Pedagogical Approaches on the Education for Environmental Citizenship

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Action Chair
Dr Andreas Hadjichambis, CYCERE, Cyprus
A. Welcome

B. ENEC in glance
   - Our Consortium
   - ENEC Organisational Structure and Objectives
   - Main Deliverables

C. Introduction to the Education for Environmental Citizenship (EEC)
   - The ecological niche of EEC
   - EEC’s definition and Model
   - Pedagogical approaches of EEC
B. ENEC IN GLANCE

EDUCATION FOR ENVIRONMENTAL CITIZENSHIP

Education for Environmental Citizenship (EEC) is defined as the type of education which cultivates a coherent and adequate body of knowledge (and connected awareness) as well as the necessary skills, values, attitudes and responsible proactive behaviours that an environmental citizen should be equipped with in order to be able to actively participate in society as an agent of change in the private and public sphere.
B. OUR CONSORTIUM

Coordinated by:
Action Chair
Dr Andreas Hadjichambis, CYCERE, Cyprus

• Kick of Meeting in Brussels, 27-10-2007
• Our Consortium today
• New Countries
Kick of Meeting in Brussels

Kick Off Meeting

Brussels Belgium
27 October 2017

40 MC Members
26 Countries

http://enec-cost.eu/events/kick-off-meeting-brussels/?preview=true
Our Consortium today

- 36 Countries (4 new)
  - 33 European Countries
  - Israel (Cooperative Country)
  - USA (IPC)
  - AUSTRALIA (IPC)
- 64 MC Members (10 new)
- 50 MC Substitutes (11 new)
- 2 MC Observer (USA, AUSTRALIA)
New Countries

• Turkey
• Slovenia
• Estonia
• AUSTRALIA (IPC)

Near Neighbour Countries

• Ukraine (UA)
Role and Structure of ENEC Committees and Boards
Role and Structure of ENEC Working Groups

- GRANT HOLDER (GH)
  - MANAGEMENT COMMITTEE (MC)
  - COST Association Administration

- WG 1 Primary Formal
  - Conceptualize EC in Primary Formal
  - Assessing EC in Primary Formal
  - Best Practices EC in Primary Formal
  - Policy Measures EC in Primary Formal

- WG 2 Primary Non-Formal
  - Conceptualize EC in Primary Non-Formal
  - Assessing EC in Primary Non-Formal
  - Best Practices EC in Primary Non-Formal
  - Policy Measures EC in Primary Non-Formal

- WG 3 Secondary Formal
  - Conceptualize EC in Secondary Formal
  - Assessing EC in Secondary Formal
  - Best Practices EC in Secondary Formal
  - Policy Measures EC in Secondary Formal

- WG 4 Secondary Non-Formal
  - Conceptualize EC in Secondary Non-Formal
  - Assessing EC in Secondary Non-Formal
  - Best Practices EC in Secondary Non-Formal
  - Policy Measures EC in Secondary Non-Formal

- DISSEMINATION
  - DELIVERABLES
  - DISSEMINATION TOOLS
Work Flow of ENEC
Objectives

Research Coordination Objectives (RCO)

Capacity-building objectives (CBO)
RESEARCH COORDINATION OBJECTIVES

• Initiate collaborations and expand previously established collaborations on Environmental Citizenship across Europe. (RCO1)

• Development of common understanding/definition of Environmental Citizenship by conceptualizing and framing Environmental Citizenship. (RCO2)
  
  • Development of new research paradigms and metrics for assessing Environmental Citizenship. (RCO3)
  
  • Identify research gaps and future research needs, priorities and perspectives in Environmental Citizenship which require European/ international coordination and transnational collaborations. (RCO4)

  • Propose policy measures and recommendations needed for the promotion of Environmental Citizenship. (RCO5)
Indices to measure the achievement of the Research Coordination Objectives

• The number of partners and professional diversity will indicate the achievement of the RCO1.
• The number of publications, reports and policy documents related to the concept and dimensions of Environmental Citizenship will measure the achievement of the RCO2.
• The number of publications, reports and policy documents related to the assessment of Environmental Citizenship will measure the achievement of the RCO3.
• The number of reviewed publications, reports and policy documents related to research needs, gaps and priorities in the field will measure the achievement of the RCO4.
• The number of dissemination documents regarding the policy measures and recommendations will serve as a measure of the achievement of the RCO5.
CAPACITY-BUILDING OBJECTIVES

• Bridging separate fields of science to achieve breakthroughs in Environmental Citizenship that require multi-national and multi-disciplinary research. (CBO1)

• Fostering knowledge exchange on different macro- and micro-level dimensions of formal and non-formal education that could lead to Environmental Citizenship. (CBO2)
  • Acting as a stakeholder platform for knowledge exchange and mapping expertise and also developing a depository database of scientific measures and evidence based interventions that target Environmental Citizenship. (CBO3)
  • Involving specific target groups such as Early Career Investigators (ECI) and research teams from COST Inclusiveness Target Country (ITC). (CBO4)
Indices to measure the achievement of the Capacity-Building Objectives

- The number of multi-national and multi-disciplinary partners will indicate the achievement of the CBO1.
- The number of publications, reports and policy documents which referred to formal and non-formal dimensions leading to Environmental Citizenship will measure the achievement of the CBO2.
- The number of platform users database entries and best educational practices are a measure of the achievement of the objective CBO3.
- The number of Early Career Investigators (ECI) and the number of research teams from COST Inclusiveness Target Country (ITC) which will participate in the Action are a measure of the achievement of the CBO4.
EEC and other other types of education (EE, ESD, SE, CE)

Education for Environmental Citizenship

EE

Environmental Education

ESD

Education for Sustainable Development

SE

Science Education

Citizenship Education
Final Results on EU Level

167 Experts
28 European Countries

Ecological Niche of Education for Environmental Citizenship

Environmental Education (EE)

Citizenship Education (CE) 3.4
Science Education (SE) 2.4
Education for Sustainable Development (ESD) 3.8

An ecological niche is the role and position a species has in its environment.
Environmental Citizenship never was at the heart of our education

Still remains a lively disagreement about the aims of environmental education that may lead to conflicting goals and outcomes (Schild, 2016)

• Despite this clear charge to build a citizenry capable and motivated to work toward better environmental outcomes, both the definition of environmental education and its intended outcomes have been contested and debated for several decades (Disinger, 1997; Fien, 2000; Fraser, Gupta, & Krasny, 2014; Huckle, 1993; Jickling & Spork, 1998).
Environmental Citizenship never was at the heart of our education

Fraser et al. (2014, p. 1) note, “Recently, highly charged critiques from those outside and within EE have fomented debate about EE, challenging whether the field is implicit environmental advocacy or reasoned problem-solving, prescriptive behaviour change or sound science education, democratic decision-making or critical thinking about social transformation.”
Debate between EE and Citizenship

• According to Jacobi (2005) EE should be placed in a broader context, namely education for citizenship and understood as a practice that is decisive in the consolidation of citizen-subjects (p. 243).

• According to Loureiro (2011) EE is a constituent part of social/environmental movement …and the process of constructing planetary citizenship or ecocitizenship is consider as a new concept.
Debate between EE and Citizenship

• According to Scott (2011) citizenly engagement should be a priority.

• He concluded that “the priority must be to engage young people with ideas about sustainability through imaginative teaching strategies that provide stimulating opportunities for learning, including practice in citizenly engagement – and that everything else has to be secondary to this”.
Debate between EE and Citizenship

• According to Dimick (2015) environmental citizenship should be an educational aim.

• He stated that “developing students’ civic capacities and dispositions to engage as participatory citizens in relation to environmental issues and concerns” (p. 390) should be an educational aim of EE.
Environmental Citizenship

Influential concept in different arenas such as

- Economy
- Policy
- Development studies
- Philosophy
- Organisational Management and Marketing
- Could be… exploited furthermore by Education
Education for Environmental Citizenship

• Has something new, innovative and unique to deliver

• Could be the basis for a new Educational Theory which will be developed and promoted by our consortium

• Each one of us here could take the opportunity to contribute to such inspiring initiative within the framework of our project.

• Be part of the genesis of the Education for Environmental Citizenship.
INTRODUCTION TO EDUCATION FOR ENVIRONMENTAL CITIZENSHIP (EEC)

Our Approach

Environmental Citizenship

“Environmental Citizenship” is defined as the responsible pro-environmental behaviour of citizens who act and participate in society as agents of change in the private and public sphere, on a local, national and global scale, through individual and collective actions...

Education for Environmental Citizenship

“Education for Environmental Citizenship” (EEC) is defined as the type of education which cultivates a coherent and adequate body of knowledge as well as the necessary skills, values, attitudes and competences that...

Environmental Citizen

“Environmental Citizen” is defined as the citizen who has a coherent and adequate body of knowledge as well as the necessary skills, values, attitudes and competences in order to be able to act and participate in society as an agent of change...

European Network for Environmental Citizenship
Cost Action CA16229
INTRODUCTION TO EEC

I. Defining “Education for Environmental Citizenship”

“Education for Environmental Citizenship” (EEC) is defined as the type of education which cultivates a coherent and adequate body of knowledge as well as the necessary skills, values, attitudes and competences 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 (ENEC 2018).
II. Defining “Environmental Citizenship”

“Environmental Citizenship” is defined as the responsible pro-environmental behaviour of citizens who act and participate in society as agents 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, achieving sustainability as well as developing a healthy relationship with nature. “Environmental Citizenship” includes the exercise of environmental rights and duties, as well as the identification of the underlying structural causes of environmental degradation and environmental problems, the development of 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 inter- and intra-generational justice (ENEC 2018).
III. Defining “Environmental Citizen”

“Environmental Citizen” is defined as the citizen who has a coherent and adequate body of knowledge as well as the necessary skills, values, attitudes and competences 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. “Environmental Citizen” is the citizen who exercises his/her environmental rights and duties, is able to identify the underlying structural causes of environmental degradation and environmental problems, and has 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 inter- and intra-generational justice (ENEC 2018).
I. Defining “Education for Environmental Citizenship”

"Education for Environmental Citizenship" (EEC) is defined as the type of education which cultivates a coherent and adequate body of knowledge as well as the necessary skills, values, attitudes and competences 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 (ENEC 2018).
The EEC Model

According to the definition of the Education for Environmental Citizenship (EEC defined by ENEC (2018) there are 8 main intended outputs of the EEC:

- Preventing environmental problems (new)
- Solving environmental problems (current)
- Exercising environmental rights and duties
- Identifying structural causes of environmental degradation and problems
- Achieving critical and active engagement and civic participation
- Promoting inter- & intra generational justice
- Developing healthy relationship with nature
- Achieving sustainability
The EEC Model

According to the same definition of the Education for Environmental Citizenship (EEC) defined by ENEC (2018) the intended individual and collective actions should be applied in:

a. Private and public spheres

b. Local, national and global scales
Environmental Actions’ Classification

How the environmental actions of environmental citizens, can be classified:

**Private sphere**
- Participate in a protest or demonstration
- Recycle
- Choose as consumer
- Composting
- Donate for a project

**Collective Actions**
- Connect and influence decision makers
- Involvement in local politics
- Head of a school of thought
- Organizing a campaign - Lobbying
- Become Volunteer

**Public sphere**
- Vote
- Support with my presence

**Individual Actions**
EEC’s Scales

- Global
- EEC’s Scales
- Local
- National
The EEC Model

Collective actions

achieving sustainability

developing healthy relationship with nature

Private sphere

promoting inter- & intra-generational justice

achieving critical & active engagement & civic participation

Individual actions

Public sphere

preventing environmental problems

solving environmental problems

exercising environmental rights & duties

addressing structural causes of environmental degradation & problems

Knowledge Values Attitudes Skills Competences Behaviour

Global scale

National scale

Local scale
THE NEED FOR PEDAGOGICAL APPROACH for Education for Environmental Citizenship
The pedagogical landscape of EEC
Sustainability and Transformative Sustainability Learning

Achieving TSL

Peers
Community Organizations
Emancipatory Equity
Care for environment
Social learning
Social justice
Authentic real-world problem
Traditional resources of knowledge

Pedagogical Approaches of EEC

The following pedagogies, teaching tools and learning schemes could promote EEC:

• Place based education
• Civic ecology education
• Ecojustice pedagogy
• Environmental Action Competence
What is Place-based education?

- Place-based education (PBE) immerses students in local environment, heritage, cultures, landscapes, opportunities and experiences. PBE emphasizes learning through participation in service projects for the local school and/or community.

- Research has shown that well-designed initiatives can:
  - PBE boosts **students' engagement, academic achievement**, and sense of **personal efficacy as stewards** of their local environment and community. It also can re-energize teachers.
  - PBE forges strong ties between **local social and environmental organizations** and their constituencies in the schools and community, which helps to improve quality of life and economic vitality.
  - Through project-based learning, students make tangible contributions to **resolving local environmental issues** and conserving local environmental quality.

Source: https://promiseofplace.org/what-is-pbe/what-is-place-based-education
Principles of Successful Place-Based Education

- Learning **takes place on-site** in the school yard, and in the local community and environment.
- Learning focuses on **local themes, systems, and content**.
- Learning is **personally relevant** to the learner.
- Learning experiences contribute to the **community’s vitality and environmental quality** and **support the community’s role** in fostering global environmental quality.
- Learning is supported by strong and varied **partnerships** with local organizations, agencies, businesses, and government.
  - Learning is **interdisciplinary**.
  - Learning experiences are tailored to the **local audience**.
  - Learning is grounded in and supports the development of a **love for one’s place**.
  - Local learning serves as the foundation for **understanding and participating appropriately** in regional and global issues.
  - Place-based education programs are integral to achieving **other institutional goals**.

Source: https://promiseofplace.org/what-is-pbe/principles-of-place-based-education
Positive interactive cycle of accessibility, mobility and engagement with environment leading to environmental change agency (Malone 2012 p. 30, adapted from Chawla 2007, p. 155)
Civic ecology education

• Civic ecology pedagogy (Tidball & Krasny, 2010), can provide another one example of how environmental citizenship could be promoted.

• Civic ecology is defined as “stewardship practices that integrate social and environmental values within a social—ecological systems framework … where participants act as stewards of their environment through such practices as community gardening, community forestry, and watershed restoration” (Tidball & Krasny, 2010, p. 466).
Civic Ecology Education

Example from Friends of the Gorge Student Organization

EXTERNAL DRIVER
Stewardship and safety concerns

SOCIO-CULTURAL TEMPLATE

HUMAN BEHAVIOR
Policies in support of Safe Access, Recreational Use, Stewardship

HUMAN OUTCOMES
1) Social Capital (civic engagement, social connectedness)
2) Social-ecological systems understanding
3) Sense of Place
4) Environmental Values and Behaviors (stewardship, recreation)

Pulses: Civic Ecology Education (gorge clean up, discussions, hikes)

Presses: New policies in favor of Safe Recreational Use, Stewardship

ECOSYSTEM STRUCTURE AND FUNCTION
Trash cleaned, trails improved, habitat restored

ECOSYSTEM SERVICES
Erosion regulation, Recreation, Education

Adapted from LTER 2007, Tidball and Kazmaz 2007
Ecojustice pedagogy

• Calls for time spent in “out-of-classroom spaces and places; experiencing the knowledge of different cultures and cultural relationships to place; gaining a diversity of natural history knowledge; and developing community relationships and actions” (McKenzie, 2008, p. 366).

• Ecojustice pedagogy, bridges western scientific knowledge with traditional ecological knowledge (TEK) through critical and relational discourse, coupled with an interdisciplinary approach to learning, helps us move beyond the binary and disconnect.

• It adds an ecological lens on social justice. In other words, it extends values of justice to include the environment and ‘environmental racism’ (Bowers, 2002).
Action Competence Learning

• As an educational approach, environmental action aims not to modify specific behaviours like recycling or saving water, but rather engages youth in planning and taking action on environmental issues they find relevant.

• It involves shared decision making, which occurs when adults and youth collaborate in planning, implementing, and evaluating a project, whether the project is initiated by youth or adults.
Environmental action occurs at the intersection of youth civic engagement and inquiry-based education.
Several examples of youth environmental action have been documented in educational practice:

- **Physical environmental improvements** (e.g., planting trees to stabilize streambanks; transforming vacant lots into community gardens);
- **Community education** (e.g., organizing community information fairs; producing educational media like newsletters or videos);
- **Inquiry** (e.g., community assessments, surveys, and mapping; scientific experiments designed to inform or evaluate action);
- **Public issue analysis and advocacy for policy change** (e.g., researching and analyzing the environmental impacts of on-site wastewater treatment regulations and presenting policy recommendations to a state legislative committee); and
- **Products or services contributing to community development** (e.g., sustainably growing food for sale at a neighbourhood farmers market).
The EEC Model

- Collective actions
  - achieving sustainability
  - preventing environmental problems
  - solving environmental problems
- Private sphere
  - developing healthy relationship with nature
  - promoting inter- & intra-generational justice
- Public sphere
  - exercising environmental rights & duties
  - addressing structural causes of environmental degradation & problems
- Individual actions
  - achieving critical & active engagement & civic participation
Education for Environmental Citizenship
Pedagogical Approach
The EEC Model

Collective actions

- preventing environmental problems
- solving environmental problems
- exercising environmental rights & duties
- addressing structural causes of environmental degradation & problems

Individual actions

- achieving critical & active engagement & civic participation
- achieving inter- & intra-generational justice
- developing healthy relationship with nature
- achieving sustainability

Private sphere

Public sphere

Knowledge
Values
Attitudes
Skills
Competences
Behaviour

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Conclusion

• Productive and fruitful Training School
• Be familiar with the pedagogical approaches proposed
• Examine the possibility of introducing some aspects of the Education for Environmental Citizenship in your research.

Thanks for your attention

Dr Andreas Hadjichambis
ENEC, Action Chair
References


References