Educating primary school students through natural sciences to foster an environmentally conscious attitude

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Annotation: This article analyzes the educational and pedagogical potential of natural sciences in forming a conscious attitude toward nature among primary school students. Through the content of natural science subjects, the issues of developing environmental awareness, responsible behavior toward the environment, and ecological culture are examined. The effectiveness of practical activities, observations, experiments, excursions, and interdisciplinary integration in fostering environmental responsibility in young learners is highlighted. The study emphasizes that environmental education at the primary level plays a crucial role in shaping environmentally responsible and socially active individuals.

Keywords: natural sciences, environmental education, environmental awareness, conscious attitude to nature, primary education, ecological culture.

The purpose and objectives of fostering primary school students' love for nature are aimed at creating an ecologically literate and responsible generation capable of actively participating in environmental protection for future generations. Indeed, as emphasized by President Sh. M. Mirziyoyev, our youth are rightly capable of taking responsibility for the future of our country, becoming a decisive force in shaping today and tomorrow, which fills us with pride. It is essential to logically complete the large-

scale efforts in this field, particularly the nationwide educational and upbringing programs [1].

The main purpose of instilling a love for nature in primary school students is to develop ecological awareness, responsibility, and active engagement with the environment. Its key objectives include:

1. Introducing students to natural phenomena, plants, and animals to develop their interest and love for nature.

2. Forming students' understanding of environmental problems and their impacts on the ecosystem.

3. Developing students' skills in observation, information analysis, and decision-making within the context of environmental protection.

4. Encouraging active participation in practical environmental activities, such as ecological projects or clean-up events.

5. Fostering positive and responsible attitudes toward natural resources and developing ecological safety competencies.

Modern pedagogy considers education and upbringing as two inseparable aspects of a single process, with the educational content defining its upbringing character. Teaching natural science provides teachers with opportunities to develop students' thinking, creativity, and cognitive activity. The content of all topics in natural science reflects educational and upbringing issues. Methods of conveying knowledge are pedagogically significant, as all student activities are linked to the process of learning. Thus, teaching natural science offers vast opportunities for educational work.

In natural science education, oral, visual, practical, and other modern methods are used. Methods aimed at developing children's creativity and individual abilities are increasingly applied. Lessons should be closely integrated with extracurricular

activities, outdoor games, and field trips. This allows teachers to engage with students not only in acquiring knowledge but also in shaping their personalities.

The objectives of teaching natural science in primary grades include introducing elementary concepts of botany, zoology, ecology, anatomy, physiology, hygiene, and geography. Natural science lessons also serve as a school of labor education. Through concrete examples, students learn that human labor is a source of both physical and moral development, instilling respect for work and a love for diligent effort.

For example, in Grade 1, topics include *"Living Organisms"* and *"Development of Animals"*; in Grade 2, *"My Faithful Helpers"* and *"We Are Different but Equal"*; in Grade 3, *"How We Study Nature"* and *"Useful Minerals"*; and in Grade 4, *"The Impact of Plants on the Environment"* and *"How Humans Affect Plant Life."* These topics highlight the significance of labor and nature in students' upbringing.

Natural science, through its content and methods, provides unlimited opportunities to educate students comprehensively. Nature, as the science of the world, requires a carefully designed methodology for delivering content. The main goal is not only memorizing knowledge but turning it into understanding and confidence, which manifests in students' attitudes, habits, and behaviors. Teaching tools such as visual aids, slides, printed materials, films, and TV programs should be used to facilitate this process.

Integrated ecological education through natural science should be consistent not only in classroom lessons but also in extracurricular activities, such as excursions, outdoor tasks, and schoolyard projects. Observing natural phenomena as part of an ecosystem allows students to understand interconnections and make logical conclusions. Experiments and practical exercises in natural science should therefore be conducted in real environmental conditions whenever possible [2].

Lessons are key tools for improving ecological understanding in primary students. By studying natural sciences, students begin forming a scientific worldview. The teacher's guidance ensures the effectiveness of lessons. Natural science classes help students develop observation and analytical skills, draw logical conclusions, and acquire competencies from various sources (environmental, experimental, textual). Students learn to use basic tools (compass, thermometer, weather vane), create models, mock-ups, and herbariums, and record their observations in written and oral forms.

Natural science is instrumental in developing foundational environmental knowledge and skills. Students learn to study nature, use resources responsibly, and conserve it. They are encouraged to conduct independent observations, focus attention, and pursue goals systematically, understanding the significance of each task.

This issue is pressing, and its solution depends on a scientific and pedagogical approach, ensuring continuous and systematic provision of ecological knowledge in primary schools. Research shows that natural sciences play a critical role in environmental protection and in fostering a holistic understanding of the world. Globally, minimizing ecological risks depends on the positive influence of humans on nature, which requires promoting ecological knowledge, forming ecological thinking, and cultivating ecological culture among the population, particularly youth [3].

By systematically exploring the surrounding environment, young students form a comprehensive understanding of nature, their place in it, and the country's natural resources. They learn how humans utilize these resources in various activities, understanding the interconnection between human labor and nature.

Recent changes in primary school curricula emphasize ecology, labor, and hygiene education. Students should gain initial knowledge in these areas, learning to maintain personal health and hygiene from a young age.

In conclusion, natural sciences are a vital pedagogical tool for fostering conscious attitudes toward nature among primary school students. These subjects develop ecological knowledge, responsibility, and culture. Practical exercises, interdisciplinary integration, and modern pedagogical approaches enhance the effectiveness of ecological education. Therefore, enriching primary education with environmental content in natural sciences remains a priority in the education system.

References:

1. Sh.M. Mirziyoyev Buyuk kelajagimizni mard va olijanob xalqimiz bilan birga quramiz. -Toshkent: O‘zbekiston, 2017. – B.488

2. BOSHLANG‘ICH SINF O‘QUVCHILARIDA TABIIY FANGA BO‘LGAN QIZIQISHNI SHAKLLANTIRISHNING USUL VA VOSITALARI Umaraliyeva Baxtilaxon Raxmonali qizi , Karimov Abduvoxid Ìmomberdi o‘g‘li
“Geografiya fanining dolzarb masalalari: iqlim o‘zgarishi, hududiy rivojlanish va ta’limda innovatsion yondashuvlar” mavzusidagi respublika ilmiy-amaliy konferensiyasi 23-24 may, 2025

3. Хуморова N. (2024). Boshlang‘ich sinf o‘quvchilarini tabiatga muhabbat ruhida tarbiyalash texnologiyasi. *Наука и инновации*,*1*(1),184–185. https://inlibrary.uz/index.php/ilm-fan-va innovatsiya/article/view/32961

4. D.A. Suyunov. Tabiiy fanlarni o‘qitish asosida boshlang‘ich sinf o‘quvchilarining ekologiyaga doir ijobiy qarashlarini shakllantirish. // Inter education & global study. 2025. Vol.3 №10. B.54–60.

5. Nabijonova F. V. *Boshlang‘ich sinf o‘quvchilariga tabiiy fanlar orqali ekologik tarbiya berish.* – Pedagogik tadqiqotlar jurnali, 2025.

6. Sotvoldiyeva M. M., Matnazarova K. O. *Boshlang‘ich ta’limda ilmiy dunyoqarashni shakllantirish.* – Pedagogika va psixologiya, 2022.