

Vol. 22, No. 4, 2023

ISSN 1648-3898 /Print/, ISSN 2538-7138 /Online/



JOURNAL  
OF BALTIC  
SCIENCE  
EDUCATION

# Journal of Baltic Science Education



THE INTERNATIONAL JOURNAL OF THE SCIENTIA SOCIALIS Ltd. & SMC "SCIENTIA EDUCOLOGICA"



## THE IMPORTANCE OF ENVIRONMENTAL EDUCATION AT AN EARLY AGE

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There is no doubt that environmental education at an early age is significant for human development. When we refer to an early age, we mean the preschool and the primary stage of education (preschool education institution and primary school). It is obvious that the foundations of personality are formed at this stage, primarily a positive attitude towards nature and the surrounding world. At this stage, the child begins to distinguish himself from the environment, an emotional and value attitude towards the environment, nature, himself, and other people, etc., is formed. On the other hand, knowledge corresponding to a certain age of a personality (e.g., ecological), norms and rules of interaction with nature are required, on the other hand, it is extremely important to develop empathy for nature through various activities (e.g., actively solving certain environmental problems). It can be reasonably stated that the formation of values, nature cognition and a sustainable lifestyle are three essential factors determining (describing) the importance of environmental education. Thus, environmental education at an early age not only helps to develop environmental awareness but also promotes abilities and the attitude, which can determine a sustainable and responsible lifestyle in the future. From this point of view, the continuity and sustainability of this education is extremely significant. Environmental education in primary school can have a long-term effect on children's moral and worldview behaviour and contribute to sustainable development and global well-being. The period of primary education is a suitable and favourable environment for the formation of children's positive and rational attitude towards the environment, promoting environmental awareness and developing a sustainable lifestyle.

The preschool educational institution is the first link in the continuous environmental education system, so it is not by chance that teachers are faced with the task of forming the cultural foundations of preschoolers' rational environmental management. Later, the accumulated experience is transferred to the primary school. Consistency and continuity are important here. It is fully understood that environmental education is not a one-time event or activity but must be consistently integrated into the teaching process at all levels and stages of the school. Continuity ensures that important principles of sustainability and environmental habits are formed from early childhood and developed throughout formal and non-formal education periods.

Environmental protection problems are faced all over the world. The quality of the environment has a tendency to deteriorate, therefore environmental education becomes one of the essential conditions for continued existence. In order to improve the situation, it is necessary to raise public awareness and encourage behaviour change. It is obvious that environmental education is needed, which would raise the level of people's awareness, encourage them to change their behaviour, accordingly, changes would take place in the field of production and industry, consumption habits and the relationship with the environment itself. Environmental education is especially important in primary school. In forming children's environmental awareness, a large responsibility falls on the primary school teacher, therefore, his preparation in the field of environmental education must be adequate (Lamanauskas & Makarskaitė-Petkevičienė, 2023). It is emphasized that the requirements for the environment are growing, and it is increasingly necessary to act sustainably, responsibly, and respectfully, not only to protect but



also to restore the environment. In the process of environmental education, various didactic tools, approaches, and techniques are applied. Environmental education content is created and updated, but not always properly and in a timely manner. Researchers emphasize that digital technologies including video conferencing, mobile apps, and virtual and augmented reality, can provide new ways to engage children/students in environmental maintenance (Buchanan et al., 2019). However, there remains a fundamental question that should be a focus of those interested in environmental education. Existing and developing digital technologies can become both encouraging and hindering elements in educating young people to think globally and to behave responsibly and respectfully in the surrounding environment.

Speaking about the most important barriers to environmental education, it should be said that they basically remain the same. For example, a study conducted in 1988 (Sewing & Ham, 1988) showed that the most important barriers were lack of time (both for the lesson and preparation), lack of teaching materials and funding, and lack of teaching competence of teachers. However, recent studies also show that teachers lack knowledge and proper teaching on environmental topics, which in turn causes difficulties in implementing environmental education programmes. For example, a study conducted in Greece showed that teachers were interested in environmental issues and mainly used the media to get information about environmental protection, however, there are also significant shortcomings in the development of teachers' abilities, the organization of environmental education in preschool and primary education institutions, which negatively affect the implementation of environmental programmes in schools (Petkou et al., 2021). Many researchers rightly believe that the solutions to environmental problems are influenced by accepted environmental ethics. For example, a study conducted in Poland in 2017 (analysed the content of textbooks used by primary school science teachers in the fourth grade) showed that the content of formal environmental education is dominated by anthropocentric ethics, and biocentric ethics is much less common, and only very little attention is paid to holistic ethics and the declaration that man is a part of nature (Gola, 2017). A study conducted in Serbia showed similar results. Recent changes in school policies and educational plans/programmes confirm that the relevance of environmental education has been recognised, however, there are practically no changes in school practices (Stanišić & Maksić, 2014). Thus, in the educational programmes of many countries, environmental education is not always sufficiently emphasised or may even be practically omitted or even ignored. As a result, teachers may not gain sufficient knowledge and confidence in this important area. On the other hand, environmental education is constantly changing and developing, new perceptions and didactic approaches appear. It is obvious that it is difficult for teachers to keep up with all these new developments and incorporate them into their lessons, especially if they do not have the opportunity to learn new things regularly. Another well-known truth is that primary school teachers often have multiple tasks, including teaching general subjects, socialising with children and more. Environmental education can remain somewhat suppressed (offside) due to many other priorities. It is important to emphasize that attention must be paid to the training and support of teachers at all levels, to ensure that they are prepared and able to effectively integrate environmental education into their lessons. And here, the preparation of students, future preschool and primary education teachers in the field of environmental education during their studies at university is no less important. Here are some excerpts from respondents' answers about their vision of implementing environmental education at school (Lamauskas & Makarskaitė-Petkevičienė, 2023):

*I will encourage the school community to organise activities for environmental education. In our free time, we will watch videos with the students and discuss environmental protection. When these topics are included in world cognition lessons, I will devote time to telling as much and as original as possible about environmental protection. I think it is possible to implement various projects, for example, try to sort out for a week and reflect daily with the students on how they managed to do it. Another example is to ask each student to make a poster encouraging them to protect nature or to create a booklet, showing how we can contribute to environmental protection. Also, we can participate in the environmental action "Let's do it". It would be nice if mini containers were placed in the classrooms for sorting, I think it is useful to set an example that sorting can be done not only in the classroom but also at home. It is important to develop students' awareness, and to explain that they can also contribute to this (Respondent A, Childhood pedagogy – primary education specialisation, IV course).*

*The main vision is that every school not only talks about environmental protection but also uses all environmental protection methods – to reduce the amount of printed paper, use renewable energy sources, sort waste, and contribute to other environmental actions. After all, words remain only words if we do not see good examples in our environment. (Respondent B, Childhood pedagogy – primary education specialisation, IV course).*



*Children need to be taught to contribute to environmental protection. It is not always easy to do this. Therefore, it is important to create an understanding that even a small step in contributing to the preservation of the environment is very useful.* (Respondent C, Childhood pedagogy – preschool education, I course).

In 2023 an empirical qualitative study was conducted in Lithuania, which aimed to reveal how future primary school teachers understand the meaning of environmental education, the topic, and what kind of realisation vision they have. It was established that future teachers have a fairly clear position on the issue of environmental education. Environmental education is treated as a significant part of general education, it is important to understand its integrative and interdisciplinary essence. Students see different areas of environmental education that should be covered in primary school. The topics include such areas as waste issues, environmental pollution, global climate change, environmental solutions, and the crisis of values. Judging from the point of view of age groups, primary school students (7-11 years old) are usually willing to take responsibility, are empathetic, understand the moral imperative, their thinking is strongly dependent on experience, they learn quickly from authority figures, so the position of the teacher, his active participation in environmental activities, his environmental values are very important. The vision of future teachers' implementation of environmental education at school includes both a cognitive component (strengthening environmental education through the development of knowledge and understanding, formation of value attitudes), and a practical- behavioural component (increasing awareness of waste sorting and promoting the use of secondary raw materials) (Lamanauskas & Makarskaitė-Petkevičienė, 2023).

The competence of teachers in the field of environmental education may vary depending on the specific country, school (especially in terms of its location), individual efforts of teachers and various other factors. However, it is often observed that teachers in many countries lack knowledge and confidence in terms of environmental education. Many teachers may have basic knowledge about environmental protection; however, they lack specific methods and ways how to transfer this knowledge to students and how to help them form sustainable behavioural habits. There is also a lack of information about reliable sources of information (e.g., proponents and opponents of global climate change), ideas for activities and planning and implementation of activities in this area.

It can be said that it is important not only to talk about environmental education but also to study its effectiveness so that we can improve it taking into consideration the obtained results. The study of the effectiveness of environmental education is an important process that helps to evaluate the results of this type of education and to make sure that it achieves the intended goals and effects on the knowledge, attitudes, and behaviour of students. The results of the research can provide valuable knowledge about how to do better and how to improve environmental education. The aspect of optimal balance is important. If environmental education is too theoretical and not practical enough, or on the contrary, too practical and not sufficiently based on theoretical foundations, it may not be useful for both students and teachers. Therefore, it is necessary to ensure that environmental education is consistently integrated into curricula in all disciplines (e.g., using STEM methodology and approaches). This will enable students to relate sustainability principles with real areas of knowledge. An extremely rational approach is to organise practical classes and activities that would allow students to actively learn about nature, conduct research, experiments and create projects related to the environment and its protection and improvement. Recently, it is significant to effectively use modern technologies, video materials, interactive teaching tools and internet resources, which can increase the involvement of students and form their adequate understanding of environmental protection. Based on research data, educational institutions can adjust their programmes and methodology. Therefore, by conducting research on environmental education effectiveness, it is possible to obtain valuable information about its impact and contribute to the consistent and effective development and implementation of this education.

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Received: July 29, 2023

Revised: August 15, 2023

Accepted: August 20, 2023

Cite as: Lamanuskas, V. (2023). The importance of environmental education at an early age. *Journal of Baltic Science Education*, 22(4), 564-567. <https://doi.org/10.33225/jbse/23.22.564>

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