



## METHODOLOGY FOR DEVELOPING ENVIRONMENTAL EDUCATION AMONG PRIMARY SCHOOL STUDENTS IN AN INNOVATIVE EDUCATIONAL ENVIRONMENT

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**Annotation:** This article discusses the methodology for forming environmental education among primary school students in an innovative educational environment. It analyzes interactive methods, digital educational tools, environmental projects, and practical activities aimed at developing ecological awareness, responsibility, and a careful attitude toward nature.

**Keywords:** innovative educational environment, environmental education, primary school, methodology, interactive methods, ecological awareness, digital technologies.

In today's globalization processes, environmental problems — climate change, loss of biodiversity, and depletion of natural resources — have become some of the most urgent challenges facing humanity. Therefore, introducing environmental education from early stages, especially in primary school, is becoming increasingly important in the education system of Uzbekistan. An innovative educational environment serves as an effective tool for activating students, broadening their thinking, and fostering ecological awareness.

Integrating modern pedagogical technologies, digital learning tools, interactive methods, and the STEAM approach into primary education helps develop love, responsibility, and conscious attitudes toward nature. This article analyzes the methodological foundations for developing ecological competencies among primary school students in an innovative learning environment.

An innovative educational environment is an educational process organized based on modern technologies, interactive methods, multimedia, virtual laboratories, electronic platforms, and project-based learning. Its advantages include:

- encouraging independent research among students;
- enabling modeling of ecological problems;
- strengthening the practical application of acquired knowledge;





– increasing environmental responsibility and social activity among students.

Primary school students are at the most active stage of exploring the surrounding world. Therefore, methods should suit their age characteristics, rely on visualization and practical experience, and incorporate interactive and game-based activities.

Since their worldview is shaped through imagination and observation, environmental education should be delivered mainly through practical activities, observations, and mini-projects.

The following methods show high efficiency in primary education:

STEAM projects help create ecological solutions through the integration of natural science, technology, engineering, art, and mathematics.

Virtual laboratories allow students to safely observe processes such as the water cycle, air pollution, and plant growth.

The “Green Class” technology strengthens ecological emotions through outdoor lessons and direct interaction with nature.

Gamification enables active participation through online ecology-themed games, quizzes, and quests.

Project-based learning fosters initiative through mini-projects such as “My Green School,” “Eco Patrol,” “A Day Without Electricity,” and “Plant Care Diary.”

Ecological competencies are further developed through multimedia lessons — animations and videos that simplify complex ecological processes; electronic learning platforms (Khan Academy Kids, EduPage, Moodle modules) — tests and interactive tasks; AR/VR technologies — virtual tours of forests, deserts, and water ecosystems.

An innovative educational environment plays a significant role in forming environmental education among primary school students. Modern technologies and methods activate students’ ecological thinking, instill responsibility, values, and practical skills related to nature. An education system built on innovative approaches not only imparts knowledge but also contributes to the sustainable development of ecological culture. Therefore, improving environmental education in primary schools through innovative methods is essential for strengthening ecological awareness among future generations.

#### **References:**

1. Karimov, A., et al. Methodology of Environmental Education. Tashkent: “Yangi asr avlodi”, 2021.
2. Abdullayeva, M. Innovative Technologies in Primary Education. Tashkent: Innovatsiya Publishing, 2022.





3. Ministry of Public Education of Uzbekistan. Concept of Environmental Education in General Secondary Schools. Tashkent, 2023.