



**MECHANISMS FOR MODERNIZATION, SOCIALIZATION AND
INTEGRATION OF ENVIRONMENTAL EDUCATION IN THE
CONDITIONS OF ECOLOGICAL GLOBALIZATION**

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ABSTRACT

This article analyzes the relevance of environmental education in the context of ecological globalization, the mechanisms for its adaptation to national state science programs, as well as the ways of modernization, socialization and integration. The article studies the current state of environmental education, its problems, their causes and consequences on a scientific basis. Proposals are developed to increase the role of environmental education in combating global environmental problems (climate change, loss of biodiversity, resource scarcity). The article highlights the areas of integration of environmental education into national science programs in our country, the use of innovative technologies, active involvement of society and taking into account international experience.

KEYWORDS

Environmental education, ecological globalization, modernization, socialization, integration, national science programs, mechanisms.

INTRODUCTION

Ecological globalization is a process of changing the natural environment, the emergence of environmental problems that transcend borders and create global problems affecting all of humanity. Today, every country in the world is facing problems such as climate change, water and air pollution, and deforestation. The importance of environmental education in combating these problems is increasing. Environmental education is a system that teaches not only environmental protection, but also the principles of living in harmony with nature, mastering and applying them in practical life. The purpose of this article is to develop effective mechanisms for adapting environmental education to national state science programs in the context of ecological globalization, and to propose ways to modernize, socialize, and integrate it.

Literature Review

Currently, there are many scientific studies on the problem of environmental education. At the global level, initiatives such as UNESCO, the “Environmental Education and Training” programs, and the “Sustainable Development Goals” (SDGs) are aimed at developing environmental education. Uzbek

scientists, including A. Abdukodirov, M. Tokhtaboyev, Sh. Tashkulov, have created works on the development of the methodology, content, and national model of environmental education. However, in the context of ecological globalization, the mechanisms for adapting environmental education to modern requirements, integrating it with society, and incorporating it into science programs have not been sufficiently studied. Filling these gaps is the main task of the article.

Discussion and Results

The environmental education system in our country is largely based on traditional methods, relying heavily on theoretical knowledge presented in textbooks and programs. Practical application, innovative technologies, and collaboration with society are often lacking, while environmental education remains mainly confined to biology and geography, with weak integration into other subjects. This situation has created significant shortcomings in fostering a sense of environmental responsibility among students.

The main reasons for these shortcomings include outdated methodological foundations of environmental education, insufficient use of innovative and interactive teaching methods, low qualifications of teachers in the field, limited public awareness of environmental issues, and insufficient attention to environmental education in state policy. As a result, young people often exhibit a low sense of environmental responsibility, show limited activity in environmental protection, and the country faces difficulties in effectively addressing global environmental problems and achieving sustainable development goals.

To overcome these challenges, several mechanisms can be implemented. First, modernization of environmental education should be prioritized. This includes the introduction of innovative technologies such as virtual laboratories, online platforms, and mobile applications; enrichment of educational materials through practical projects, excursions, and direct contact with nature; and development of digital educational resources and curricula based on artificial intelligence.

Second, the socialization of environmental education should be strengthened by enhancing cooperation with communities, non-governmental organizations, and parents, organizing environmental projects, volunteering, and awareness campaigns, and raising public understanding of environmental issues through media and other channels.

Third, environmental education should be integrated across all subject areas, including mathematics, physics, chemistry, literature, and art. Interdisciplinary projects and integrated lessons should be organized, and environmental competencies should be incorporated into national education standards to ensure a holistic approach to learning.

Finally, environmental education must be adapted to the national context by focusing on Uzbekistan's specific environmental challenges, such as the Aral Sea crisis, water scarcity, and soil erosion. Local environmental traditions, values, and knowledge should be incorporated into the curriculum, and state policy should pay particular attention to environmental education, including strengthening its financial and legal framework.

Conclusions

In the context of ecological globalization, the development of environmental education is a necessary condition for the sustainable development not only of the education system, but also of the entire country. By modernizing, socializing and integrating environmental education, it is possible to

increase the sense of environmental responsibility of young people and involve society in environmental protection.

Suggestions

1. Develop a national program for the development of environmental education and provide it with financial support.
2. Organize special courses to improve the skills of teachers in environmental education.
3. Integrate environmental education at all levels of education (from school to higher education).
4. Study international experiences (Finland, Japan, Germany) and adapt them to local conditions.
5. Digitalize environmental education, create online platforms and mobile applications.
6. Actively involve society in environmental projects, develop environmental volunteer organizations.
7. Strengthening cooperation between state and non-state organizations in the field of environmental education.

With the implementation of these proposals, the effectiveness of the environmental education system will increase, young people will be prepared for the problems of environmental globalization, and our country will take an important step towards sustainable development.

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