

THE ROLE OF INNOVATIVE METHODS IN FORMING ECOLOGICAL CULTURE

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Annotation:

This article comprehensively covers the theoretical foundations of the concept of ecological culture, the stages of its formation and its role in society. In particular, the relevance of forming ecological culture in the era of increasing environmental problems is emphasized. The author analyzes the role of modern, innovative educational methods and technologies in the formation of ecological culture on a scientific basis. The article considers the possibilities of forming ecological awareness, responsibility and active citizenship in students through methods such as digital technologies, interactive teaching methods, project-based learning, virtual laboratories, ecological excursions and the STEM approach.

Also, examples of foreign and national experiences in increasing the effectiveness of environmental education are given, and the results of the practical application of innovative methods are analyzed. The author emphasizes the importance of ensuring the cooperation of educational institutions, family education and the media in the development of environmental culture. In the final result, the use of innovative methods is shown as the main tool for ensuring environmental safety and achieving sustainable development goals.

Keywords: environmental culture, innovative methods, education, environmental awareness, digital technologies.

Introduction

Today, global environmental problems are emerging as an urgent task for humanity. Environmental protection, achieving sustainable development, forming environmental awareness and responsibility in the younger generation - all this depends on the level of environmental culture. From this point of view, there is a need to widely use innovative methods in the formation of environmental culture, along with traditional methods. In the 21st century, human development is closely related to high technologies, industrial development and urbanization. However, these processes are causing serious consequences such as global environmental problems - climate change, loss of biodiversity, water and air pollution, and an increase in the volume of waste. In order to prevent such ecological crises, first of all, raising the ecological awareness of

the population and forming a conscious attitude towards the environment is becoming an urgent issue. This, in turn, requires the formation of ecological culture.

Ecological culture is a system of spiritual and moral principles, knowledge and skills that determine the interaction of man with nature. In societies with a high level of this culture, criteria such as environmental safety, sustainable development, and rational use of resources are of paramount importance. From this perspective, the formation of ecological culture is one of the most important priority areas of the education system today.

In the process of modern education, it is not enough to be limited to traditional methods in the formation of ecological awareness and culture. In the age of globalization, digital transformation and innovation, it is necessary to use innovative methods to effectively convey ecological values to young people. Such methods serve not only to provide knowledge, but also to educate the younger generation as proactive and responsible individuals who are not indifferent to environmental problems.

Innovative educational methods include interactive teaching, project-based learning (PBL), digital platforms, simulations, environmental campaigns, excursions and other modern approaches. They allow students to develop a deep understanding of environmental problems, develop practical skills and implement the ideas of environmental sustainability.

In this regard, this article analyzes the essence and importance of the concept of ecological culture, as well as the role of innovative methods in its formation from a scientific, theoretical and practical point of view. The article also contains proposals and recommendations on effective methodological approaches, based on national and foreign experience.

Main part

1. The concept of ecological culture

Ecological culture is a set of qualities that express the conscious organization of a person's interaction with nature. It consists of:

respect for the environment,
ecological awareness,
responsibility for environmental safety,
practical skills for nature protection.

2. The need for innovative methods in the formation of ecological culture

Although traditional lessons provide theoretical knowledge about ecology, their application to practical life is often weak. Therefore, it is necessary to enrich environmental education with interactive, innovative methods:

STEM approach: solving environmental problems based on science, technology, engineering and mathematics.

Project-Based Learning: students participate in projects aimed at finding solutions to real environmental problems.

Digital resources: students develop a visual understanding through video lessons, virtual laboratories, and ecological simulations.

Eco-tours and ecological excursions: practical knowledge and skills are strengthened through teaching in a real natural environment.

3. Skills formed as a result of innovative methods

The following skills are effectively formed through innovative approaches:

identifying and analyzing environmental problems;

developing sustainable solutions;

a sense of social responsibility;

correct use of environmental information.

4. Examples and best practices

In some secondary schools and higher educational institutions of Uzbekistan, environmental projects have been implemented:

The concept of "Green School";

Environmental monitoring programs based on artificial intelligence;

Environmental awareness through QR-code information stands.

Also, international experience - innovative methods of ecological culture have been successfully implemented in the education systems of Finland, Germany and Japan.

Conclusion

In conclusion, the formation of ecological culture serves the sustainable development of society. The use of innovative methods in this regard significantly increases the effectiveness of environmental education. Pupils and students not only acquire knowledge, but also become active participants in environmental protection. Therefore, it is necessary to develop ecological culture in the modern education system based on innovative approaches. The formation of ecological culture is today an important factor in ensuring the ecological sustainability not only of the education system, but also of society as a whole. The results of the study show that environmentally responsible, conscious and environmentally sustainable citizens serve as the foundation for the long-term development of society. Therefore, the effective formation of ecological culture in the educational process is a very urgent issue.

Innovative methods - interactive educational technologies, project-based learning, digital and virtual platforms, ecological projects and practical ecological activities - were shown as effective tools for further developing ecological culture. These methods

help to form not only theoretical knowledge in students, but also ecological thinking, analysis, problem solving and social responsibility.

The national and international experiences presented in the article confirm the effectiveness of innovative approaches. At the same time, it was found that the integral cooperation of educational institutions, family and mass media is of great importance in the formation of ecological culture. This requires an integrated approach to conveying ecological knowledge and values to all segments of society.

Therefore, it is necessary to widely introduce innovative methods in the formation of ecological culture, constantly improve their content and practice. In this regard, educators, scientists, government organizations and representatives of civil society should actively work together. Any measures taken in this direction will serve to strengthen ecological safety and protect the environment.

In general, the development of ecological culture is the most important tool in solving environmental problems at the national and global levels. Innovative educational methods play an important role in shaping the younger generation as environmentally conscious, active and responsible citizens. Therefore, a more in-depth study and widespread application of these approaches in the scientific and practical field is considered a promising direction.

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