

O‘ZBEKISTON RESPUBLIKASI
OLIY TA’LIM, FAN VA INNOVATSIYALAR VAZIRLIGI
GULISTON DAVLAT UNIVERSITETI



**“IQLIM O‘ZGARISHI, GEOEKOLOGIK MUAMMOLAR
VA TABIIY MUHITNI MUHOFAZA QILISHDA GAT
TEXNOLOGIYALARIDAN FOYDALANISH”
MAVZUSIDAGI**

XALQARO ILMIY-AMALIY ANJUMAN

MATERIALLARI TO‘PLAMI

2025-yil 20-21-May

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“Iqlim o‘zgarishi, geoeologik muammolar va tabiiy muhitni muhofaza qilishda GAT texnologiyalaridan foydalanish” mavzusidagi xalqaro ilmiy-amaliy anjuman materiallari to‘plami. Guliston davlat universiteti.

Ushbu to‘plam Global iqlim sharoitida tabiiy va rekreatsion resurslardan foydalanishda GAT texnologiyalarining ahamiyati. Iqlim o‘zgarishi fonida oziq-ovqat xavfsizligi: muammo, yechim va takliflar. Geoeologik va geografik tadqiqotlar hamda ularning nazariy va amaliy masalalari. Atrof muhitni asrashda ta’limning roli: ekologik ta’lim va tarbiyaning ilmiy amaliy ahamiyati. Yashil iqtisodiyot, innovatsion yondashuvlar, fan va ishlab chiqarish integratsiyasi masalalari ko‘rib chiqiladi.

Konferensiyadan ko‘zlangan maqsad iqlim o‘zgarishiga moslashish bo‘yicha chora-tadbirlar ustuvorligini belgilash va moslashish mexanizmlarini ishlab chiqish bo‘yicha yondashuvlar va imkoniyatlarni taqdim etish, shu bo‘yicha geoeologik muammolar va tabiiy muhitni muhofaza qilishda GAT texnologiyalaridan foydalanish shuningdek, Milliy moslashish rejalarini tayyorlashda olingan saboqlar bo‘yicha Markaziy Osiyo davlatlarining xabardorligini oshirishdan iborat.

To‘plamga oliy o‘quv yurtlarida atrof-muhit muhofazasi muammolari bo‘yicha ilmiy izlanishlar olib borayotgan professor-o‘qituvchilar, doktorantlar, tadqiqotchilar, vazirlik, qo‘mita va turli mulkchilik shaklidagi korxona va tashkilotlarning yetakchi mutaxassislari, magistr va talabalarning ilmiy izlanishlari natijalari kiritilgan. Shuningdek, xalqaro ilmiy-amaliy anjuman to‘plamidagi materiallarning mazmuni, undagi statistik ma’lumotlar va keltirilgan me’yoriy-huquqiy hujjatlarning haqqoniyligi, tanqidiy fikr mulohazalar va takliflarga muallifning o‘zlari mas’uldirlar.

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THE IMPORTANCE OF TEACHING ENVIRONMENTAL PROTECTION TO PRIMARY SCHOOL STUDENTS

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Abstract: This article discusses the growing ecological issues in the context of globalization, emphasizing the importance of educating young generations, especially primary school students, on environmental protection. It highlights the necessity of starting environmental education at an early stage, taking into account the specific characteristics of children, and effectively implementing it through lessons and non-traditional methods. The author provides examples of the "Green Makan" project and other initiatives carried out under the President's initiative and discusses the significance of collaboration between schools, families, and communities in shaping ecological culture. The article also proposes the use of modern technologies—such as mobile applications, QR codes, and AR/VR technologies—to foster eco-thinking in children.

Keywords: Environmental education, primary education, environmental protection, ecological culture, "Green Makan" project, eco-thinking in students, interactive lessons, modern technologies, AR/VR, collaboration between family and society.

In today's era of globalization, humanity is increasingly paying attention to ecological problems. Pollution, climate change, and the depletion of water and air resources are affecting not only large countries but every individual's life. Therefore, shaping ecological culture and teaching young generations to protect nature has been identified as one of the priorities of national policy in our country.

In particular, in recent years, a series of important decisions and decrees have been adopted on environmental protection, the expansion of green areas, and the formation of responsible attitudes toward the environment under the initiative of President Shavkat Mirziyoyev. For example, through the implementation of the "Green Makan" nationwide project (Decree PQ-46 of November 30, 2021), millions of trees and shrubs are being planted across the country. This project serves not only to improve the environment but also as a living tool to educate the younger generation about environmental protection. Within the framework of the concept to improve ecological culture in 2023–2025, the enrichment of ecological education content in the preschool and school education system, and the creation of new curricula are set as key tasks. Although 2024 has been declared the "Year of Youth and Business Support," year by year, this focus is expanding to cover ecological education and environmental entrepreneurship as well. These decisions and decrees show that environmental protection is recognized as one of the most important strategic directions in our country. Therefore, reforms in this area should be implemented in the education system, especially in primary education, in a deep and systematic manner.

Primary education is considered the foundational stage in the formation of an individual's personality. The knowledge and values imparted at this stage remain with the child for a long time. Thus, shaping ecological culture in students from an early age and encouraging them to care for and protect the environment is a vital task today.

Children in primary education are naturally curious, eager to observe, and enthusiastic to learn about the world around them. Psychologists believe that the period between the ages of 7 and 10 is crucial for the formation of moral values and attitudes toward life and nature. Therefore, ecological education should begin during this period. From a pedagogical perspective, the effectiveness of environmental education is closely related to the use of visual materials, organizing practical experiences, and employing an emotional approach to engage children. Through these methods, children not only learn about nature but also “feel” it and begin to develop a loving attitude toward it.

Environmental education in primary schools can be effectively carried out through the following approaches:

A) *Through educational activities.* Texts, poems, and images in textbooks should consistently address environmental topics. For example, topics

such as "Mother Nature," "Trees Speak," and "Water: The Source of Life" help students grasp ecological concepts. In math lessons, students can sort waste into categories and conduct ecological calculations based on the topic "Recycling." In language arts or reading lessons, works that praise nature, such as those of Alisher Navoi, Erkin Vohidov, and Abdulla Oripov, can be explored.

B) *Non-traditional lesson formats.* Activities like ecological excursions, open lessons, role-playing games, quizzes, and writing environmental fairy tales can increase children's interest in the topic. For example, in a role-play titled "Let's Protect Nature!", students can take on roles like trees, the sun, or birds. "Green Challenges" can be reinforced with interactive QR code-based questions.

Students' environmental attitudes should not be limited to the school. Collaboration with families and neighborhoods is crucial. Initiatives such as "Family Tree Planting Day," "Let's Clean Our Neighborhood," and the "Ecological Children's Festival" allow children to understand how small actions can lead to big benefits. As President Shavkat Mirziyoyev emphasized: "Raising the ecological awareness of youth and cultivating a culture of harmonious living with nature in the creation of New Uzbekistan is our collective responsibility."

Youth is particularly interested in technology. Therefore, explaining ecological topics through interactive mobile applications (e.g., the "Ecological Hero" game), video lessons, QR-coded tasks, and AR/VR technologies (virtual forest tours) is an approach that aligns with modern trends. This approach not only enhances the effectiveness of education but also develops sustainable eco-thinking in children.

Proposals and Recommendations:

1. **Program Development for Ecological Education:** It is advisable to create a dedicated course or textbook on ecological education for primary school students. The curriculum should include age-appropriate visual materials, practical exercises, and interactive tasks.

2. **Teacher Training:** Special seminars, training sessions, and webinars should be organized to improve the ecological literacy of primary school teachers and their ability to integrate ecological components into lessons.

3. **Systematic Organization of Ecological Events:** It is recommended that schools organize "Ecological Week" and "Green School" projects every semester, involving excursions, clean-up campaigns, and exhibitions.

4. **Expanding Technological Approaches:** To capture students' attention, ecological mobile applications, QR-coded tasks, virtual excursions via AR/VR, and quizzes should be developed. These methods help deepen the understanding of the topics.

5. **Strengthening Collaboration with Families and Communities:** Engaging parents and community leaders in initiatives such as "Family Eco-Projects" and "Ecological Activist Groups" would be beneficial in shaping ecological awareness in children.

6. **Developing an Assessment System:** It is recommended to introduce class portfolios, mini-projects, and ecological journals to assess students' ecological knowledge and skills.

7. **Contextual Approach to Local Issues:** By taking into account the ecological problems specific to each region, teachers can use case-study-based tasks that prepare students for real-life challenges.

Teaching primary school students to protect the environment is not just about simple explanations; it is about instilling human qualities such as love for nature, responsibility, and care in their hearts. Such education lays a strong foundation for a stable and healthy society in the future. Only through the collaborative efforts of schools, families, and communities can we nurture a generation with ecological culture and awareness.

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TALABA YOSHLARGA EKOLOGIK BILIMLARNI SINGDIRISHNING NAZARIY ASOSLARI

Ekologiya va geografiya kafedrasi katta o'qituvchisi

Madraximova Z.N.

Annotatsiya: Ekologik bilimlarni yoshlarga singdirish – bu ijtimoiy va ekologik barqaror rivojlanishning muhim omilidir. Ushbu mavzuda ta'lim jarayonida ekologik bilim va madaniyatni shakllantirishning nazariy asoslari, metodlari va zamonaviy usullari tahlil qilinadi. Tadqiqotning maqsadi – ekologik tarbiyaning samaradorligini oshirish yo'llarini aniklab, yoshlarning atrof-muhitga ma'suliyatli munosabatini shakllantirishga yo'naltirilgan takliflar ishlab chiqishdan iborat.

Kalit so'zlar: ekologik bilim, tarbiya, nazariy asoslar, innovatsion metodlar, talaba yoshlar, barqaror rivojlanish.

Hozirgi kunda jamiyat taraqqiyotining hozirgi bosqichlarda fan va texnika yutuqlari halq xo'jaligining hamma sohalarida jadal suratlar bilan kirib kelmoqda. Shuning uchun ham halq xo'jaligining biror sohasini endilikda fan va texnika taraqqiyotisiz qarab bo'lmaydi. Shunday ekan hozirgi zamon ilmiy texnika tarakkiyoti avvalo fanlar diferiensiysasi rivojlantirishga olib keldi. Natijada mavjud fanlar yanada takomillashib, bir necha sohalarga tarmoqlanib ketadi.

Ekologik inqirozlar, iqlim o'zgarishi, tabiiy resurslarning son-sonisiz isrof bo'lishi kabi dolzarb muammolar har bir insonning, ayniksa, kelajakning asosi – yoshlarning ekologik an'ana va bilimlarga ega bo'lishini talab etadi. Talaba yoshlarga ekologik bilimlarni singdirish – bu nafaqat ta'lim jarayonining bir qismi, balki ijtimoiy barqarorlikni ta'minlashning asosiy vositasidir.

Ushbu tadqiqotda ekologik tarbiyaning nazariy asoslari (psixologiya, pedagogika, ekologiya fanlarining integratsiyasi), innovatsion metodlar (loyihalar, ijtimoiy tadbirkorlik, raqamli texnologiyalardan foydalanish) va uning amaliy tatbiqidagi muammolar yoritiladi. Maqsad – ekologik ongni shakllantirishda zamonaviy yondashuvlarni tahlil qilib, samarali yechimlarni takdim etish.

Bizning fikrimizcha, talabalar ekologiyaga oid atamalarning mag'zini o'rta maktabda anglab yetganlarida edi oliy dargohda olib borilayotgan barcha o'quv tarbiyaviy jarayonlarda ularning bu fanni o'lashtirishlari ancha oson buladi. Oliygoth talabalarda ekologik asoslarni tushintirishning kuyidagicha bulishini maqsadga muvofiq deb asoslaydi.

MUNDARIJA

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