Education for Environmental Citizenship in Focus

A booklet for teachers with practical ideas for implementation of Education for Environmental Citizenship

cost
EUROPEAN COOPERATION IN SCIENCE & TECHNOLOGY

Funded by the Horizon 2020 Framework Programme of the European Union

European Network for Environmental Citizenship
Cost Action CA16229

2

Education for Environmental Citizenship in Focus

This booklet is based on work from Cost Action ENEC – European Network for Environmental Citizenship (CA16229) supported by COST (European Cooperation in Science and Technology).

COST (European Cooperation in Science and Technology) is a pan-European Intergovernmental Framework. Its mission is to enable break-through scientific and technological developments leading to new concepts and products and thereby contribute to strengthening Europe's research and innovation capacities.

cost
EUROPEAN COOPERATION IN SCIENCE & TECHNOLOGY

Funded by the Horizon 2020 Framework Programme of the European Union

European Network for Environmental Citizenship
Cost Action CA16229

Grant Holder Institution:

ISBN: **978-9963-9275-7-9**

Reference:
ENEC Consortium (2019). *Education for Environmental Citizenship In Focus*. Lemesos, Cyprus: European Network for Environmental Citizenship – ENEC Cost Action.

This booklet is based on the book chapter:
Hadjichambis, A. Ch. & Paraskeva-Hadjichambi D. (2020). Education for Environmental Citizenship: the pedagogical approach. In: A. Ch. Hadjichambis, P. Reis, D. Paraskeva-Hadjichambi et al. (Eds) *Conceptualizing environmental citizenship for 21st century education (pp* 237-261). Cham, Switzerland: Springer.

Photos:
From Shutterstock

Contents

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.

Education plays a key role in shaping future environmental citizens; nobody is born an environmental citizen but anybody can become so by education.

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.

The Education for Environmental Citizenship pedagogical approach is one such proposal designed to promote Education for Environmental Citizenship as defined by the European Network for Environmental Citizenship (2018a). Of course, there are other approaches that can also contribute in this direction.

The purpose of '***Education for Environmental Citizenship in Focus***' is to present the basic ideas of this approach to educators and teachers. We hope that educators will find it useful.

Dr Andreas Ch. Hadjichambis

Chair
European Network for
Environmental Citizenship
ENEC Cost Action CA16229

Prof Pedro Reis

Vice-Chair
European Network for
Environmental Citizenship
ENEC Cost Action CA16229

Introduction

What kind of environment will our children live in tomorrow? The answer to this question largely involves the dimension of education. The type of education we provide our children with today will greatly shape their environment in the future; this environment will be in their hands and the way they manage it depends on the education we give them today.

Environmental citizenship is a key concept in the vision for sustainable development and a sustainable world. For the first time we have an agreed definition of environmental citizenship; since more than 130 academics, scholars and researchers, representing 38 countries of the European Environmental Citizenship Network have defined environmental citizenship to be:

> *'The responsible 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 and developing a healthy relationship with nature. "Environmental Citizenship" includes the exercise of environmental rights and duties, as well as the identification of underlying structural causes of environmental degradation and environmental problems, as well as the development of a sustainable environment, the development of willingness and 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-generational and intergenerational justice (ENEC, 2018a)'.*

Educational systems and schools could greatly contribute to the empowerment of young people in becoming active, participatory and responsible environmental citizens.

The starting point for the European Network for Environmental Citizenship and Education for Environmental Citizenship was that educational systems and schools should have the empowerment for environmental citizenship as one of their key missions. This requires our students to be aware and understand the impact of their decisions and the environmental challenges faced and be able to recognise their capabilities and how these can result in sufficient environmental and social changes. In order to be able to do so, they need be equipped with the necessary knowledge, skills, attitudes, competences and behaviours. Education for Environmental Citizenship seeks to educate those environmental citizens to acquire these characteristics.

The Education for Environmental Citizenship pedagogical approach is a proposal that points in this direction. This is being proposed as a comprehensive tool of inspiring for the Education for Environmental Citizenship. “Education for Environmental Citizenship in Focus” presents the Education for Environmental Citizenship pedagogical approach in a lay format as was described by Hadjichambis & Paraskeva-Hadjichambi (2020).

The approach recommends specific elements as stages and steps, but it is not mandatory to follow all of them, or to be applied in a particular linear order. Depending on the environmental problem under study, the level of education (e.g., primary or secondary) and the educational settings (e.g. formal or non-formal), the necessary differentiations and adaptations can be made. We invite teachers to attempt to implement and evaluate aspects of this pedagogical approach.

At the beginning, the EEC Model illustrates the definition of Education for Environmental Citizenship. In the following pages some basic concepts of this definition (ENEC, 2018b) are presented such as ‘agents of change’, ‘solving environmental problems’, ‘preventing environmental problems’, ‘achieving sustainability’, ‘healthy relationship with nature’, ‘environmental rights and duties’, ‘structural causes’, ‘civic participation’, ‘intra-generational justice’ and ‘inter-generational justice’. Subsequently, we illustrate the main stages and steps of the pedagogical approach and outline specific examples and ideas wherever possible.

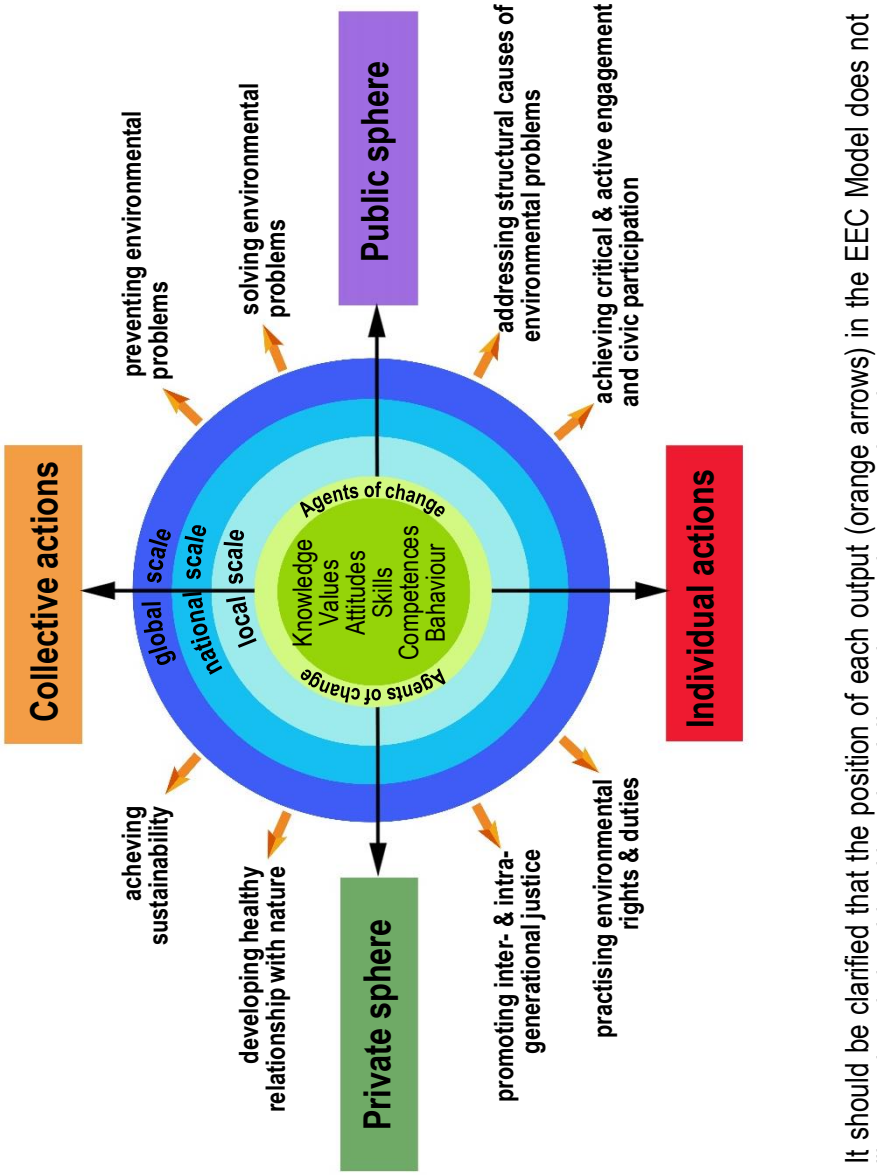
We hope this will assist in shaping a more sustainable world.

EEC Definition

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, 2018b).

EEC MODEL

The EEC definition can be visualized in the EEC model.



It should be clarified that the position of each output (orange arrows) in the EEC Model does not illustrate its relationship with actions' dimensions, spheres and scales.

Source: Hadjichambis, A. Ch. & Paraskeva-Hadjichambi D. (2020). Education for Environmental Citizenship: the pedagogical approach. In: A. Ch. Hadjichambis, P. Reis, D. Paraskeva-Hadjichambi et al. (Eds) *Conceptualizing environmental citizenship for 21st century education (pp* 237-261). Cham, Switzerland: Springer.

Agents of Change:
We need, as never before, environmental citizens who have the willingness and are able to bring changes to the environment and in society for the benefit of our planet. Agents of change are those citizens who can act as catalysts of change, who take part in decision making and act as educators for their peers and for adults.

Solving environmental problems:
It is true, that the current environmental problems are difficult to solve. The current environmental problems:
• need immediate solution
• are characterised by complexity
• have environmental, economic and social components
• and have local, national and global dimensions.
Environmental citizens are citizens who are capable of contributing to the solution of existing environmental problems.

Preventing environmental problems:
Our everyday life affects the environment. Every day, many of our decisions and many of our actions, have an impact on the environment
and can lead to new environmental problems. Environmental citizens are the citizens who contribute to the prevention of new environmental problems.

Main Concepts

Achieving sustainability:
Sustainability is the process of maintaining change in a balanced environment. It focuses on the development that meets the needs of current generations without compromising the ability of future generations to meet their needs. Environmental citizens realise the importance of sustainability and they struggle for its fulfilment taking into account Environmental, Social and Economic dimensions.

Healthy relationship with nature:
Humans have lost their connection with nature. They grow, live and create in anthropogenic environments and do not realise their dependence on nature. They ignore the effects of their actions on nature and the environment. Environmental citizens have a healthy relationship with nature. They value, respect and protect nature.

Environmental rights and duties:
As ordinary citizens, organisations, governments, supranational entities we all have environmental rights and environmental duties. Environmental citizens know and apply their environmental rights and duties. They prompt the other entities of society, governments and supranational entities, to do the same.

Structural causes:
Environmental problems often have structural causes that create and constitute their sources. Structural causes often hidden are not apparent by a superficial examination. The economic system, the improper implementation of environmental legislation, the lack of effective structures, the interference and corruption can be structural causes for environmental problems. Environmental citizens are investigating, identifying and trying to change the structural causes of environmental problems.

Civic participation:
Current environmental problems require the active, social and critical engagement of all of us, as well as our civic participation. Environmental citizens are involved in decision making. In addition, they act individually and collectively in both the private and public sphere. They are also active at a local, national and global scale.

Intra-generational justice:
Intra-generational justice is justice within a generation. We often see in the world the injustice between the members of the same generation. We see inequality, discrimination, and limitation of rights. We see huge differences at a geographical level (e.g., North-South). Environmental citizens realise that social justice is important and therefore seek and claim intra-generational justice.

14

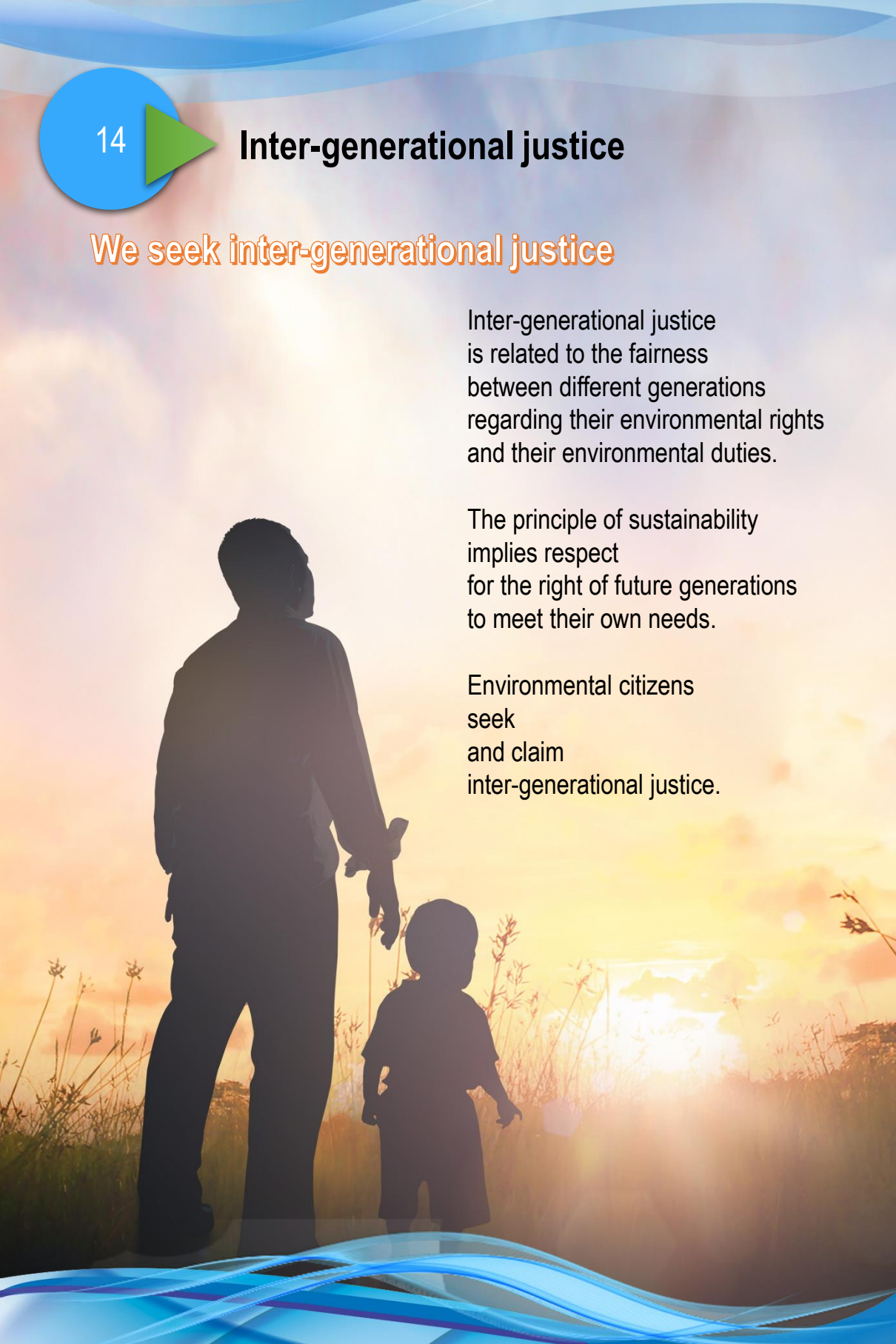
Inter-generational justice

We seek inter-generational justice

Inter-generational justice
is related to the fairness
between different generations
regarding their environmental rights
and their environmental duties.

The principle of sustainability
implies respect
for the right of future generations
to meet their own needs.

Environmental citizens
seek
and claim
inter-generational justice.



EEC pedagogical approach

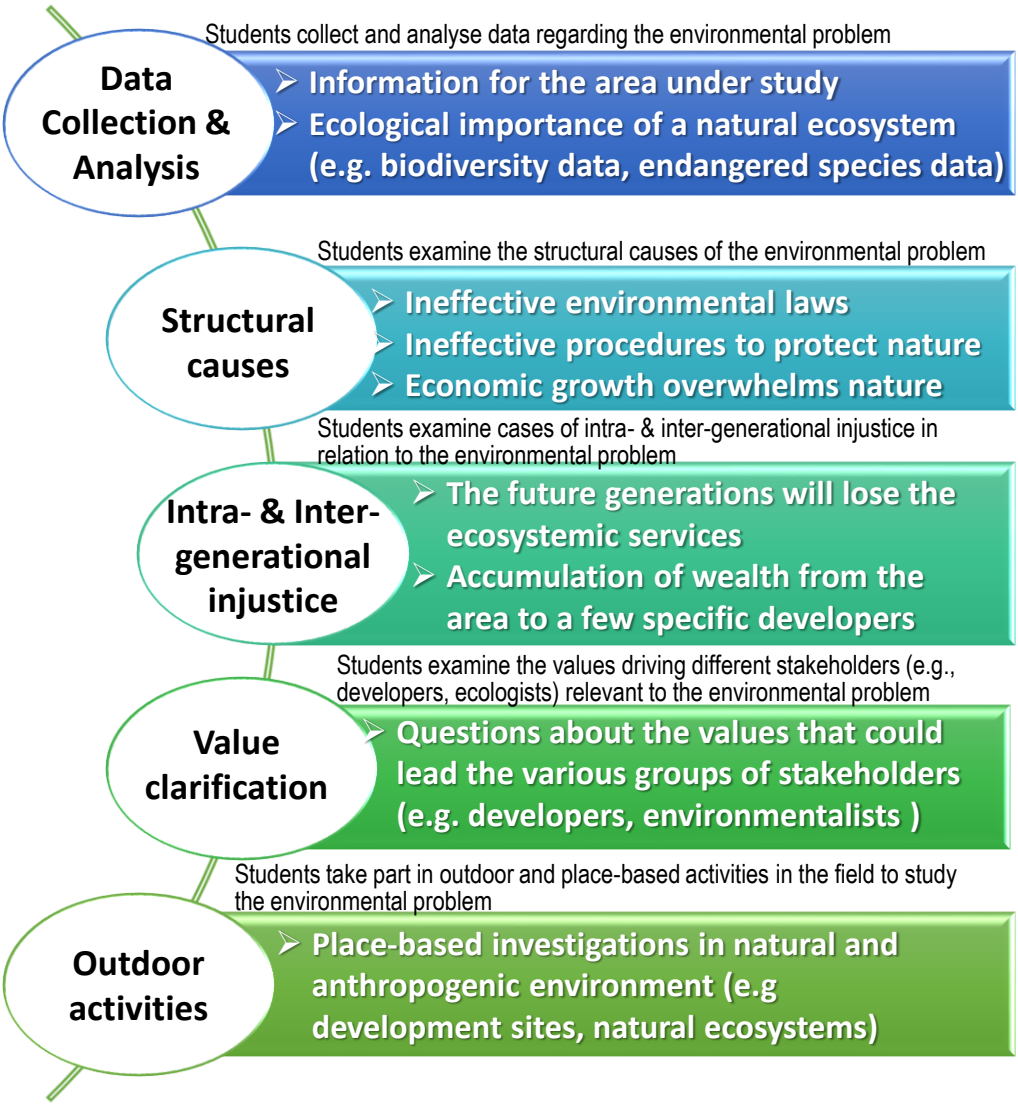
Education for Environmental Citizenship (EEC) is promoting the EEC Model which can be applied at all levels and in all settings of education with an adequate differentiation.

Six stages are proposed in the EEC pedagogical approach:

It is not mandatory to follow all of the stages and steps, or to be applied in a particular linear order. Depending on the environmental problem under study, the level of education (e.g., primary or secondary) and the educational settings (e.g. formal or non-formal), the necessary differentiations and adaptations can be made.

Inquiry

Examples of Inquiry



Examples of planning actions

Students record the stakeholders' interests to the environmental problem under study

Stakeholders' interests

- Developers
- Ecologists
- Students
- Neighbours

Students map the controversy and arguments from the different stakeholders

Mapping controversy

- Mapping stakeholders' positive and negative arguments
- Mapping the interrelationships between stakeholders and their arguments

Students examine the possible alternative solutions to the environmental problem

Alternative solutions

- Cancellation of the project
- Moving the project to another area
- Implementation of the mitigation measures of the project

Students study the possible structural resistance with the planned changes

Structural resistance

- Resistance from the system
- Non-elastic laws
- Conflicting interests and interference
- Economic conditions conducive to growth at the expense of the environment

Students assess the risks from the planned actions

Risk assessment

- Distress and confrontation within the community
- Blame on a personal and /or collective level

Civic participation

Examples of civic participation

Decision making Students decide and select an alternative solution

- Choose the optimum alternative solution
- Contact scientists and environmental organisations
- Contact politicians for assistance

Practice of environmental Rights and Duties Students apply their environmental rights and duties

- Public access on environmental data (Aarhus convention)
- Practise the right for public participation
- Application of the "polluter pays" principle

Actions in community Students apply individual and collective actions in a private and public sphere

- Publish articles in local newspapers
- Participate in radio and TV broadcasts
- Organize a campaign-lobbying

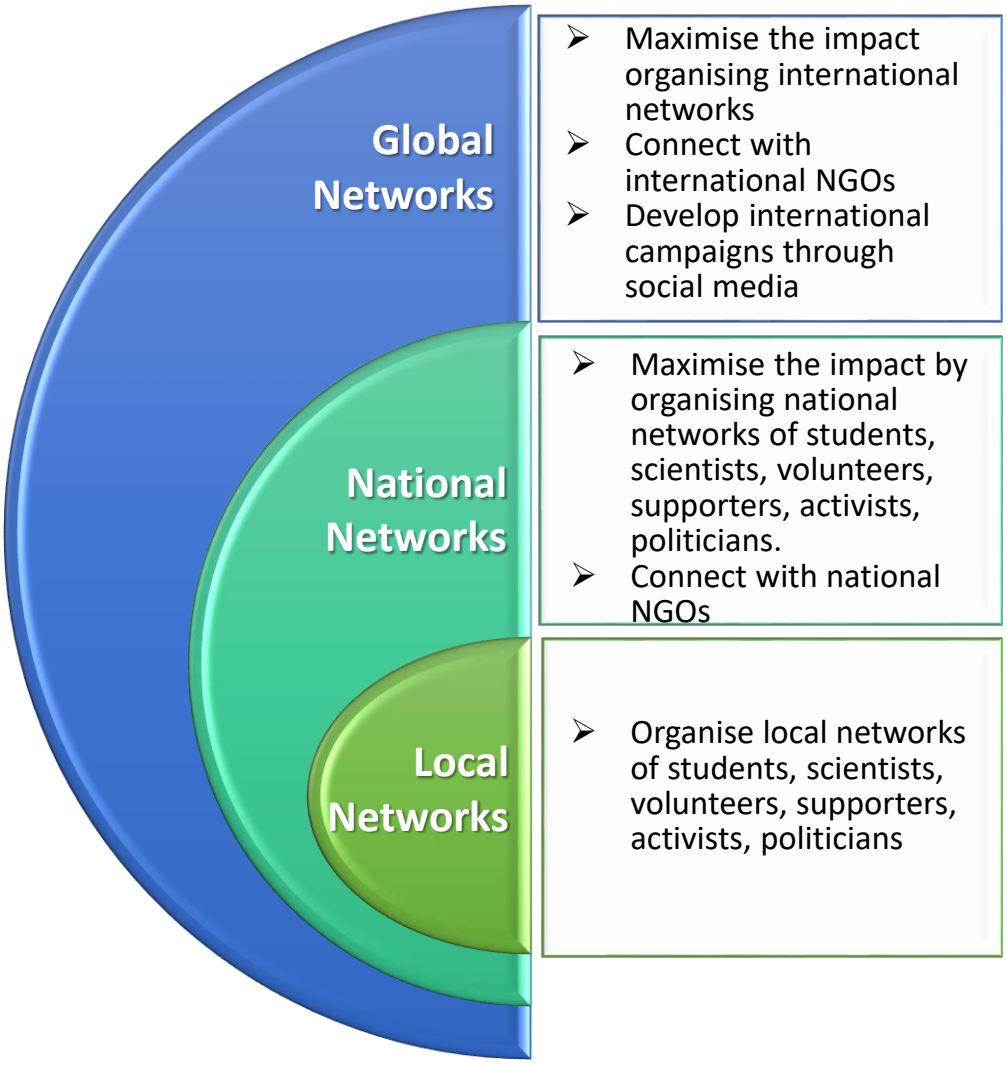
Public debates Students organise and/or participate in public debates

- Organise debates at school
- Organise community debates
- Participate in debates on TV

Student activism Students organise youth activism actions

- Inform peers, families, neighbourhoods and the general public
- Organise and participate in protests or demonstrations

Examples of networking and sharing



Sustain environmental & social change

Examples of sustain change

Examples of Evaluation & Reflection

Students audit the success of the applied actions

Audit

- **Audit the success of radio and TV broadcasts**

Students measure the change in some dimensions

Measure

- **Measure the change in the environmental attitudes of the students participating in the actions**

Students assess the effectiveness of the approach

Assess

- **Assess the effectiveness of the stages and steps followed**

Students inspect hidden dimensions of the approach followed

Inspect

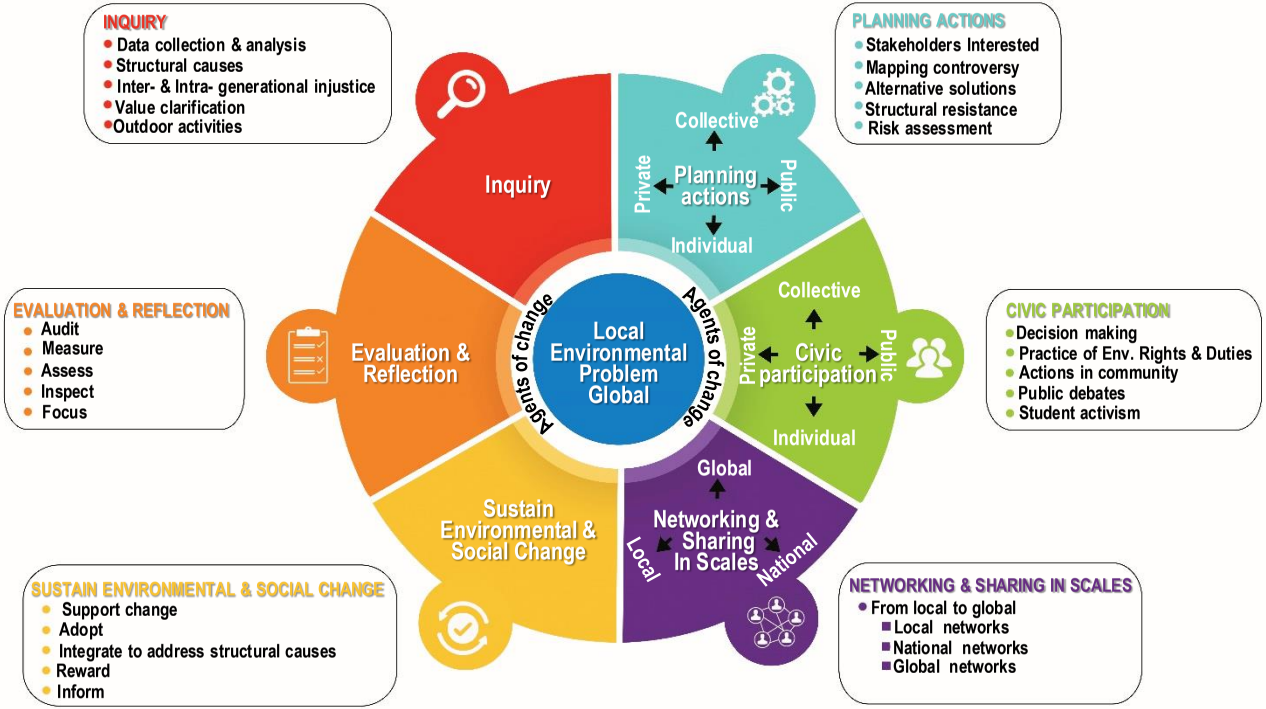
- **Inspect if there is a hidden dimension in the environmental problem studied (e.g. something that was not expected or anticipated)**

Students focus on the positives and negatives of the approach and lessons learned

Focus

- **Focus on the positives and negatives of the approach (e.g. positive was the motivation of the students of the area)**

Education for Environmental Citizenship Pedagogical Approach



Source: Hadjichambis, A. Ch. & Paraskeva-Hadjichambi D. (2020). Education for Environmental Citizenship: the pedagogical approach. In: A. Ch. Hadjichambis, P. Reis, D. Paraskeva-Hadjichambi et al. (Eds) *Conceptualizing environmental citizenship for 21st century education (pp* 237-261). Cham, Switzerland: Springer.

References

- European Network for Environmental Citizenship – ENEC (2018a). Defining "Environmental Citizenship". Retrieved from http://enec-cost.eu/our-approach/enec-environmental-citizenship/
- European Network for Environmental Citizenship – ENEC (2018b). Defining "Education for Environmental Citizenship". Retrieved from http://enec-cost.eu/our-approach/education-for-environmental-citizenship/
- European Network for Environmental Citizenship – ENEC (2018c). Defining "Environmental Citizen". Retrieved from http://enec-cost.eu/environmental-citizen/
- Hadjichambis, A. Ch. & Paraskeva-Hadjichambi D. (2020) Education for Environmental Citizenship: the pedagogical approach. In: A.Ch. Hadjichambis, P. Reis, D. Parakseva-Hadjichambi et al. (Eds) *Conceptualizing environmental citizenship for 21st century education* (pp 237-261). Cham, Switzerland: Springer.

Acknowledgments

This booklet is based on work from Cost Action ENEC – European Network for Environmental Citizenship (CA16229) supported by COST (European Cooperation in Science and Technology).

ENEC Consortium: Country authors for this booklet responsible for the translation

Albania: Nevila XHINDI, Enis SOKOLI
Austria: Katharina LAPIN, Florian LEREGGER, Johann ZOESCHER
Bosnia and Herzegovina: Mirjana ZABIC (Serbian), Haris GEKIC (Bosnian)
Bulgaria: Dilyana KERANOVA, Boris MANOV
Croatia: Ivan SULC, Slaven GASPAROVIC, Barbara SLADONJA, Danijela POLJUHA
Cyprus: Andreas Ch. HADJICHAMBIS, Demetra PARASKEVA-HADJICHAMBI
France: Theodora BALMON, Bruno GARNIER
Greece: Marianna KALAITZIDAKI, George FARANGITAKIS, Anastasia PASCHALIDOU, Themistoklis SBAROUNIS
Hungary: Boldizsár MEGYESI, Adrienne CSIZMADY, Imre KOVÁCH, Zoltán FERENCZ
Iceland: David C. FINGER
Italy: Daniela CONTI, Luca BAGLIVO, Claudia SARTORETTI
Israel (Hebrew): Keren MINZ, Zvi WEINSTEIN, Daphne GOLDMAN, Ariel SARID
Lithuania: Audronė TELEŠIENĖ, Aistė BALŽEKIENĖ, Audra BALUNDĖ
Montenegro: Irena PETRUSIC (Bilafer), Sanja PERUNICIC, Jovana JOVANOVIC
Serbia: Mirjana LENHARDT, Vesela RADOVIC, Vladan DJOKIC, Zorana DJORDJEVIC, Mirjana CUJIC
Slovakia: Vladislav KAPUTA, Hubert PALUŠ, Hana MAŤOVÁ, Mikuláš ŠUPÍN
Slovenia: Željko OSET, Maša KOVIČ DINE
Spain: María Gema PARRA ANGUITA, Alexandra DELGADO JIMÉNEZ, Marta ROMERO ARIZA
Turkey: Hasan Volkan ORAL, Aliye Suna ERSES YAY, Erkan CERMIK

Publisher:
European Network for Environmental Citizenship – ENEC Cost Action (CA16229)

This booklet is full referenced as below:

Hadjichambis, A. Ch., Paraskeva-Hadjichambi D., Reis, P., Knippels, M.C., Christodoulou A., Xhindi, N., Sokoli, E., Lapin, K., Leregger, F., Zoescher, J., Zabic, M., Gekic, H., Keranova, D., Manov, B., Sulc, I., Gasparovic, S., Sladonja, B., Poljuha, D., Balmon, T., Garnier, B., Kalaitzidaki, M., Farangitakis, G., Paschalidou, A. Sbarounis, T., Megyesi, B., Csizmady, A., Kovách, I., Ferencz, Z., Finger, D.C., Conti, D., Baglivo, L., Sartoretti, C., Minz, K., Weinstein, Z., Goldman, D., Sarid, A., Telešienė, A., Balžekienė, A., Balundė, A., Petrusic (Bilafer), I., Perunicic, S., Jovanovic, J., Lenhardt, M., Radovic, V., Djokic, V., Djordjevic, Z., Cujic, M., Kaputa, V., Paluš, H., Maťová, H., Šupín, M., Oset, Z., Kovič Dine, M., Parra Anguita, M.G., Delgado Jiménez, A., Romero Ariza, M., Oral, H.V., Erses Yay, A.S., Cermik, E. (2019). *Education for Environmental Citizenship In Focus (in English)*. Lemesos, Cyprus: European Network for Environmental Citizenship – ENEC Cost Action.

Proposed reference for this booklet:

ENEC Consortium (2019). *Education for Environmental Citizenship In Focus (in English)*. Lemesos, Cyprus: European Network for Environmental Citizenship – ENEC Cost Action.

This booklet is based on the book chapter:

Hadjichambis, A. Ch. & Paraskeva-Hadjichambi D. (2020). Education for Environmental Citizenship: the pedagogical approach. In: A. Ch. Hadjichambis, P. Reis, D. Parakseva-Hadjichambi et al. (Eds) *Conceptualizing environmental citizenship for 21st century education (pp* 237-261). Cham, Switzerland: Springer.

ENEC Steering Committee

Steering Committee (SC) of ENEC:

- Dr Andreas HADJICHAMBIS (CY), Cyprus Center for Environmental Research and Education, CYCERE, MOEC, Cyprus (Action Chair)
- Prof Pedro REIS (PT), University of Lisbon, Portugal (Action Vice-Chair)

-Working Group Leaders:

- Dr Marta ROMRO ARIZA (ES), University of Jaen, Spain (Primary Formal)
- Dr Jelle BOEVE-DE PAUW (BE), University of Antwerp, Belgium (Primary Non Formal)
- Dr Niklas GERICKE (SE), Karlstad University, Sweden (Secondary Formal)
- Dr Demetra HADJICHAMBI (CY), Cyprus Center for Environmental Research and Education, CYCERE, MOEC, Cyprus (Secondary Non Formal)

-Other Members:

- Dr Andri CHRISTODOULOU (UK), University of Southampton, UK (Early Career Investigator and Gender Equality Coordinator – STSM Coordinator)
- Dr Marie-Christine KNIPPELS (NL), Universiteit Utrecht, Netherlands (Dissemination Board Coordinator – Communication Manager)

Working Groups' Vice-Leaders:

- Working Group 1 Vice-Leader: Dr Audrone TELESIENE, Kaunas University of Technology, Lithuania
- Working Group 2 Vice-Leader: Dr. Rares HALBAC-COTOARA-ZAMFIR, Universitatea Politehnica Timisoara, Romania
- Working Group 3 Vice-Leader: Dr Lihong HUANG, Oslo Metropolitan University, Youth Research Unit of NOVA, Oslo, Norway
- Working Group 4 Vice-Leader: Prof Daphne GOLDMAN, Beit Berl Academic College, Israel

ISBN: 978-9963-9275-7-9

The European Network for Environmental Citizenship (ENEC) – funded as a COST Action (CA16229-Horizon 2020) – brings together more than 130 experts from 38 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.

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.

The Education for Environmental Citizenship pedagogical approach is a proposal that points in this direction. The approach recommends specific elements as stages and steps, but it is not mandatory to follow all of them, or to apply them in a particular linear order. Depending on the environmental problem under study, the level of education (e.g., primary or secondary) and the educational settings (e.g. formal or non-formal), the necessary differentiations and amendments can be made.

We hope the educational community will find it useful.

cost
EUROPEAN COOPERATION IN SCIENCE & TECHNOLOGY
Funded by the Horizon 2020 Framework Programme of the European Union

European Network for Environmental Citizenship
Cost Action CA16229