

THE USE OF MODERN PEDAGOGICAL TECHNOLOGIES IN TEACHING BIOLOGY

Xolboyeva Munisxon

New Methodologies for Teachers in The District of Uzbekistan

National Center for Teaching

Abstract

The problematic "mental attack" lesson, which plays a prominent role in teaching, and controversial (scientific discussion and free thinking) lessons are based on problematic teaching technology. The uniqueness of these lessons is based on the problematic situations that arose during the course.

The problematic "mental attack" lesson, which plays a prominent role in teaching, and controversial (scientific discussion and free thinking) lessons are based on problematic teaching technology. The uniqueness of these lessons is based on the problematic situations that arose during the course.

Problem education is said to be a process aimed at developing students' ability to think in the process of learning and meeting the need to know, preparing the ground for a person's overall and special development, relying on the laws of thought using the most viable option for pedagogical influence. A problematic situation arises under the direction of a teacher in a problematic teaching process, which allows students to develop their knowledge, skills, and skills creatively and mentally as a result of their active independent activities.

The Course (Judicial Attack) is based on the following phase:

Step 1. Forming equally small groups of students who are psychologically close together.

Step 2. To assist individuals desiring to benefit the worldwide work of Jehovah's Witnesses through some form of charitable planning, a brochure has been prepared in English and Spanish entities.

1- stage. Direct students' knowledge activities to solve learning problems.

2- stage. Listen to students' information on solving problems.

3- stage. Conducting a training debate and discussion between small groups.

4- stage. Make a general conclusion.

In the "mental attack," students use the knowledge they first acquired in new situations, expand their knowledge, deepen them, and acquire mental functioning methods.

This organization of knowledge activities allows students to organize creative activities in them.

Controversial lessons are based on problematic teaching technology.

To assist individuals desiring to benefit the worldwide work of Jehovah's Witnesses through some form of charitable giving, a brochure entitled Charitable Planning to Benefit Kingdom Service Worldwide has been prepared.

1. Study the opinions of Linney K., Lamark J.B., Darwin CH. about the appearance of a person. How do you react to these points?
2. Why is man included in the category of primates in the scientific classification of the organic world?
3. What are some similarities in the structure of humans and monkeys?
4. What characteristics of a person's embryonic development are similar to mammals? Base your opinion.
5. Identify human rudiments. In what organisms did they develop, and what do they indicate?
6. Identify human atavisms. In what organisms have they not lost their function today?
7. Compare the physiological and biochemical processes that go in humans and monkeys.
8. Why do apes have a low ability to combine their environmental impressions and think? Base your opinion.

The success of controversial lessons, first and foremost, is for students to prepare feverishly for this lesson, Cooperation between them will depend on the origin of assistance, the full and logical explanation of their opinions and opinions, the ability to prove them, to listen patiently and patiently to their partner's opinions, the teacher's abilities, beliefs, and ability to activate students' cognitive activities.

METHODOLOGY FOR CREATING KEYS

Because of the laxity of the nannies in the maternity ward, the numbers of the two newborn boys were misled. The two women who have children are very excited. They went to the chief physician and asked him to find their infant. The chief physician entrusted the nurses with the task of identifying the blood group of the women, their spouses and infants. It was found that the blood group of the first husband and wife was I and II, and the blood group of the second husband and woman was I and IV. Children's blood group I and III.

Can you help us determine which child the child is?

Questions:

- How do you determine which family is the child of the bites?
- Identify the parents of babies
- Identify the blood group of babies
- Will a group IV child be born here?

Tinglovchilar uchun ko'rsatmalar:

1. Get enough understanding of the essence of the keys
2. Identify factors that serve to find a solution to the problem
3. Try to base a solution on these factors.
4. O'z fikringizni bayon eting

2-KEYS

Nafisa graduated from university and went to school as a teacher. Shortly thereafter, his parents married a boy named Nafisa Sha'drach, Me'shach and A-bed'ne-go. They lived happily. They dreamed of having children. But it was too late for them to have children. Sherzod took Nafisa to a lot of doctors. But it didn't help. Gradually, days later, some masculinity symptoms, namely, good hair, began to appear in Nafisa. When Sherzod saw the situation, he quickly took Nafisa to the doctor. The scribes observed these changes in Nafisa, examined blood tests and began treating her. Nafisa went to bed in the hospital for four weeks and was again under the care of a doctor. A few years later Sha'drach, Me'shach and A-bed'ne-go had children and began to live happily again.

Questions:

1. Why was having children delayed?
2. What is the reason for such changes in selfishness?;
3. Which doctor do you think they should consult?
4. What system of organs do you think is involved in the diagnosis of selfishness?
5. What factors do you think contribute to having children?

Tinglovchilar uchun ko'rsatmalar:

1. Get enough understanding of the essence of the keys
2. Identify factors that serve to find a solution to the problem

Design Technology

Design technology is currently successfully used in educational institutions in developed countries such as the United States, Great Britain, Belgium, Israel, Finland, Germany, Russia, Italy, Brazil, and the Netherlands. J. Dyu proposed organizing teaching by activating students' activities for a particular purpose, taking into account the interest and needs of the students. To do this, he taught students to apply the knowledge, skills, and skills they have acquired in practice, to show them ways to use them in future life, or to teach them theoretical knowledge in connection with practice. In this process, students will master new knowledge, skills, and skills by applying the knowledge and skills they first mastered. In order for students to successfully solve problems, the teacher must give them appropriate instructions, recommend the

sources used, show them ways to achieve the results of teaching, and design students' activities in solving the problem.

The main idea of design technology is to achieve the result in the process of solving a problem of practical or theoretical significance. If it is necessary to design a theoretical problem, it is necessary to develop specific recommendations on how to apply it to practice, if there is a specific solution, if there is a practical problem. To achieve this result, students need to have acquired independent thinking skills, to understand the problem and to look for ways to solve it, to take advantage of the knowledge they had previously acquired in this regard, to research in various fields of science, to predict future results, to develop options for a variety of solutions, and to imagine that they will eventually connect. The main essence of design technology is to stimulate students' interests by creating a certain problematic situation, to develop design activities, to acquire relevant knowledge, and to make interdisciplinary connections.

The basic idea of designing technology is: "I know why I need the knowledge, skills being studied and where and how to use it." This idea helps students to consciously master the basics of science, adapt to life and get the target right. Taking into account students' interests and abilities, a teacher should use design technology to solve not only academic problems in the classroom but also creative problems in classroom and extracurricular activities.

The use of design technology allows students to approach individual and differential. Each project will have its own characteristics, so they will be classified according to certain characteristics as follows:

According to the preponderance of activity stipulated in the project: research projects; creative projects; role-playing projects; practical projects; projects for research and targeting.

According to the work and content of the projects: projects covering one field of science; projects that require interdisciplinary research.

According to the characteristics of projects: projects designed to obtain accurate results; projects designed to obtain multi-directional results.

According to the number of participants participating in the project: individual projects; projects for two students; and projects designed for students to work in small groups.

According to the scope of the project: projects for one-graders; projects for schoolchildren; city-wide solutions; projects designed to be addressed nationally; and projects designed to be addressed worldwide.

The project is divided into : short-term; long-term.

Projects of research character. The structure of these projects is well-designed, including the research work, relevance, social significance, methods used, research and experiments, and methods of formalization of results should be clear for participants in the project. This project must logically approach the problems of scientific research and be consistent with and subsistence to its solution. This type of project should identify new problems for the relevance of the research topic, the work and object of the research problem, the consistent and gradual identification of tasks, the advancement of hypotheses on solving problems, the development of ways to solve it, the discussion of the results and conclusions obtained, the issuance, and the continuation of the research. A biology teacher can use projects in this category in classroom and extracurricular activities with some students.

After studying plant organs in the botanical course, a project on the theme "Plant—A Holistic Organism" is recommended.

Purpose of the project: to prove that it is a holistic organism, taking into account the structure and function of plant organs.

Content of the project: Prove that the plant is a holistic organism, taking into account the structure and function of vegetative and generative organs of plants. Draw up a table showing links between plant organs and prove your thoughts on this basis.

Depending on the work and content of the projects, projects covering one field of science are divided into projects that require interdisciplinary research. In the formation of these projects, the teacher can get problematic, difficult topics in the field of biology. These projects allow to make interdisciplinary connections to natural sciences, literature, spirituality, culture, art and humanities in teaching biology.

Available Publications:

1. Куйчиева М.А., Use of Interdisciplinary Relationships In The Formation Of Competences In Biology Students // CONVERTER 2021 www.converter-magazine.info. - P. 485-489. (№10. ISSN:0010-8189).
2. 4. Куйчиева М.А. // Organization of Experimental Works on the Development of Professional and Methodical Competence of Future Biology Teachers // Eurasian Journal of Learning and Academic Teaching. Open Access, Peer Reviewed Journal. 2022. ISSN (E): 2795-739, - P.19-21. (№7. SJIF; IF-8.115)
3. 5. Куйчиева М.А., Д.Эшматова. Development of Professional and Methodical Competence of Future Biology Teachers in Extracurricular Activities // Web of Scientist: International Scientific Research Journal. 2022. ISSN:2776-0979, - P. 113-117. (№12. SJIF; IF-7.565).
4. Sayidahmedov N.S. New pedagogical technologies. - T.: Finance, 2003.
5. Urazova M.B., Eshpulatov SH.N. Design activities of a future teacher. Methodological manual. - T.: TDPU, 2014.

-
6. 6.TolipovaJ.O. Innovative technologies for teaching biology. A textbook for students of higher education institutions of pedagogy. Tashkent, 2014.

Internet Resources:

www.eduportal.uz

www.ziyonet.uz

www/rtm.uz

www/pedkutubxona.uz