

**MODERN ECOLOGICAL EDUCATION IN THE CONDITIONS OF
SUSTAINABLE DEVELOPMENT
СОВРЕМЕННОЕ ЭКОЛОГИЧЕСКОЕ ОБРАЗОВАНИЕ В УСЛОВИЯХ
УСТОЙЧИВОГО РАЗВИТИЯ**

O.I. Abduganiyev

Fergana State University, Associate Professor of the Department of Geography,
DSc. Fergana, Uzbekistan,

О.И.Абдуганиев

Ферганский государственный университет, доцент кафедры географии,
г.ф.д. Фергана, Узбекистан,

Mominova S.I.

Master's student, specialty "Geography" Fergana State University,
Fergana, Uzbekistan

Муминова С.И.

Магистрант по специальности «География» Ферганский государственный
университет, Фергана, Узбекистан,

Ortikova M.X

Master's student, specialty "Geography" Fergana State University,
Fergana, Uzbekistan

Ортикова М.Х.

Магистрант по специальности «География» Ферганский государственный
университет, Фергана, Узбекистан,

Bozorboeva D. X.

1st-year Geography student Fergana State University, Fergana, Uzbekistan

Бозорбоева Д.Х.

Студентка 1 курса направления «География» Ферганский государственный
университет, Фергана, Узбекистан,

Annotation. This article examines the actual problem of environmental education of modern schoolchildren and students. The program for the implementation of environmental education and upbringing is presented, the main aspects of its implementation are revealed. Environmental education should become the lever that will ensure the transformation of the concept of sustainable development into a system of spiritual and professional attitudes of mankind.

Аннотация. В данной статье рассматривается актуальная проблема экологического образования современных школьников и студентов. Представлена программа реализации экологического образования и воспитания, раскрываются основные аспекты её осуществления. Экологическое образование должно стать рычагом, который обеспечит превращение концепции устойчивого развития в систему духовных и профессиональных установок человечества.

Keywords: ecology, education, enlightenment, upbringing, eco-culture, ecological education, sustainable development, ecological consciousness, UN, ecological culture.

Ключевые слова: экология, образование, просвещение, воспитание, экокультура, экологическое образование, устойчивое развитие, экологическое сознание, ООН, экологическая культура.

Education for Sustainable Development (ESD) sees education as the key to unlocking progress in all the [global development goals](#). It teaches individuals to

make informed decisions and take action, both individually and collectively, to change society and protect the planet. It equips people of all ages with the knowledge, skills, values, and ability to tackle issues such as climate change, biodiversity loss, overuse of resources, and inequality that impact the well-being of people and the planet. Despite the adoption of international agreements such as the Convention on Biological Diversity, we are failing. Current goals and associated actions lead, at best, to a controlled reduction in species. Reversing the decline in natural resources and biodiversity is needed to meet plans to combat climate change and promote sustainable development [5, 8].

In addition to unsustainable agriculture and overexploitation of natural resources, invasive species pose a threat to biodiversity, the spread of which is largely driven by trade-related activities such as the transport of goods. Environmental pollution, such as agricultural waste, and damage from dam building, fires and mining, pose an additional threat. In order to raise the ecological awareness and ecological culture of the population, new teaching models should be introduced into education. The above shows that the issues of environmental education and the formation of environmental culture in Uzbekistan are an urgent task of both the education system and society as a whole [6, 7, 11].

Ecological education plays a crucial role in fostering sustainable development by equipping individuals with the necessary knowledge, skills, and values to address environmental challenges. This analysis examines the current state of modern ecological education in the context of sustainability, considering its theoretical foundations, methodologies, and practical implementation.

1. Theoretical Foundations of Modern Ecological Education. The process of continuous education and upbringing has become a requirement of the current period, which includes a number of topical issues, the achievement of environmental knowledge, the formation of environmental culture, only after the development of the system of continuous environmental education can it be successfully implemented. For this, the educational - methodological base is an

important factor in environmental education, harmoniously combined with the system of continuous education, constantly and effectively contributes to the purposeful and perfect growth of the environmental consciousness of the younger generation [1, 9]. Modern ecological education is grounded in interdisciplinary principles, integrating knowledge from environmental science, sociology, economics, and ethics. Key theoretical frameworks include:

–**Systems Thinking**: Understanding ecosystems as interconnected and dynamic systems.

–**Environmental Ethics**: Promoting responsibility and stewardship of nature.

–**Sustainable Development Goals (SDGs)**: Aligning education with global objectives, particularly SDG 4 (Quality Education) and SDG 13 (Climate Action).

2. Methodologies in Ecological Education. The formation of an ecological culture, ecological awareness among the population, mainly among children, is a long and difficult process. The main condition in the formation of practical skills of environmentally conscious behavior is the behavior of adults, primarily teachers and parents. In the event that a preschooler observes how elders take care of plants and animals, communicate with each other, behave thoughtfully in nature, he accumulates the appropriate emotional reactions of adults, forms of their behavior, includes this information in the structure of the personality and preserves it for life as the source database. For this reason, environmental education and upbringing should be conducted unobtrusively, without a touch of obligation, but always with pleasure and sincere interest, both for children and adults [7, 98 p.]. Ecological education employs diverse teaching strategies to engage learners effectively:

- **Experiential Learning**: Hands-on activities such as fieldwork, environmental monitoring, and ecological projects.

- **Problem-Based Learning (PBL)**: Encouraging critical thinking by addressing real-world environmental issues.

- **Digital and Interactive Learning:** Utilizing online platforms, virtual simulations, and gamification to enhance engagement.

In addition to environmental education at school, children can get interesting information from extracurricular education - in circles, extracurricular activities, nature excursions, excursions to production facilities, excursions to scientific laboratories. The solution of environmental problems cannot be ensured by the efforts of only specialists - ecologists. Thus, the main areas of environmental education are: - training courses within school or university programs;

- - additional education - electives and circles and educational work;
- - methodical activity - publication of booklets, brochures, manuals;
- - carrying out environmental actions, festivals and holidays;
- - ecological and educational tourism;
- - scientific and practical conferences and competitions on environmental issues;
- - conducting scientific environmental research and expeditions;
- - environmental fees, children's and youth camps;
- - environmental films and programs, social advertising [1, 6, 7].

3. Challenges and Barriers. To effectively achieve the strategic goals of the Concept, the main areas of activity will be the integration of education for sustainable development (ESD) objectives into regulatory legal acts in the field of education, environmental protection and socio-economic development. The strategic objectives of ESD will be reflected in priority state programs aimed at improving the quality of all levels of education, expanding access to various forms of education, increasing the professional competence of scientific and pedagogical personnel and graduates of educational institutions.

In accordance with it, the Ministries of Public Education and Higher and Secondary Special Education have developed the Concept of Continuous Environmental Education and the State Standard of Continuous Environmental Education. The state standard for environmental education has been tested in

several general education schools. However, the implementation of this standard has not yet been completed. In the majority of secondary schools of the republic there are no special subjects on ecology, environmental protection. Instead, environmental issues are taught as electives, or integrated into existing academic subjects - biology, chemistry, botany, zoology, geography, and others. In preschool institutions, work in this direction is not yet widely carried out [6, 7, 9]. Despite its importance, ecological education faces several challenges:

- **Curriculum Limitations:** Many education systems do not prioritize environmental subjects.

- **Lack of Trained Educators:** Teachers may lack specialized knowledge in sustainability.

- **Insufficient Funding:** Limited financial resources restrict the implementation of innovative ecological programs.

- **Resistance to Change:** Traditional educational models often do not support interdisciplinary and experiential learning approaches.

4. Best Practices and Case Studies. Here I would like to note that in the countries of America and Europe they often talk about education for sustainable development - a concept close to the concept of environmental education, but broader, since it includes related environmental, economic and social problems. It is important to emphasize that in the 1990s, school environmental education in Russia followed this path. In a number of countries, for example, Germany, Great Britain, Sweden, USA, Canada, the Netherlands, Denmark and some others, environmental education is realized through "immersion in nature": classes and games are held outside buildings, certain days and weeks are allocated for projects. The main idea is to awaken a holistic emotional perception of the surrounding nature [8]. Several countries have successfully integrated ecological education into their systems: **Finland:** Emphasizes outdoor education and sustainability topics in all school levels; **Germany:** Implements the "Green School" program, integrating

energy efficiency and ecological awareness; **United States:** Promotes environmental literacy through state and national policies.

Conclusion. Modern ecological education is a vital component of sustainable development, yet it requires systemic reforms to maximize its impact. By integrating innovative teaching methods, increasing policy support, and overcoming existing barriers, education systems can better prepare future generations to address environmental challenges.

ЛИТЕРАТУРА

1. «Концепция развития экологического образования» Республики Узбекистан. Т., 2018.
2. Доклад WWF «Живая планета 2018. Стремиться к большему» https://wwf.ru/upload/iblock/2fe/lpr_2018_summary_ru.pdf.
3. Повестки дня в области устойчивого развития на период до 2030 года. www.uz.undp.org/content/uzbekistan/ru/
4. Махкамов Б. А. Экологическое образование учащихся в процессе трудового обучения // Молодой ученый. — 2012. — №1. Т.2. — С.97-99.
5. Абдуганиев О., Қосимов Д. Барқарор ривожланишни таъминлашда муҳофаза этиладиган табиий ҳудудларнинг аҳамияти. Ekologiya xabarnomasi. №3/2020. Б. 44-46.
6. Abduganiev O.I., & Abdurakhmanov G.Z. (2020). Ecological Education For The Purposes Sustainable Development. The American Journal of Social Science and Education Innovations, 2(08), 280-284.
7. Джўрабоева Х.Ш. Миллий қадриятларнинг экологик моҳияти. Ўзбекистон География Жамияти Ахбороти. –Тошкент, 2018. -№ 53. –Б. 48-50
8. Джўрабоева Х.Ш. Дехканбоева М.Н. Ёшларга экологик таълим-тарбия беришда географиянинг ўрни. Илмий оммабоп рисола. Фарғона, “Poligraf Super Servis” 2017. 53 б.