

Global environmental protection: strategies for tackling key challenges

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Abstract. The rise in frequency and intensity of dust storms underscores the pressing need to address critical environmental issues. Current knowledge highlights the urgency of tackling global challenges such as environmental protection, biodiversity loss, climate change, ozone layer depletion, and desertification. This article aims to identify and evaluate effective strategies for global environmental protection. The research question focuses on determining which strategies are most effective in addressing key environmental challenges, including atmospheric pollution and ecosystem degradation. The study uses a comprehensive review of existing literature, policy analysis, and evaluation of successful case studies to understand and propose effective strategies. It provides a broad overview of various approaches without delving into specific methodological details. The study finds that a combination of policy enhancements, technological advancements, and active public engagement are crucial for tackling global environmental issues. Effective strategies include international cooperation, innovative technologies, and community-based initiatives. To effectively address global environmental challenges, it is essential to adopt a holistic approach that integrates policy reform, technological solutions, and public involvement. These strategies are pivotal for advancing environmental protection and achieving sustainable outcomes.

1 Introduction

In our country, the study of environmental problems and their solution have been raised to the level of state policy. In particular, in recent years, the state has paid attention to environmental protection, protection of flora and fauna, atmospheric air and natural resources, elimination of waste problems, introduction of ecological education, and the development and implementation of regulatory documents in this regard is proof of our opinion.

In this regard, the decree of the President of Uzbekistan dated December 30, 2021 "On measures to accelerate greening works in the Republic and more effectively organize tree protection" set a number of urgent tasks for deepening large-scale reforms in the field of ecology of our country.

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Improvement of the management system in the field of planting and care of trees within the framework of the national project "Green Space" throughout the country, conducting research and analysis aimed at determining the soil-climate and other characteristics of the regions based on scientific approaches, and as a result, developing a national map of the regions, increasing the number of nurseries including.

By decree, the moratorium on the cutting of valuable species of trees and shrubs that are not part of the state forest fund was extended indefinitely. The amount of administrative fines for violating the moratorium requirements has been increased by five times, and the amounts of damage to flora have been doubled.

The implementation of the nationwide project "Green Space" in our republic regarding the protection and restoration of ecosystems, the acceleration of greening works, and the expansion of green spaces was an important step in this regard. Within the framework of this project, it is planned to plant 200 million trees and shrubs per year, thereby increasing green areas in cities from the current 8% to 30%.

It is commendable that now a large-scale work on planting trees is being carried out in all cities and villages. At the same time, it was determined that attention should be paid to the maintenance of trees planted in spring and autumn and their future fate. The global environmental problems of the modern world are also relevant for Uzbekistan. Today, the most important tasks of economic and social development are being solved in our country. But in this process, environmental problems may be aggravated by the lack of environmental culture in society. It is impossible to find a solution to environmental problems without changing the quality of environmental education.

Scientific studies have proven that the most rapid development of a child begins at preschool age. At this stage of development, it is very important to create a solid foundation for a common culture that includes environmental education and upbringing. Currently, there is a need to pay special attention to the formation of the foundations of ecological culture in preschool children.

In the preschool age, the foundation is laid for the general culture of the person, and in accordance with the state requirements and the state curriculum, it is envisaged to form the foundations of ecological understanding in preschool children. Preschool children will have basic knowledge about plants, animals, and living creatures in general, as well as the connection and balance between man and nature in the natural world.

Environmental education and the upbringing of children are very important problems of the present time. Only the ecological thinking and ecological culture of people will help to get our planet and humanity out of today's crisis.

2 Material and methods

In Germany, environmental education is carried out using various forms of educational process organization, such as projects, eco-weeks, and group excursions. [1]

There is no single state program (concept of education) in this country. But in preschools, children spend a lot of time outdoors and communicate with nature. Children are taught to think creatively; plot-role games, experiments, excursions to nature or city enterprises are given great attention.

The primary task of environmental education in preschool educational organizations in Germany is not to impart knowledge about impending global disasters, but to bring to the minds of children the problems of the immediate environment that surrounds them. The acquired knowledge should be transformed into concrete, practical actions that lay the foundation for a responsible attitude towards nature throughout life. [1]

Environmental education in Russia has come a long way. The State Standard of Preschool Education was developed as a state requirement for the psychological and pedagogical

conditions of upbringing and education in preschool educational organization, focusing on the formation of the environmental culture of a person. [2]

The entire educational process includes pedagogical models based on the principles of integration and ecologization, decolonization of the developing scientific environment, methods of increasing environmental literacy of parents, environmental education programs of preschool educational organization employees, and coordination of preschool educational organization activities with non-governmental and public organizations.

In Japan, there is a special approach to environmental education and upbringing of preschool children. The "initial situation" in the country was different, due to the limited nature of all natural resources except the marine world (island territory, minimal amount of its own minerals, poverty of biodiversity in wildlife, high intensity of urban growth/urbanization etc.). [3]

In Japan, children, schoolchildren, students, businessmen, housewives, company presidents, mayors and governors - that is, everyone - are taught to treat the environment with care and respect. Environmental education and upbringing should be, first, at the level of civic education and upbringing; that is, the goal of environmental education is to form an active, environmentally ethical life position in all citizens.

In Japan, environmental education begins at preschool age, when a child begins to understand himself and the world around him. The main tasks of environmental education include:

- forming a system of knowledge about the relationship between man and nature, realizing that man is not the master of nature but a part of it;

- forming an ecological value system with an emotional, responsible, and careful attitude towards nature and a person who is part of it;

- creating a practical approach to nature protection, conservation and restoration.

Environmental education in the USA is an extraordinary diversity of approaches, forms, directions and methods; it is the deep penetration of the ideas of environmental ethics into the content of almost all educational subjects, parents and the public, especially non-governmental public organizations, to educate children about the natural environment. It is characterized by involvement in the process of forming norms of careful and responsible attitude toward the environment. [4]

Education and development programs do not have a strong section on conservation issues. Education is carried out according to personal, author's programs of pedagogues. There are consultant positions for teaching nature conservation in the education system. Practical field training and the organization of educational excursions to various museums, nature centers and research institutes are widely used.

Thus, the foreign experience in environmental education and the upbringing of preschool children is mainly based on two directions - health and economic spheres. The system of general preschool education abroad has various forms and manifestations, which are often associated with a school and perform the functions of a preschool link in the general chain of educational links [5-6].

The analysis of existing practices shows that the USA, European countries, and Asian countries are on the way to involving preschool education organizations in solving the issues of ecological education for the younger generation. Special types of institutions are being created in these countries: ecological kindergartens and forest kindergarten.

International ecological education for preschool children is that they are focused on practical results: they teach children ecologically correct behavior in the social and natural environment and economical treatment of Earth's resources. Inculcates skills.

In all developed countries, the education system in the field of environment has already been developed and continues to be improved, people's perceptions of our planet and its crisis situation are expanding.

3 Results

The themes of environmental problems in children's drawings and expressions are grouped into three categories: environmental problems, causes of environmental problems, and actions to solve environmental problems. According to children's drawings, the first category is litter (24.61%), animal death (15.38%), air pollution (10.76%), sea pollution (10.76%), green space pollution (10.76%), deforestation (9.23%), drinking water pollution (7.69%), thirst (3.07%), human death (3.07%), human misery (3.07%), and diseases (1.53%) were coded as environmental problems.

According to children's drawings, littering around (52.5%), cutting dry trees (15%), throwing garbage in water (15%), natural disasters (10%), bad people (5%), and harming animals (2.5%). These are the numbers that occur as causes of environmental problems.

According to children's drawings, the third category is garbage collection (47.82%), littering (17.39%), forest protection (8%), animal protection (8.69%), warning signs (8.69%), keeping the living space clean (4.34%), and being a good person (4.34%) were cited as percentages of what to do to solve environmental problems.

Research shows that preschool children are the most perceptive in the category of environmental problems. In students' perception of environmental problems, the category of causes of environmental problems ranked second, while the category that ranked least was what should be done to solve environmental problems. In addition, the perceptions of all three categories of children about environmental problems are mainly related to the garbage around them, and from the frequency of the data, it is understood that their perceptions about other environmental problems are limited.

Children's perceptions of environmental problems are analyzed according to their drawings and shown in Table 1. The topics of environmental problems in children's drawings are grouped into three categories: environmental problems, causes of environmental problems, and what needs to be done to solve environmental problems.

Table 1. Results of the analysis of children's drawings on environmental problems

Category	Events in the picture	f(x)	%
Environmental problems	Sticks around	16	24.61
	Death of animals	10	15.38
	Air pollution	7	10.76
	Pollution of canals and ditches	7	10.76
	Green area pollution	7	10.76
	Deforestation	6	9.23
	Contamination of drinking water	5	7.69
	Thirst	2	3.07
	Human deaths	2	3.07
	People's misery	2	3.07
	Diseases	1	1.53
	Total	65	100
Causes of environmental problems	Throwing sticks around	21	52.5
	Unconscious logging	6	15
	Throwing sticks into the seas	6	15
	Natural disasters	4	10
	bad person	2	5
	Harm to animals	1	2.5
	Total	40	100
What should be done to eliminate environmental problems?	Collection of waste (water container).	11	47.82
	Dispose of waste in the waste bin	4	17.39
	Protection of trees	2	8.69
	Protection of animals	2	8.69

	Placing warning signs	1	4.34
	Keeping the living space clean to be a good person	1	4.34
	Total	23	100

According to the children's drawings, the first category is the surrounding land (24.61%), animal death (15.38%), air pollution (10.76%), sea pollution (10.76%), and pollution of green areas. (10.76%), deforestation. (9.23%), drinking water pollution (7.69%), thirst (3.07%), human death (3.07%), human misery (3.07%), and diseases (1.53%) were coded as environmental problems. In general, according to the analysis of the children's drawings, it appears that their ideas about what to do to solve environmental problems are limited. Children's drawings involve picking up litter thrown around to solve environmental problems. Protecting forests, protecting animals, putting up warning signs, keeping the place clean, and being a good person are the least mentioned topics as solutions to environmental problems in children's drawings.

4 Discussion

Green universe a person health in storage extremely big important have that’s why for too each one of us own education our yard, street and avenues landscaping at work active our participation, seedling holding them maintenance to do through environment pure to be contribution let's add need our explanation it is necessary Current period grow up coming young generation in his mind to nature relatively conscious in relation to be feeling formation and development requirement is doing

Of nature in the future to bloom - to live or ecological of problems becoming global to go young generation to nature relatively to the relationship directly and indirectly dependence young generation to his mind absorb current from tasks one is considered

In the past, due to the nature of harm, deep complications finishing, ecological safety and environmental protection, separate attention was directed. At the time, ecological culture said the concept of the young generation was important in his mind; formation and development are important, and occupation is enough

Nature from their wealth fruitful use them protection to do issues conscious respectively solution reach for family, before school education from institutions starting from in children nature blessings affection is love the soul formation, ecology about knowledge they are to his mind absorb young generation in the future environment protection do it will receive and from nature to him harm did not bring without use will receive being in adulthood important factor being service does.

Before school education institution ecology in the direction of the work take go to the children's diary in their lives live and lifeless nature according to education giving to go it is necessary. It is necessary to organize ecological knowledge in a developing environment for each group. It is necessary to have a proper attitude toward the surrounding environment, to take care of living nature, and to carry out educational activities aimed at its protection. It is necessary to cultivate a sense of pride in nature in ecological education and education with beauty. Flowers, herbs, and insects in nature attract children.

We need to raise our children to be nature guardians. An educator should instill in children a sense of wonder and pride in nature from an early age. The first age is the most favorable period for collecting perceptions about the environment for sensory education. Our task in working with children of the first age is to inculcate basic ideas about the environment and nature, to understand that plants and animals are alive, that they breathe, drink water, eat, and feel pain like humans. To study the natural world in pre-school educational institutions, create centers for studying the ecosystem in groups; that is, each group should have creatures,

medicinal and cultural plants, water, sand, and stones in the corner of nature. Children learn their features with the help of game activities, show their creative qualities, develop imagination and sensory abilities, as well as fine motor skills.

In the Ecosystem Learning Centers, children conduct various experiments: pour water into containers, let it cool, find out what things sink and don't sink in water, and see and understand what can be made from sand. Experiments and observations are repeated and compounded.

Environmental education in pre-school educational institutions should provide information about the connection between people and nature, the impact on people, and instill the concepts that children should know about nature during training.

It is appropriate to provide the following concepts on environmental education in preschool educational institutions:

- in pre-school educational institutions, how children can behave in nature, forming the skill of developing knowledge about nature by following the rules;
- being able to apply ecological concepts in various activities;
- collecting children's interactions with nature.

Preschool educational institutions achieve the solution to these issues through certain plans:

- educators must be ready to provide ecological education to children;
- Adults and children should have clear guidelines for environmental education.
It is necessary to regularly organize children's communication with nature.

It is necessary to properly and fully organize the ecological development environment in preschool educational institutions.

Parents should be involved in active participation in environmental education.

It is planned to hold the following activities on environmental education in pre-school educational institutions: observations, ecological activities, and conducting experiments in nature.

Work in nature instills in children a sense of compassion for living creatures. This, in turn, ensures that they are mentally healthy. Children are happy with the results of their work in nature; they show their friendly attitude towards nature.

After taking care of various creatures and plants, the moods of the children who are being educated in pre-school educational institutions, moods will rise, and they will receive spiritual nourishment. By reading books about nature to children, their knowledge, skills and abilities about nature are improved.

Environmental education is important for preschool children to become ecologically cultured adults. Including:

- forms children's sense of love for the city, village, neighborhood, and home where they live, the spirit of patriotism;

Children are brought up in the spirit of loving, honoring and being proud of Mother Nature.

Children develop concepts of dirty water and not wasting it.

Children develop observability and interests related to understanding the beauty of the environment;

Children understand that plants and animals are a part of nature, that humans are related to it, and that nature needs to be preserved.

5 Conclusions

In this study, preschool children's perceptions of environmental problems were investigated. Environmental problems of preschool children are divided into 3 categories. One of the findings is that the majority of preschool children perceive garbage and animal deaths in their

environment as an environmental problem, while their perceptions of other environmental problems are less. As a result of similar studies, it was found that preschool and elementary school students perceive garbage thrown into the environment as an environmental problem.

Furthermore, this study found that students' perceptions of air pollution and water pollution are very limited. Similarly, it was found that children pay the most attention to land pollution and hardly pay attention to air and water pollution. It is necessary to develop methodological recommendations for the development of pre-school children's perceptions of air and water pollution.

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