European Network for Environmental Citizenship

Cost Action CA16229

ENEC Report

Research gaps and future research needs, priorities and perspectives in Environmental Citizenship

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Universiteit Antwerpen

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Research gaps and future research needs, priorities and perspectives in Environmental Citizenship

*A European research agenda put forward
by the ENEC management committee*

This document is the result of a collaborative effort of 128 scholars from 30 member states joined in the COST network ENEC, European Network for Environmental Citizenship. We have co-created a framework and an academic book publication on the conceptualization of Environmental Citizenship for 21st century Education, published in 2020. In parallel, SWOT analyses on the implementation of EC into formal and nonformal education have been performed across the member states of the cost action, bringing together the views of 157 European experts (academic and societal) in the fields of environmental education, science education, citizenship education and education for sustainable development.

Based on this input we put forward a European research agenda to support and accelerate the implementation on Education for Environmental Citizenship across Europe.

1. What is (Education) for Environmental Citizenship and why is it important for a sustainable Europe?

Environmental Citizenship is a key factor in the European Union's growth strategy (Europe 2020) and its vision for Sustainable Development, a Green and Cycle economy and a Low-carbon society (EU roadmap 2050). Environmental Citizenship has been an influential concept in many different arenas such as economy, policy, philosophy, organisational management and marketing and it could be better exploited and established furthermore in education. Research on the implementation and effectiveness of (Education for) Environmental Citizenship is crucial to achieve these goals.

Education for Environmental Citizenship (EEC) is defined by ENEC (2018) as the type of education which cultivates a coherent and adequate body of knowledge as well as the necessary skills, values, attitudes and competencies that an environmental citizen should be equipped with in order to be able to act and participate in society as an agent of change in the private and public sphere, on a local, national and global scale, through individual and collective actions, in the direction of solving contemporary environmental problems, preventing the creation of new environmental problems, in achieving sustainability as well as developing a healthy relationship with nature. Education for Environmental Citizenship (EEC) is important to empower citizens to exercise their environmental rights and duties, as well as to identify the underlying structural causes of environmental degradation and environmental problems, develop the willingness and the competences for critical and active engagement and civic participation to address those structural causes, acting individually and collectively within democratic means and taking into account the inter- and intra-generational justice.

2. Results of the ENEC SWOT analysis: What is needed across Europe?

In this section we summarize the needs that exist in Europe in terms of implementing EEC at European, national and local level. The summary is based on the empirical SWOT analyses that are published by ENEC in this electronic publication.

>> European Level

N1.1   Need for a common European competence frameworks at three levels: competences of individual learners, competences of professionals (teachers and educators), and competences of organisations (schools and informal learning centers).

N1.2   Need for a quality framework that elucidates when and how EEC can be considered successful in terms (a) implementation fidelity of the process and (b) achievement of learning goals, both in formal and informal education contexts.

N1.3   Sustained funding to support collaborative longitudinal research on the implementation of EEC in and across the member states with specific attention to the local context as well as European communalities.

>> Macro level : member state policy context

N2.1   Needs for EEC be anchored into formal curricula for all levels of compulsory education. This includes a need to incorporate EEC in the mandatory objectives of curricula and not as facultative within the member states education system.

N2.2   Need for a scaffolded locally relevant curriculum that identifies which learning outcomes of EEC should be achieved at which stage of education.

N2.3   Need for initial teacher training curricula to offer EEC as part of basic curricula, as well for in-service professional development on EEC for teachers and educators.

>> Meso level : educational organisations

N3.1   Need for cross-curricular collaboration to fully implement the interdisciplinary nature of EEC and a firm need to connect learning to real world issues, collaborating with local stakeholders from the public and private spheres.

N3.2   Need to rethink and redesign school culture towards new forms of (sustainable) educational leadership.

N3.3   Need for time: EEC requires long term implementation to achieve the intended outcomes. Educational organisations cannot undergo such transformations in a single (school)year.

>> Micro level : individual learners and teachers

N4.1   Need for concrete learning materials and assessment tools for the learning outcomes of EEC and for professional competences of teachers and educators.

N4.2   Need to bridge the gaps in the transfer of acquired EC competences from the learning environment to everyday life.

N4.3   Need to sustain learning outcomes beyond the lifetime of educational interventions.

3. Priorities for a European Research agenda on EEC

To address the needs identified above ENEC puts forward eight major research principles for a joint research agenda that can accelerate the implementation of EEC across Europe.

RP1   The development of theoretically grounded and empirically validated competence framework for EEC across Europe. This includes the development of measurements instruments that can be used to study the development over time of EC competences of learners of all ages.

RP2   The development a practical framework for designing, implementing and evaluating EEC learning environments and experiences. This implies exploring and elucidating what EEC can look like in practice within formal and informal education. Focus should also go to connections of EEC with environmental education, science education, citizenship education and education for sustainable development, and to bridging gaps between school subjects.

RP3   The development of a quality framework for EEC (building on RP1-2), including road maps for successful implementation, inspiring practices, learning materials, assessment tools… attuned to relevant ages and (local) environmental contexts.

RP4   Research on prototypes and pilot implementations is needed to determine hurdles and accelerators of success. These relate to competences of teachers and educator as well as characteristics of the educational organisations within which pilots are ran.

RP5   Research should explicitly take a longitudinal perspective. We need to be able to follow teams of teachers and educators as they develop professional competences for EEC, and learn to implement EEC, as well as students that experience EEC and develop core competences for environmental citizenship. This implies that studies should seek to study the implementation of EEC in practice across several years.

RP6   Research needs to delve into pivotal moments for EEC, such as transitions for primary to secondary education and from secondary to higher education and/or the labour market. We also need research to understand how learners apply their learned EC competences in real life situations and how EC competences can be learned in real life situations.

RP7   For formal education specifically there is a clear need to study the role of the school organisation as a mediator in the successful implementation of EEC. This includes but is not limited to educational leadership, collaboration, communication, responsiveness… as how these factors can facilitate the implementation of EEC.

RP8   How can we support bottom up initiatives while at the same time installing a top down quality framework for EEC in educational organisations. This includes studying the role of intermediary actors such as NGO of local governments and how they support the sustainable implementation of EEC in educational organisations through professional development and guidance processes.

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