



Proceeding Paper

Key Pedagogical Features and a Common Approach to Evaluate Education for Environmental Citizenship: An International Perspective [†]

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Abstract: This paper presents various educational interventions aimed at promoting environmental citizenship, which were developed in three different European countries (Sweden, Belgium and Spain). The interventions differ in context, target group and educational setting (formal or non-formal) and were evaluated in terms of their impact on participants' knowledge, attitudes and behaviours. The results show significant differences between pre and post scores, with a positive impact on the behavioural dimension in all of the reported interventions. Finally, the interventions are discussed on the basis of key common pedagogical features aligned with the specialised literature.

Keywords: sustainability consciousness questionnaire (SCQ); education for environmental citizenship; evaluation of interventions; formal education; non-formal education

1. Rational and Objectives

Several authors have suggested approaching environmental problems through citizenship [1–3], and important efforts have been made to conceptualise the idea of environmental citizenship [4].

Education is considered a main tool for capacity building and for providing citizens with fundamental knowledge and meaningful opportunities to exercise action competences to actively contribute to the generation of sustainable solutions to current and future problems.

Different pedagogical approaches with high potential to promote environmental citizenship have been identified. Činčera et al. [5] maintain that these interventions that have been proven to have a significant impact on people's beliefs, attitudes and behaviours exhibit common features: they engage individuals in the collaborative construction of sustainable solutions to local problems, fostering a sense of ownership and empowerment towards environmental issues.

The model developed by Paraskeva-Hadjichambi is aligned with the key pedagogical features previously mentioned [6], including processes such as inquiry, planning, acting, evaluating, reflecting and use dissemination and networking to enhance the effect of those interventions. Nevertheless, there is a need to better understand how this educational

model might be implemented in different contexts and situations, as well as to evaluate the impact of these interventions on environmental citizenship. The Sustainability Conscientiousness Questionnaire (SCQ) has been proven to be a powerful instrument for this purpose [7].

Addressing all these concerns, this work sets the following objectives:

1. To discuss educational interventions taking place in three countries differing in context, target group and educational setting (formal or non-formal).
2. To evaluate these interventions according to their impact on participants' knowledge, attitudes and behaviours.
3. To identify key pedagogical features common to the different interventions and to discuss to what extent these features are aligned with the specialised literature.

2. Research Design and Methodology

A single-group, pre and post test research design was used to measure the effect of various educational interventions on participants' beliefs, attitudes and self-reported behaviours, using an instrument previously validated in the specialised literature [8].

3. Findings and Conclusions

The results show significant differences between pre and post scores, with a positive impact on the behavioural dimension in all the reported interventions. Even though the three cases presented addressed different target groups, took place in very different contexts and varied in length, we can find common pedagogical features: the three of them promoted active and situated learning and were contextualised in real-life problems, offering meaningful opportunities for action-taking and reflection.

Author Contributions: This paper is the result of a truly collaborative work where all the authors (M.R.A., J.B.-d.P., D.O., P.V.P., G.P. and N.G.) significantly contributed to its conceptualisation, methodology, validation, formal analysis, data curation, and the writing, editing and reviewing process when preparing the present manuscript. All authors have read and agreed to the published version of the manuscript.

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Institutional Review Board Statement: In the Belgian case, data were collected under the positive advice given by the ethical committee for social sciences and humanities to the VALIES project (SHW_18_25). In the Spanish case, data collection follows the guidelines provided by the ethical committee for social sciences and humanities of the University of Jaén. In the Swedish case, the study follows the ethical guidelines provided by Karlstad University.

Informed Consent Statement: All Belgian participants provided active informed consent; for minors, consent was received from a parent or legal guardian combined with the children providing informed assent. The Spanish participants were informed about the purpose of data collection, accepted to participate and provided patient consent. The Swedish participants were informed about the purpose of the project, and they all provided active informed consent for participating.

Data Availability Statement: Data supporting the findings of this study are available from the corresponding author upon reasonable request.

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