

EDUCATION FOR SUSTAINABLE DEVELOPMENT AT THE EARLY CHILDHOOD EDUCATION

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Purpose: the aim of the paper is to present the role of education in developing one's awareness of sustainable development. The first educational stage is a special period of development, during which it is extremely important to develop pro-ecological and pro-social attitudes.

Approach: the paper shows the essence of education for sustainable development (ESD) in shaping the values, empathy and awareness that are needed to act for society, the environment and the economy. There are many scientific publications that present research on the implementation of ESD in school curricula, but only few of them truly analyze the role of the first stage of education, which is considered the period of greatest human development.

Findings: what formal education requires is to redefine and adopt a new experiential learning paradigm. The principal role of the school, as an organization responsible for shaping this process, and also of the teacher, is to shape specific attitudes of creativity, wisdom and reasoning. These competencies are blocked by pre-established learning outcomes that need to be verified through sets of compulsory tests.

Practical implications: currently, the implementation of ESD at the first stage of education involves changing existing curricula. However, it is also worth paying attention to the need for balance at every stage of school activity: organizational, teaching, educational, and to notice possible changes in the area of quality and standards regarding ESD in Poland.

Originality/value: the implementation of ESD at the stage of early education in Poland is not yet well recognized; the article offers threads for possible further discussion, as well as the design of practical strategies.

Keywords: education, early childhood, sustainable development.

Category of the paper: Viewpoint, general review.

1. Introduction

Education plays the most important role in developing awareness about society, the environment and the economy. N. Mandela indicates that education is the most powerful role we can use to change the world. In the face of the challenges of modern society, education

becomes the best way to achieve ecological, economic and social harmony in order to implement the assumptions of sustainable development. Many international and national documents establish the need to implement the principles of sustainable development in everyday education. However, few pay attention to the first stage of education, which is the period of the greatest human development, affecting further functioning and attitudes that it will present. The introduction of education for sustainable development in the education system has the potential to transform the attitudes, habits and ways of thinking of future generations, creating a more responsible, aware and active society, ready to work for a better future for our planet.

2. Education for sustainable development

Understanding the essence and the implementation of the principles of sustainable development depends only on man, therefore it is important that education around the world is aimed at promoting sustainable development. Recently, many actions have been taken that oblige UN member states to introduce Education for Sustainable Development (ESD) at all levels of education. Implementation of the concept of sustainable development, whose most important feature is realism and a multidimensional approach to the environmental crisis (Papuziński, 2007, p. 30), should be conducted through education. The Ministry of the Environment has stated that education is a basic human right and is a precondition for achieving sustainable development, it can help in implementing the assumptions of the new vision of the future (Europejska Komisja Gospodarcza ONZ [*UN Economic Commission for Europe*], 2008, p. 5). The main task of the ESD is to disseminate the knowledge and skills that are needed to implement sustainable development, it is also to create a new culture of society manifested in four integrated perspectives: economic efficiency, social justice, ecological compatibility and democratic order (Schreiber, 2005). Sustainable economic efficiency should ensure a good life here and now as well as for the future. A manifestation of its efficient functioning is the economical management of natural resources and the use of renewable energy sources, which limit the possibilities of using natural resources in the future. Tax policy should be conducted in such a way as to support pro-ecological initiatives (Jutvik, Liepina, 2005, p. 11). Social justice, otherwise known as sustainable social development, is the comprehensive development of humanity, involved in shaping the reality in accordance with ethics and morality, which sees the relationships between communities and the ecosystem (Jutvik, Liepina, 2005, p. 11).

A broader approach to ESD is the assumption that it focuses on the development not only of knowledge, but also of values and skills that are the basis for taking local and collective actions, it is to stimulate awareness of the need to improve the quality of life, taking into account the rational use of Earth's resources (Batorczak, 2013, p. 25). It is worth emphasising that this

is knowledge that helps in looking at the world in a new way, is needed for action and shapes values that stimulate motivation to participate in the life of a local society with global impact. It is important to rethink "teaching and learning as the processes of knowledge, skills, values and attitudes that shape the views and plans of individuals, schools and local communities in relation to the issues of social justice, economic security, ecological sustainability and democracy" (Jutvik, Liepina, 2005, p. 21).

Currently, the most important document is the 2030 Agenda for Sustainable Development, which was adopted at the conference in Rio de Janeiro in 2015. It is a continuation of the Millennium Declaration adopted in 2000, which contains eight Millennium Development Goals. The leaders of 189 countries under the auspices of the UN signed this declaration and committed themselves to reducing the level of poverty and hunger, striving for equality between women and men, improving the state of education and health, including the fight against AIDS, and protecting the environment (Millennium Development Goals, 2017). Agenda 2030 is the new challenges that have been called the Sustainable Development Goals-SDGs, in Poland called the Sustainable Development Goals. This is another step to achieve sustainable development. The main assumptions are 17 goals that should be achieved by 2030, and their effects will be to ensure basic material needs and human rights around the world, as well as sustainable use of the natural environment (Sachs, 2012, p. 2208).

Political changes, technological and financial solutions will not be enough to meet the challenges of sustainable development. It requires changing the way we think and act, paying attention to how it affects the ecosystem that supports our lives (Cheng, Yu, 2022, p. 1). ESD is an educational model designed to solve not only ecological, but also economic and social problems on a global scale, thus adopting a holistic approach (Pearson, Degotardi, 2009, p. 98). Formal education plays an important role in this concept, as it is the basis for shaping attitudes and values among students. As emphasised by E. Pearson and P. Degotardi – by instilling important life and learning skills in young children, early childhood education can promote change and improve the quality of life on a global scale (Pearson, Degotardi, 2009, p. 103; Pearson, Degotardi, 2009, p. 100). It is also worth emphasizing the essence of the ESD approach, which acknowledges the important role of environmental, social, cultural and physical conditions in the development and upbringing of a child (Pearson, Degotardi, 2009, p. 103). This is also an important step to make changes. Good practices introduced in the early stages of education will bear fruit in the future, both on a local and global scale (Siraj-Blatchford et al., 2010, p. 8). An important aspect of the need to implement ESD from an early age is indicated by K.G. Eriksen, on the example of education in Norway, shows the possibilities offered by integrating the social learning perspective with the concept of acquiring ecological competences and skills (Eriksen, 2013). Such an attitude allows for building foundations that guarantee the durability of this strategy. This survival in time and space means not only long-term knowledge, but, above all, it develops awareness of the volatility of society, economy and environment (Hägglund, Samuelsson, 2009, p. 59) and care for their balance.

“ESD provides students of all ages with the knowledge, skills, values and empowerment to address related global challenges, including climate change, biodiversity loss, unsustainable use of resources and inequality. It empowers students of all ages to make informed decisions and take individual and collective action to transform society and care for the planet. ESD is a lifelong learning process and an integral part of high-quality education. It enhances the cognitive, social-emotional and behavioral dimensions of learning. It covers the content and learning outcomes, pedagogy and the learning environment itself” (What You Need to Know about Education for Sustainable Development, 2023).

3. Sustainable development in programmes for the 1st stage of education

The document currently in force is the "Regulation of the Minister of National Education of February 14, 2017 on the core curriculum for pre-school education and the core curriculum for general education for primary schools, including students with a moderate or severe intellectual disability, general education for a stage I sectoral vocational school, general education for a special school preparing for work and general education for a post-secondary school" (*Podstawa Programowa Kształcenia Ogólnego [Core Curriculum for General Education]*). It assumes that at the first stage of education “education and upbringing in primary school is conducive to developing civic, patriotic and social attitudes of students. The school's task is to strengthen the sense of national identity, attachment to national history and traditions, prepare and encourage activities for the benefit of the school and local environment, including involvement in volunteering. The school cares for the education of children and youth in the spirit of acceptance and respect for other people, shapes the attitude of respect for the natural environment, including disseminating knowledge about the principles of sustainable development, motivates to act for environmental protection and develops interest in ecology” (*Podstawa Programowa Kształcenia Ogólnego [Core Curriculum for General Education]*, p. 14). Other important guidelines for education are the Pillars of Education included in the Report of the International Commission on Education for the 21st Century, chaired by Jacques Delors for UNESCO. Although it was published in 1996, its assumptions are still valid and valid for ESD. The report presents 4 such pillars:

- learn to know – the first pillar that rejects encyclopedic knowledge and assumes equipping students with tools - the ability to independently acquire knowledge allowing to understand, learn and discover;
- learning to act – education is not only acquiring the skills necessary to perform a specific profession, but learning to act in the face of various social, economic and ecological challenges;

- learning to live together – recognising interdependence on others, developing conflict management skills and respect for others;
- learn to be – a pillar relating to personality development, autonomy and responsibility for one's own conduct. The authors of the report point out that developing the potential of each person, focusing on memory, reasoning, aesthetic sense, physical abilities and communication skills (Learning: The Treasure within..., 1996).

The report also emphasizes the role of formal education as an opportunity for holistic human development, but this requires looking at the learning process from different perspectives and with the participation of not only teachers, but also governing bodies and the local community. These assumptions impose on teachers the obligation to create educational programmes adapted to the needs of the modern world. "When creating curricula, it is worth taking into account 3 aspects of sustainable development, which show the theoretical layers - components of human development striving for balance between society and the environment" (Konieczny, 2022a, p. 172). When introducing sustainable development to curricula, it is worth applying the following principles, which allow for a fully qualitative design of teaching material:

- multilateralism - the first challenge faced by the creators of curricula is to notice areas not only in the field of environmental education, but also social and even economic;
- perspective - the implementation of the sustainable development goals requires long-term design and rejection of focusing on immediate results;
- activation – introducing changes requires active participation and acquiring the ability to act, involve students and apply knowledge in practice;
- communication without barriers – emphasising the importance of cooperation and respect towards different social groups;
- local action, global impact - taking into account the needs of the immediate environment, recognizing its needs, and developing respect for culture. This action also allows for the implementation of the global sustainable development goals;
- interdisciplinarity – the integration of many fields of science allows for a broader view of the problems of the modern world;
- cooperation - the introduction of changes requires cooperation at all levels of education and organisations operating in the local environment;
- inclusion – equal opportunities for all pupils, taking into account special educational needs.

The introduction of changes is limited by the mechanical understanding of education through the use of prescriptive forms of learning, with predetermined, verifiable learning outcomes (O'Flaherty, Liddy, 2018, p. 1044). It is worth paying attention to the role of the school as an organization influencing all dimensions of social life and serving as a role model for other entities (Mathar, p. 25). The concept of the whole school approach (WSA) is based on the assumption of developing competences as personal development and not the

implementation of an assumed subject (Mathar, 2018, p. 49). Sustainability is emphasized at every level of school activity (didactic, educational, organizational) and not only the student's activity.

4. Teachers' and students' attitudes towards education for sustainable development

The future of Polish education at all levels depends on well-educated, competent, dedicated and capable teachers. Knowledge combined with the appropriate skills shapes the teacher's abilities, which have a key impact on the knowledge, skills and attitudes that his students will display. The role of a modern teacher is to shape the student's awareness and need for development, to sensitise him to the problems of contemporary reality and to support his self-development and intellectual autonomy. In the face of the dynamics of civilisational, social and cultural changes, the constant development of knowledge, and the needs of a modern student, the new paradigm of the teacher is the model of a specialist who helps the student to meet newer and newer requirements, supports in a critical understanding of reality, and helps to evaluate the excess of incoming information. Reflection on the quality of education prompts the adoption of a new direction of education, where a space is created that allows ongoing understanding and integration of new information, a high level of flexibility and adaptation (Konieczny, 2022b, p. 36).

Many of the most fundamental values of tomorrow's society are formed in early childhood, and early childhood education has a fundamental role in achieving sustainable development (Siraj-Blatchford, 2009, p. 9). Educators can make a difference and support children's learning for sustainability (Cheng, Yu, 2022, p. 1). At the first educational stage, it becomes very important to stimulate the cognitive functioning of the child. It is a complex process of processing impulses coming from the world around us. ESD requires society to learn to live in balance with the natural environment from an early age, so it is important to develop creativity, wisdom and reasoning.

Creativity understood as the ability to tackle the right problems, i.e. those that have not yet been noticed or are the subject of interest of a small number of people. It is essential for building a modern and effective society and for introducing changes in the world aimed at increasing collective well-being. Wisdom is the application of tacit as well as explicit knowledge for the common benefit by balancing personal, interpersonal, and transpersonal interests in the short and long term to achieve a balance between adaptation to the existing environment, modification of the existing environment, and selection of a new environment. Wisdom is a life attitude that enables the individual to engage their potential to achieve their own life goals, taking into account work for the common good. Reasoning is the thought process of drawing

inferences from principles and data, moving from what is already known to formulating new conclusions or evaluating proposed ones.

An equally important, yet overlooked aspect of learning in education is the development of critical thinking skills. Practicing critical thinking skills is a complex process that affects the emotions, skills and abilities of a child. In terms of emotionality, independent thinking is supported. In order to gain intellectual independence, one must learn to look at the problem from different points of view. One should be aware of one's own thinking, but also of seeing it from the perspective of others. The sense of the essence and importance of one's own reasoning stimulates the acquisition of skills that allow you to learn the rules of defining words and transforming them into complex chains of thought. Such cognition allows a positive attitude to the task to be performed to arise in the mind. Discovering the goals and expected effects of your activity gives you greater opportunities to understand the world around you.

Appropriate projects to check and evaluate the work performed are multi-element intellectual, physical and social challenges. They develop students' thinking and planning skills and make their abilities and interests the starting point for developing their competence later on (Barron, Darling-Hammond, 2013, p. 325).

Therefore, it is important for the development of creative and critical thinking that the teacher, parents and students ask questions skillfully, so that it leads to curiosity/surprise and to take the trouble to look for original answers. In order to stimulate the development of critical thinking, it is necessary to introduce into the teaching framework methods that are aimed at its development. Among them, the concept of learning through research, which is a more conventional variant of the problem-based learning method, can be particularly distinguished. Learning by research requires a lot of effort on the part of both the teacher, who has to organize appropriate teaching aids and the place where classes are conducted, and the student, who performs the task together with his peers without the help of the teacher. The student learns to use his own knowledge, acquired skills and intuition, which will allow him to perform the task correctly. Learning by research or practice is the most appreciated working method in the modern school. Its biggest advantage is the fact that it develops the cognitive independence of students, their creativity and interests are stimulated. The nature of learning through research is very creative, as students expand on known didactic problems with scientific problems. Education through research is effective because knowledge is better assimilated when a person generates it himself than that which is given to him in ready-made concepts. Thinking procedures that lead to a solution affect better memorisation. Adoption of such a working strategy allows for the development of critical thinking (Bąbel, Wiśniak, 2008, p. 73). While working through the study, not only does the level of knowledge of students increase, but also cognitive independence develops, students function better in society and are able to express their opinions. This method makes it easier for students to get to know the reality directly, has a very large impact on the level of skills as well as their school achievement results (Kupisiewicz, 2012, p. 140). As F. Bereźnicki points out, the education system should not only

support the student in the intellectual sphere, but also the aesthetic and moral aspects should be stimulated. The purpose of education is to prepare students for life, shaping its character and attitudes, however, it should be remembered that the goals will not be fully achieved if it does not take into account the world of values, its understanding, acceptance and respect (Bereźnicki, 2011, p. 33). Learning through research is a method that requires a lot of activity on the part of both teacher and student. However, it is worth emphasising that it has many advantages that affect the development of the mind and also shapes the ability of critical and creative thinking, teaches cooperation and empathy.

5. Conclusion

The article summarizes some considerations for developing education indicators for ESD. In the research conducted on the implementation of ESD into school curricula, J. Boeve-de Pauw et al. (2015, p. 15712) not only indicate the potential of this strategy, but also emphasize the need to adapt it to the needs of the recipients to whom it is addressed. It seems worth observing that specific attention should be paid to the first stage of education, which is the period of the greatest development of learners. The quality of education at this level affects functioning at further stages. The role of the teacher is to stimulate creative and critical thinking, which is the basis for noticing oncoming problems and searching for their solutions. It is important to develop the ability to tackle the right problems, acquire the ability to introduce changes and care for the common good.

ESD should be perceived through the prism of an approach based on action competence (Mogensen, Schnack, 2010, p. 59). In developing cognitive independence, an effective method may be education through research, as it not only offers learners freedom in learning but also rejects memorizing encyclopedic knowledge often recognized as the only correct way of learning. In this concept, the teacher, while ceasing to be the only source of knowledge for the student, takes on the role of a companion and support in learning. Thus, in early childhood education ESD not only shapes responsible attitudes and habits in children, but also helps build the foundation for future generations, in hope they will be more involved in creating a better and more sustainable world. Additionally, improving teaching and learning by reflecting democratic values appears to be one of these important threads of discussion that mark the beginning of a discourse that will lead to practical progress in schools.

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