



UDC 349.6

BASIC METHODS OF TEACHING ECOLOGY IN HIGHER EDUCATIONAL INSTITUTIONS

Pattullaeva Zamira Uzakbaevna

Assistant, Department of Ecology and Soil Science, Karakalpak State University named after. Berdaha, Nukus, Republic of Uzbekistan

ANNOTATION

The article discusses the main methods of teaching ecology in higher educational institutions. The concept of “teaching method” is the methods of joint activity of the teacher and students aimed at solving learning problems.

KEY WORDS: *education, theory, methodology, science, activity, students, environmental education, task.*

In the modern world, environmental problems affect all spheres of people’s lives: science and production, politics and economics, energy, urban planning, healthcare and education [1].

Ecology is a unique phenomenon in modern science and is a complex system of interrelated sciences.

The negative impact of humans on the Earth’s ecosystem has led to global climate change and environmental degradation. The United Nations Educational, Scientific and Cultural Organization (UNESCO) notes that to ensure future global changes in the quality of life of society, it is necessary to increase public awareness of the environment. Environmental education can help people understand how their actions affect the environment and how this can be minimized [6].

The upbringing of students and their environmental education are priorities of the state educational policy of the Republic of Uzbekistan. In order to increase the environmental literacy of the growing young generation, the formation and development of environmental consciousness and environmental culture, the effective organization of the process of environmental education and upbringing, the Resolution of the Cabinet of Ministers of the Republic of Uzbekistan, dated May 27, 2019 No. 434 “On approval of the concept for the development of environmental education in the Republic of Uzbekistan¹”.

Ecology has a significant impact on the education system as a whole; the theory and methodology of teaching ecology are closely related to environmental science [4,5].

Ecology forms the content of environmental education, and methods of environmental research are largely reflected in the educational and research activities of students in higher educational institutions.

Environmental education, using teaching methods, is designed to help students learn environmental issues and participate in problem solving to improve the environment. As a result, students will develop the competence to make informed and responsible decisions.

The concept of “teaching method” is the methods of joint activity of the teacher and students aimed at solving learning problems.

Method (from the Greek *methodos* - path, method) is a set of techniques and operations of cognition and transformation of reality; as well as ways to achieve results in knowledge and practice [2,3].

The following methods are used in teaching ecology in higher educational institutions:

- verbal methods;
- visual methods;
- practical methods;
- problem-based learning methods [2,3].

¹ Resolution of the Cabinet of Ministers of the Republic of Uzbekistan, dated May 27, 2019 No. 434 “On approval of the concept for the development of environmental education in the Republic of Uzbekistan ”.



Teaching methods ensure the assimilation of all components of the content of environmental education, contribute to the development and education of the student's personality.

The classification of methods has theoretical and practical significance, as it serves as the basis for selecting methods and assessing their effectiveness in the learning process [4,5].

- In teaching ecology in higher educational institutions, various teaching methods are used, for example:
- methods that contribute to the assimilation of educational material, consolidation and improvement of acquired knowledge;
- methods for explaining new material by the teacher;
- methods of independent work of students;
- methods that form knowledge and skills, creative activity, consolidation and testing of knowledge;
- explanatory and illustrative methods; reproductive; problem presentation, heuristic, search; research;
- methods that stimulate learning motivation;
- methods of organizing and implementing educational activities and operations;
- methods of control and self-control of students;
- verbal, practical, visual methods [4,5].

Verbal teaching methods in higher education mainly include lecture, explanation and conversation. And visual methods include demonstration of experiments and visual aids, display of environmental objects, presentations of multimedia tools and viewing of films and videos.

In practical classes on ecology, an environmental atlas can be used as visual material to show the location of environmental objects or phenomena. You can also organize the environmental atlas differently by asking students to draw up an environmental characteristic of a separate district, city or region using a standard plan. Based on work with an environmental atlas, it is possible to stimulate students' creativity.

Practical teaching methods include students' work on studying an object during practical and laboratory work in an ecology lesson, and when performing independent tasks on excursions.

When using the explanatory-illustrative method, the teacher communicates ready-made information using various means, and students perceive this information, realize it and record it in their memory. At the same time, students listen, watch, read, and observe. Reproduction and repetition of a method of activity or information on the instructions of the teacher are the main features of this method.

With the search method of teaching, during the search and selection of educational information, students apply knowledge and skills to solve new problems and present the results obtained.

Research teaching methods perform important educational functions: they support the comprehension of knowledge, the prompt and flexible application of it by students, and allow them to form the experience of creative activity [4,5].

Thus, the effectiveness of the choice of methods is determined by many factors, but one of the most important is the teacher's methodological literacy. The most important skill of a teacher is manifested in the ability to choose effective teaching methods, combine them, develop and improve them in the educational process in ecology.

LITERATURE

1. Zakharova, E. A. *Formation of environmental education among students in secondary schools // School pedagogy.* - 2017. - No. 3 (10). - P. 17-19.
2. *Classification of teaching methods // https://studme.org/46759/pedagogika/klassifikatsiya_metodov_obucheniya*
3. *Methods, techniques and forms of teaching // tudent39.ru/lector/Metody-_priemy_i_formy_obucheniya*
4. *General characteristics and system of forms of teaching ecology // <https://megaobuchalka.ru/9/5856.html>*
5. *Theory and methodology of teaching ecology: its place and significance in the field of pedagogical sciences // <https://mgutunn.ru/work/1499262/Teoriya-i-metodika-obucheniya>*
6. Treshchev A. M. *Environmental education of university students in the interests of sustainable development // News of the Dagestan State Pedagogical University. Psychological and pedagogical sciences.* 2022. T. 16. No. 4. P. 104-110. DOI: 10.31161/1995-0675-2022-16-4-104-110 E