



Proceeding Paper

Developing an Evidence-Based Educational Course for Environmental Citizenship [†]

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Abstract: The current generation of high school students is faced with a vast torrent of information regarding current events and issues, and environmental issues tend to be among the more salient topics. The quality and veracity of the contents of the information often times is dubious, and this illustrates the need to establish a reliable source of factual and politically neutral information regarding environmental issues; this can be conveniently accomplished by introducing education for environmental citizenship into the high school curriculum in a more systemic manner.

Keywords: environmental education; longitudinal studies; intervention; evidence-based education; action-based knowledge



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Introduction

Currently, the environmentalist movement is gaining increasingly more public support and attention, and for good reason. In order to tackle current environmental issues, we need society to participate actively in mitigating the harm done to the environment and to participate as citizens in working toward ways of tackling environmental issues. The activist movements associated with environmental issues, however, are often politicized in ways that are more than just a fight for the environment, which may lead some people to have aversive reactions to environmentalism altogether. This type of situation benefits no one.

Additionally, many environmental activists may have opinions regarding various environmental issues that are not factual but are based in personal opinion and feelings (e.g., blaming whole political or economic systems, regarding nuclear energy as a threat to the environment, overestimating the capacity to adopt various solutions in a short period of time, and so on). The current situation in Europe, where countries with overly ambitious environmental goals were forced to go back to coal power is a prime example of good intentions backfiring because of decisions made without rational foresight. Thus, while environmental activism is in essence a positive force for change and is necessary, it needs to stem from a strong foundation of factual knowledge.

To address the aforementioned issue, the ENVICI (<http://envici.mruni.eu>) project was conceived. The aim of the project is to foster the development of environmental citizenship in school-aged children through evidence-based education that focuses on providing state of the art factual knowledge regarding environmental issues to young people, both in terms of basic understanding of ecological systems and of acquiring concrete action-based knowledge regarding everyday activities that are environmentally friendly.

In the context of the project, educational materials (an exercise book suitable for school-aged children) will be developed in order to provide an engaging and effective way of transmitting factual knowledge to young people who then will have the necessary understanding to engage in societal actions as environmental citizens. This, hopefully, will lead to a more evidence-driven environmentalism that focuses on issues from a reasonable and practically possible point of view, with tangible and realistic proposals.

The effectiveness of the educational materials in shaping environmental citizens will be tested longitudinally through an intervention study. We take the model of environmental citizenship proposed by Hawthorne and Alabaster [1] as a basis for the change model we are going to use in assessing whether students’ environmental citizenship has been affected by the educational materials we are developing (Figure 1). We are particularly interested in the part of the model that proposes that both abstract and concrete knowledge, as well as education and need for learning about environmentalism contributes to environmental citizenship. As identified by a survey of various stakeholders, there is a strong need for education for environmental citizenship in Lithuania [2] and across Europe [3]. Thus, high-quality, politically neutral, and factual educational materials that contribute to educating an environmental citizen seem to be needed if we are to address environmental issues in a sustainable and manageable way through the informed social participation of citizens.

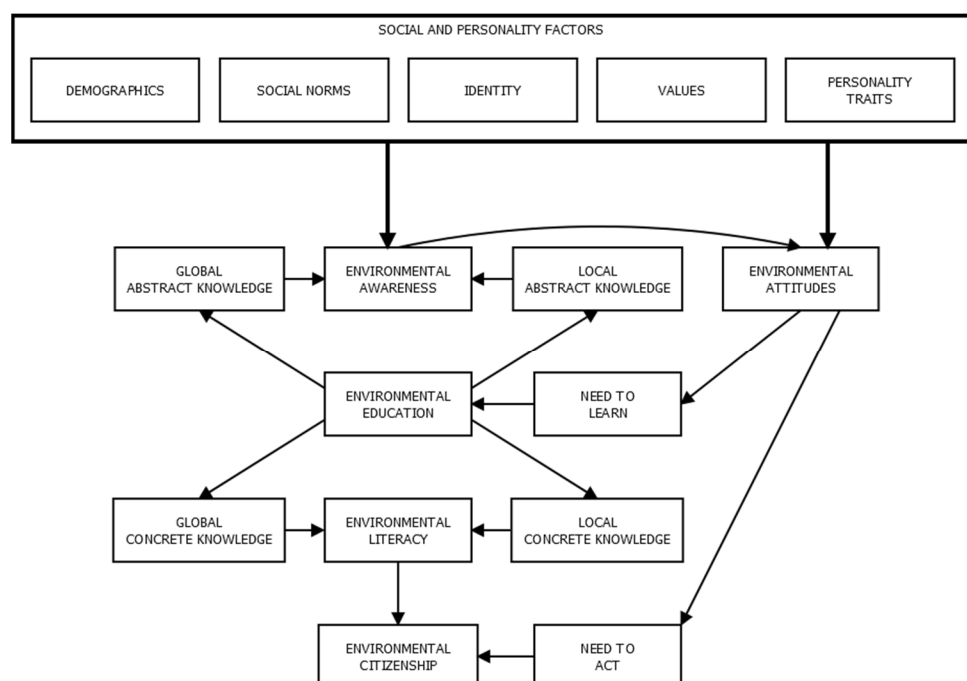


Figure 1. Theoretical model that will be used in the project.

The instruments used to assess the components of the model will be largely based on previous research on environmental citizenship [4], while some measures will be constructed by the project team as there is no clear consensus on how to assess some of the components of the model.

The intervention will be piloted on a small scale with the intention to develop the final educational materials and to assess their quality and effectiveness through a small-scale longitudinal study. After the materials are finalized, the exercise book will be finalized and tested in a large-scale longitudinal study involving several schools from Lithuania. If the data support the effectiveness of the book, it will then be made publicly available for schools to use free of charge. Additionally, translations into other languages will be considered in order to broaden the impact of the project.

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