

USE OF MODERN PEDAGOGICAL TECHNOLOGIES IN TEACHING BIOLOGY

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Abstract: *The article discusses the need to increase the effectiveness of lessons in the general secondary education system based on modern pedagogical technologies, as well as the main tasks of interactive lessons in improving the quality of education.*

Keywords: *cell, metabolism of substances and energy, evolutionary development, human genetics, biological concept, interaction of genes, heredity, variability, genetic symbols.*

The national program for personnel training indicates that a fundamental reform of education is associated with the introduction of advanced pedagogical technologies; “advanced pedagogical technologies of teaching, the creation of modern educational and methodological complexes and the didactic provision of the educational and educational process.” In the process of teaching biology, the teacher inevitably faces some problems. The problem of fully involving all students in the lesson process, because students can fully participate in the lesson, but no one can fully guarantee that all students understand the lesson, this is where the main importance lies in what pedagogical technologies the teacher uses in the lesson. The student may seem to understand in the lesson, answer the teacher's question, but the extent to which he acquires the skills to understand and imagine certain biological processes, and to use this knowledge when encountered in his life, remains an abstract issue even for the teacher. In solving such a problem, extracurricular

activities, group activities, problem solving and case studies are of great importance.

RESEARCH METHODOLOGY AND EMPIRICAL ANALYSIS R. Ishmuhamedov states that regardless of the form, methods and means by which pedagogical technologies are organized, they should include the following:

- increase the effectiveness of pedagogical activities (educational process); –
- to establish mutual cooperation between teachers and students; to ensure that students acquire thorough knowledge of academic subjects;
- formation of independent, free and creative thinking skills in students;
- creating the necessary conditions for students to realize their potential;
- it is necessary to guarantee the priority of democratic and humanistic ideas in the pedagogical process.

As is known, lessons in which students' cognitive activity is combined with game activity are called didactic game lessons. The use of didactic game technologies in biology lessons allows you to increase the effectiveness of the lesson. There are such types of didactic game lessons as plot-role, creative, business, conferences and game exercises, in which, for example, ways of using a press conference in biology lessons can be developed. A press conference is characterized by the active educational and cognitive activity of all students in the class. The teacher's preparation for a press conference lesson is somewhat more complicated. A week before the press conference, the teacher should divide the class into two groups and assign tasks in the necessary areas.

When using problem-based learning technology, it is advisable for the teacher to organize the lesson based on the following several stages:

Stage I. It is necessary to form small groups of equal number, almost equal strength, from students who are psychologically close to each other.

Stage II. It is necessary to distribute educational tasks consisting of problem questions to small groups and introduce them to the didactic purpose of the task.

Stage III. Directing students' cognitive activity towards solving educational problems.

Stage IV. Listening to students' information on solving problem situations and giving them the necessary direction.

Stage V. Conducting a study debate and discussion among small groups.

Stage VI. Making a general conclusion.

When using "Brainstorming" in this lesson, students apply previously acquired knowledge in new situations, expanding and deepening their knowledge, and mastering mental activity methods. "Brainstorming" lessons are dedicated to studying a specific topic in the program.

The didactic goal of organizing lessons using problem-based learning technology:

- to acquire in-depth knowledge and increase interest in science, and expand knowledge by activating students' cognitive activity;
- to enable students to acquire new knowledge by applying previously acquired knowledge, skills, and competencies in routine, familiar, and unexpected new situations;
- identify and eliminate abstract concepts in students' knowledge, and develop a desire for knowledge;
- To develop students' speech, to express their thoughts concisely and logically, and to develop their skills in substantiating them.

CONCLUSION AND DISCUSSION

Depending on the topics covered in biology teaching, the collaborative teaching technology has a great chance of achieving good results when using team teaching, small group teaching, "Saw" or "Zigzag", "Let's study together"

methods. In conclusion, the use of modern pedagogical technologies in biology lessons not only improves the quality of lessons by using various methods in teaching topics that cause difficulties for students, but also helps to educate the younger generation as people who think independently, who answer science questions independently, who love the environment, who have a detailed idea of their own organism, and who can express their opinion on events occurring in the environment, and allows students to develop their interests and needs in mastering the basics of science.

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