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“WHY IS ENVIRONMENTAL EDUCATION IMPORTANT FOR CHILDREN IN THE 21ST CENTURY?”

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Abstract. In this study, we will examine why preschool environmental education is important in the 21st century. Within the scope, I benefited from many studies and articles and included important opinions. In order to understand the subject well, I first explained the subjects of environment and environmental education. I talked about why environmental education is important in preschool and what conditions should be met for children and included exemplary activities to improve environmental education in preschool. I researched what has changed in environmental education in this century and why environmental education is important. Finally, I expressed my own ideas and views on environmental education in the 21st century.

Key words: environmental education, nature, childhood, preschool children.

Introduction

It is well known that investments in childhood are 5-6 times higher than the effectiveness of investments in the education and upbringing of children in general educational institutions and educational organizations of higher education. In the framework of the article, the phenomenon of environmental education of preschool children (3-7 years) is studied. Preschool age is the most sensitive period for building the foundation of a continuous environmental education of an individual, including one based on the development of feelings of citizenship and patriotism, orientation on respect for the nature of a small Motherland, reflected in mother tongue, songs and music, poetry and prose, animation, film and television. In this regard, the issue of a comprehensive harmonious development of a preschool-age personality through the prism of children's environmental education is being updated. In my opinion, during national projects and global ratings, the time of assessing the quality of life, we consider it quite advisable to consider the reflection of the problems of environmental education of children in domestic pedagogical literature for 2018–2019. It is important to notice that publications on environmental education of preschool children can form benchmarks for the development of this phenomenon in accordance with the formation of innovative tools for teaching and raising children in the new sociocultural and informational reality.

Environmental education of preschoolers is not just a trendy direction in pedagogy. The environmental education of preschool children is the education that forms the ability of a child to understand and love the world around him/her and take care of it. Nature expands the opportunities for aesthetic, patriotic, and moral education. Communication with nature enriches the spiritual sphere of a person, contributes to the formation of positive moral qualities. Introducing nature to preschoolers is an important way of educating preschoolers in terms of environmental culture. Human existence is impossible without the knowledge of nature and love for it. It is important to lay the foundations of environmental education from

early childhood, as the main personality traits are laid in preschool age. Ecological education of preschool children is one of the fundamental problems of the theory of education and it is of paramount importance for educational work. A lot of outstanding thinkers and educators of the past attached great importance to nature as a means of raising children.

J.A. Komensky saw nature as a source of knowledge, a means for developing mind, feelings and will. K.D. Ushinsky was in favor of “leading the children into nature” strategy, in order to inform them of everything accessible and useful for their mental and verbal development. The ideas of introducing nature to preschool children were further developed in the theory and practice of the Soviet preschool education. I.D. Zverev proposes to consider environmental education as a continuous process of education, upbringing, and personality development, aimed at the formation of a system of knowledge and skills, value orientations, moral, ethical, and aesthetic relations that ensure the person’s environmental responsibility for the state and improvement of social environment. G.A. Yagodin repeatedly pointed out the worldview nature of environmental education.

What is environment?

The environment is the biological, physical, social, economic, and cultural environments in which living things maintain their relationships and interact with each other throughout their lives (Torunoğlu, 2013).

The environment has two dimensions: social and physical. In the social environment, all kinds of social, economic, and political interactions between people take place; the physical environment constitutes the environment in which people live and perceive their existence, feature, and quality (Çabuk, Pamuk, Ahi, Kalburan, Güngör, 2019).

In this study, we will consider the physical environment within the scope of preschool environmental education.

The physical environment is divided into two as the ‘natural environment’ and the ‘artificial environment’ in terms of its formation.

- The artificial environment is an environment created entirely by people, where people transform what they find ready in their natural environment with their own culture and knowledge (Hartig, Van den Berg, Hagerhall, Tomalak, Bauer, Hansmann, Ojala, Syngollitou, Carrus, Van Herzele, Bell, Podestave Waaseth, 2011).
- The natural environment, on the other hand, is the environment that is not touched by humans and that is completely spontaneous. The natural environment is the whole of living things such as humans, animals and plants and inanimate assets such as air, water, soil, and underground resources (Daniel, 2001).

What is environmental education?

There are various definitions of environmental education in the literature. Some of these are the following:

- Environmental education is defined as the education carried out to raise awareness about the environment in which people live from birth to death and the future of this environment and how to protect it (Dikmen, 1993: 22).
- Environmental education, besides conveying ecological information to individuals, provides the development of attitudes towards the environment in individuals and the transformation of these attitudes into behavior. Environmental education is studies that affect children's cognitive, affective, and psycho-motor areas (Unterbruner, 1991: p.98).
- Environmental education is educational efforts undertaken to increase the level of knowledge and awareness of individuals about the environment they live in (Gülay and Önder, 2011: 47).
- Environmental education is an interdisciplinary field of study that aims to develop an understanding of citizenship that is sensitive and knowledgeable about the natural or artificial environment (Gülay and Öznacar, 2010: 2).

What is the importance of environmental education in preschool education programs?

Today, the importance of environmental education is emphasized in many preschool education programs all over the world. Environmental education is aimed at providing children with the following elements:

- Love for the environment
- Protecting the environment
- Raising awareness about the environment
- Preventing environmental problems
- Solving ecological problems
- Developing positive attitudes and behaviors towards the environment

A study by the University of Essex in England found that even a brief contact with nature has positive effects on children's self-confidence and mental well-being. According to the study, preschool period was considered as the most sensitive and critical period for children to get to know nature and develop environmental awareness (Kidd & Kidd, 1997).

By providing both unstructured and structured experiences in nature from an early age, children build an understanding of the natural world that allows them to engage in increasingly complex investigation and knowledge building over time. Further, in a time when access to nature is increasingly lacking in children’s lives outside of school, making time and space for nature-based experiences as part of the school program has become more critical (White, 2004).

Children who have the chance to observe nature show more adaptive behaviors, decrease in aggression, and develop problem-solving skills. In addition to the social and emotional benefits, spending time in nature is cognitively beneficial. In this context, it has been observed that children's attention spans increase after they return to the classroom environment (Holmes, Pelegrini, & Schmidt, 2006).

Spending more time outdoors is also very beneficial for children's physical development, so that children have a chance to move more and their risk of obesity-related health problems is reduced (Blair & Brodney, 1999). Early experiences with science and nature play a role in children’s future interest in the sciences (Maltese & Tai, 2010).

Early childhood environmental education concept

In environmental education, there is a concept map that can be used to teach environmental concepts to children.

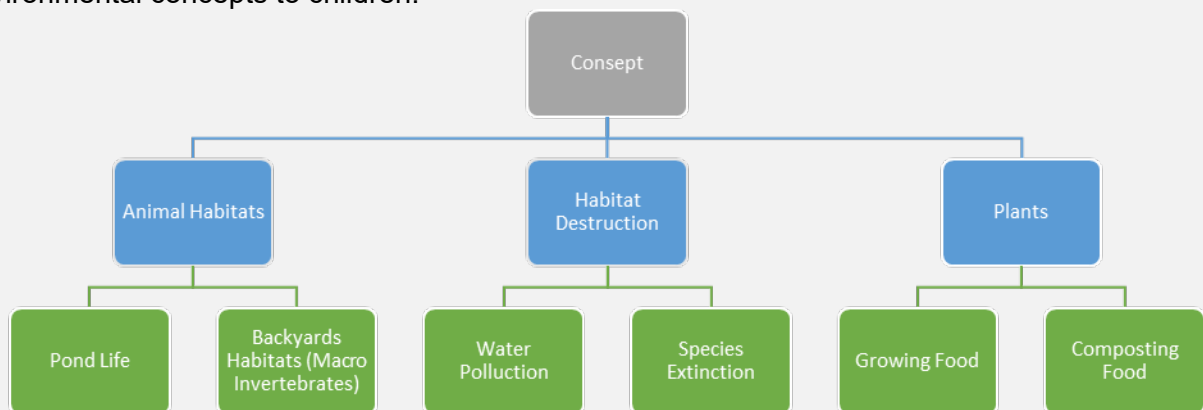


Figure.1

What are the conditions to be considered in environmental education?

Wilson (1996) emphasized that there are some situations that should be considered in environmental education practices in early childhood.

1. It should be started with simple activities in which children can feel safe.
2. Active participation of children should be ensured.

3. They should be provided with enjoyable and memorable experiences. It should not be forgotten that the pleasure to be taken from environmental education is as important as the content.
4. Not only education but also experiences should be prioritized
5. All the emotions of children should be involved.
6. More than one method and technique should be used simultaneously in education.
7. It teaches children that all components of the natural world are together and that they interact. Studies should be done to help them understand where they are .
8. Model to build children's interest in the natural world should be created.
9. A warm and friendly environment should be created for children.
10. Different cultures and perspectives should be introduced.
11. They should be instigated to focus on the perfection and beauty of nature.
12. Time should be spent outdoors as much as possible: If it is desired to arouse love and curiosity about the environment in which they live, the opportunity to interact with them should be provided at every opportunity.
13. Environmental education should be included in all aspects of the preschool program.
14. The interaction of the child with his/her natural environment should facilitate their physical, mental, and emotional participation.
15. Understanding concepts and learning based on analysis should be carried out rather than learning based on rote and patterns.
16. Daily activities should be done to enable children to interact with nature elements such as different plants, animals, water, and soil.
17. Social interaction, cooperation and cooperation among children should be ensured.
18. In environmental education activities, families as well as children should be included in the process.

What can we do to improve environmental education in preschool?

The first two elements of the environmental education steps published by the North American Environmental Education Association, which is accepted as a school in terms of environmental education, are curiosity and sensitivity. As teachers, we should design programs and activities that will reveal these feelings in children.

- We can organize a nature trip to discover nature and tree species. We can ask the children to collect various materials from nature during the trip. we can argue about which tree the leaves collected by the children belong to. At the same time, we can use the collected materials in an art activity.
- In environmental education, we can organize garbage collection activities in the schoolyard, forest, park or on the beach, which we can do together with children. Thus, we can draw attention to natural and non-nature objects and raise awareness for children to prevent environmental pollution.
- In order to teach children about recycling, we can explain that some materials can be recycled and reused in nature. We can ask them to collect some materials by taking a short walk in the garden of the school or in the surrounding area. We can ask them to dispose of these materials in the appropriate plastic, glass, paper, and metal boxes.
- We can ask the children to bring pictures of live animals the day before. We can ask them to introduce the pictures of animals to their friends. Children talk about the characteristics of animals (size, color, diet, sounds they make, where they live, etc.). We can ask the children to act out the introduced animals.

- Together with the children, we can plant flowers and trees, grow vegetables in the garden or in pots. We can also experiment with growing beans in a wet cotton or sponge in the classroom. Thus, we can observe plant life and development.

Why is environmental education important in preschool in the 21st century?

In the 21st century we live in, rapid population growth, limited resources in the world and lack of environmental awareness threaten all living things. It is an inevitable fact that education is essential to prevent this situation and to protect the environment. For this reason, it has been aimed to raise environmentally sensitive individuals in all education programs and at all stages of education in recent years.

Researchers state that environmental knowledge and attitudes towards the environment begin to take shape in the pre-school period, and environmental awareness gained in the pre-school period has an important place in developing a positive attitude towards the environment in the following years (Smith, 2001).

The aim of the efforts for environmental protection, development and improvement is to ensure that individuals live in a healthier and safer environment. Today, environmental awareness accepts living in a healthy environment as one of the basic human rights. This is only possible with quality education. If future generations are to be more sensitive to the environment, qualified environmental education should be given in pre-school education. If environmental education is not implemented in all segments of the society, starting with the individual, and necessary precautions are not taken, environmental problems will inevitably get worse in the 21st century.

My opinions and views on the importance of environmental education in the 21st century

In the 21st century, issues such as climate changes caused by human activities, increasing population, insufficient resources, unconscious consumption, technology and industrialization, and depletion of biodiversity have pushed people to be more conscious about their future lives and the importance of the environment has been understood more today. For this reason, environmental education has become an important issue almost all over the world.

In my opinion, the preschool period is the best period for raising children's awareness of the environment and environmental issues. So, where and when does this process begin? I can answer this as follows; This process starts in the family after the baby is born. From the moment the baby is born, he/she moves with the curiosity of exploring their environment. For this reason, playing with sand, collecting tree leaves, playing with rain or snow, observing a caterpillar, playing with cats, dogs or rabbits are the first important pleasures of communicating with the environment. The family's knowledge, behavior and attitudes about the environment will be a role model for the child.

When the child starts school life, pre-school teachers have important duties. The child's knowledge of the environment in the family; If it is right, we have to improve it, if it is wrong, we have to correct it. In order to understand the importance of the environment in this period, it is necessary to introduce the concepts of environment to children, to show the place of nature in human life, to explain the damage people have done to nature and the problems caused by this damage. However, it is not enough for children to have knowledge about the environment today. Children's internalization of environmental issues, gaining awareness and gaining experience should be the most important goals of environmental education.

Early childhood is the most important period for developing positive attitudes and behaviors and acquiring habits. Giving environmental education in this period is a good opportunity to teach the child about permanent and positive characteristics about the environment. For environmental education, we should raise children's curiosity towards

nature, give children the opportunity to explore nature, offer real-life experiences, make them ask questions, put problem situations in front of them and do not expect them to solve them. In addition, we should provide the necessary training to children’s families and ensure the participation of the family in the activities from time to time.

What else can we do for 21st century environmental education?

- For this, we can design activities by using the approach called STEM (Science, Technology, Engineering, Mathematics) today and provide 21st century knowledge and skills to children.
- We can practice various games and activities with children about food consumption, transportation, energy, air-water pollution, water consumption, waste management, which are the most important issues of this century.
- We need to bring children together with nature often so that they get real-life experiences. While artificial environments offer more limited wealth, natural environments will provide maximum impact in environmental education.
- We can discuss the environmental issues of this century with the children. However, the most important thing in this regard is to have a positive attitude and to be an exemplary role model for them.

All these issues I have mentioned will improve children's cognitive, social-emotional, language and motor skills as well as raise individuals who love and protect nature.

As a result, the answer to the question of why environmental education is important in the 21st century is that we have only one world. We need conscious generations to protect and develop it. The first and most important way to achieve this in this century is education. Personally, I believe we can achieve this by teaching children “environmental literacy”.

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