN's global goals for Sustainability (SDGs)(n.d.), which they suggest opens up opportunities for Education for Environmental Citizenship, due to the interrelated nature of the content, logic and approach of SDG and Education for Environmental Citizenship could thus prepare and equip students for participating in broadly recognisable sustainable development.

The educator also highlighted the SDGs, and mentioned other trends such as FabLabs (Walter-Hermann & Büching, 2014), STEM, upcycling of building materials and clothes, pre-cycling, growing food and other forms of minimalism, which feed into the content and teachings of Education for Environmental Citizenship (King et al., 2006, Gillian et al., 1996, Alexander and Ussher, 2012). They further suggest that the changing focus towards understanding responsibility when inventing future technologies and making future inventions based on environmental impact could also be an opportunity for extending the impact of Education for Environmental Citizenship.

The academic researcher identified an emerging trend to criticise the test-result oriented education system in Denmark, going so far as to suggest that Denmark should neglect their engagement in PISA tests (OECD, n.d.) and New Public Management (Lane, 2002), and instead support innovative teachers in trying out new ideas of their own. This approach would engender an educational system that brings strong focus on sustainable development entrepreneurship, climate issues and other important environmental matters. In such an environment, learners could develop many useful competences, including: creativity, innovation and the ability to act with long-term, ecological, economic and social perspectives. They would become absorbed in Environmental Citizenship aspects for life.

The policy-maker considered changing trends and demands for businesses and companies as opportunities for Education for Environmental Citizenship. They explained that many major companies now work with the SDGs. There is great competition amongst companies not to be left behind when it comes to sustainability, and even the most conservative sectors seem willing to embrace the change in order to stay in business. In terms of employment, the policy-maker saw the increasing demand for specialists with environmental knowhow, which Education for Environmental Citizenship might be able to provide.

One EPS decision-maker identified several trends that suggest opportunity-openings for Education for Environmental Citizenship: a renewable energy revolution, a sustainable fourth generation industrial revolution, a post materialist turn (Inglehart, 1981), and a more listening society that focuses more on life quality than Gross National Product. A society that accepts that humans have different Environmental Citizenship identities and values, partly based on if the mindset is traditional, modern, post- or meta-modern and how we as a society can secure a sustainable and peaceful co-existence. One specific opportunity could be if Education for Environmental Citizenship becomes an umbrella or platform that includes the best of EE, ESD and SE. It could then be considered a factor in the EU's growth strategy (Europe 2020) (EC, 2010, Marlier, 2010) and its vision for Sustainable Development, Green and Cycle economy and low-carbon society (EU-roadmap 2050)(EC, 2012). The other EPS decision-maker stated that in addition to the SDGs, many local political goals for CO2-reduction, transportation, energy production etc. (e.g. municipal climate and energy plans (e.g., Danish Energy Agency, 2015)) could also call for Education for Environmental Citizenship to better enable people to make the necessary changes and reach those (SDG) goals.

#### 8.4 Threats

This section covers the threats and obstacles to Education for Environmental Citizenship as identified by the respondents.

The educator considered the biggest threat to be the fact that:

In Denmark, the community by and large is not ready to accept the prospect of economic (growth) limitations in order to care for the future environment. Yet, this tenet is a central part of Education for Environmental Citizenship.

Other respondents were more focused on threats to Education for Environmental Citizenship within the existing education system. One EPS decision-maker stated that Education for Environmental Citizenship would have a hard time becoming a part of the curriculum as the other types of education (CE, SE and ESD) have already taught topics like Environmental Citizenship, possibly making Education for Environmental Citizenship seem redundant. The other EPS decision-maker perceived the lack of coordination of existing teaching programmes in the education system as a real impediment to achieve proper integration of Education for Environmental Citizenship. Furthermore, neglect of local engagement was seen as an obstacle.

The policy-maker, while being focused on the current state of the Danish education system, argued that the real obstacle was the decisions made at the governmental level. Political prioritisation—for example, lowering taxes and increasing public expenditure on elderly care—has for a long time put stress on the education budget,

and thereby on the system itself. This stress, combined with the fact that the education system has become more test-oriented and systemized, poses a threat to Education for Environmental Citizenship, which requires more resources for preparation time and additional training than current methods. Furthermore, the content of Education for Environmental Citizenship cannot be systemized or based on standard teaching materials.

When asked specifically what the other aforementioned types of education do better than Education for Environmental Citizenship, the teacher and an EPS decision-maker respectively stated that SE and Innovation and Entrepreneurship are more aware of the technological achievements and the correlation between science and technology (STEM approach) than Education for Environmental Citizenship.

#### 8.5 Differences

In this section we discuss the differences that emerged in the SWOT questionnaire process between (a) formal and non-formal education, and (b) primary and secondary education in Denmark. It should be noted that primary education in Denmark includes lower secondary and covers ages 6 through 16. Upper secondary education covers ages 16 through 19 and consists of four types of programmes: a general education that is both practical and theoretical and qualifies the student for access to higher education; and commercial, vocational and technical educations, primarily qualifying students for access to the labour market (Ministry of Education, n.d.).

#### 8.5.1 Formal vs. non-formal education

By and large, our respondents found that:

The current formal education system in Denmark makes it difficult to implement and practice Education for Environmental Citizenship.

The academic researcher stated that the formal system is hampered by the previous years' focus on delivery, documentation and control, instead of supporting engagement and innovation in teaching. In correlation, the first EPS decision-maker explained that Education for Environmental Citizenship plays a larger role in the non-formal educational sector than in the formal. As the second NGO decision-maker explained, it is the curriculum in Danish schools that makes it difficult to practice Education for Environmental Citizenship in the formal school system. These comments suggest that Education for Environmental Citizenship will more readily find its place in non-formal education.

The policy-maker agreed that non-formal education is ahead when it comes to Education for Environmental Citizenship, compared to formal education. For example, scout groups in Denmark (and elsewhere) have taught active citizenship for over a century, whereas it is a relatively new addition to the formal education curriculum. The second EPS decision-maker suggested that, because of these constraints, formal and non-formal education should ideally create a synergy: they should teach different things that together make up a form of Education for Environmental Citizenship. The distribution of content and teaching required to achieve this was not elaborated, so it remains a project for future elaboration.

#### 8.5.2 Primary vs. secondary education

When comparing primary and secondary education in Denmark, the academic researcher reported that the difference between primary and secondary schooling has diminished. Yet, as we see from the Danish Ministry of Education website (n.d.), the programmes are radically different. Indeed, the policy-maker stated unequivocally that there is a difference between the two. Primary education has to provide the basic knowledge required to be a citizen. Whereas, secondary education can be more specialised. Beyond these conflicting statements it was difficult to derive anything meaningful from the protracted comments of our respondents.

#### 8.6 Conclusion

We detail here responses from seven experts to a series of questions that aim to identify key strengths, weaknesses, opportunities and threats to Education for Environmental Citizenship in Denmark. Our experts include two decision-makers from national NGOs, two decision-makers from Educational Professional Society (EPS), an academic researcher, an educator (a Danish school teacher covering primary and lower secondary education), and a policy-maker representing the Danish Ministry of Education at the municipal level.

At the outset we explained that our intention here is not to synthesise. Rather it is to juxtapose, and thereby afford diffractive reading of this—at times—divergent material. Nonetheless, it is possible to draw some conclusions:

Our experts are unanimously in favour of Education for Environmental Citizenship but see a number of challenges that inhibit its adoption in Denmark. These challenges exist at the policy level, as well as within the education system and in society itself, in the form of resistances. Despite these resistances, our respondents seem convinced that Education for Environmental Citizenship can offer a sense of meaning to citizens and engage young people in shaping the society of tomorrow, by encouraging them to actively protect the environment, and that this is a good thing that should be actively encouraged.

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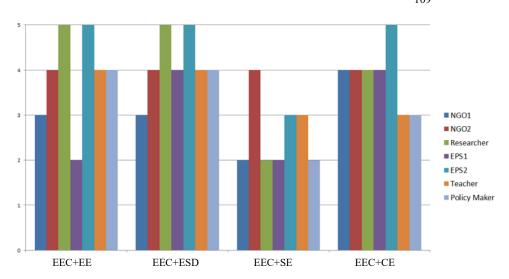
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#### Appendix A:

Table 8.1 and Figure 8.1: responses to the degree of difference between Education for Environmental Citizenship and the other mentioned types of education, EE, ESD. SE and CE.

**Table 8.1** Degree of similarity (from 1-5) between Education for Environmental Citizenship and other types of education.

	EEC & EE	EEC & ESD	EEC & SE	EEC & CE
NGO1	3	3	2	4
NGO2	4	4	4	4
Researcher	5	5	2	4
EPS1	2	4	2	4
EPS2	5	5	3	5
Teacher	4	4	3	3
Policy-maker	4	4	2	3



**Table. 8.2.** Similarity of the Education for Environmental Citizenship with other types of education, where 1 is similar and 5 is different.

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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