



MODERN PEDAGOGICAL TECHNOLOGIES USED TO IDENTIFY GIFTED STUDENTS IN BIOLOGY TEACHING.

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Article history:	Abstract:
<p>Received: 26th August 2021 Accepted: 24th September 2021 Published: 30th October 2021</p>	<p>The use of modern pedagogical technologies in biology lessons highly effectively allows students to develop their interests and needs in mastering the basics of natural science. In the process of teaching biology, modern educational technologies ensure the assimilation of educational material, textbooks, texts, and various didactic materials by the teacher and the student.</p>
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One of the main advantages of the paradigm of comprehensive development is that many human abilities manifest over time. Sometimes very early, at preschool age (Mozart, Sofia Kovalevskaya), a unique talent manifests itself, but this is an exception. Practice shows that strange abilities are often revealed in adolescence and even later. It follows from this that one of the main tasks of modern education is to reveal in children their talents in various fields of activity, to reveal their strengths to the student as early as possible, to give them the opportunity to develop further. However, the current education system does not fully meet this need.

The phenomenon of talent is well studied in modern pedagogy, but the issue of talent development in the study of individual disciplines is not sufficiently covered. It follows that primary school teachers are not able to fully realize the process of qualitative development, a specific combination of individual talents of children. The lack of pedagogical ways to unlock the potential of such students can lead to the disappearance of many of their unique talents.

Recently, in the process of modern education, more and more attention has been paid to methodological aspects of the development of youth talents in the form of extracurricular activities (extracurricular activities, projects, research, Olympiads). However, this issue has not yet been fully studied. In addition, there are very few methodological recommendations aimed at developing the ability to study basic school subjects, in particular biology.

Based on these contradictions, we raised the problematic question of the article: "How can students' talents be developed in the process of studying biology?"

It should be noted that a necessary condition for the introduction and implementation of the methods is a creative approach. Without personal development, it is impossible to grow and succeed in professional activities. Therefore, mastering the latest technologies, achieving the development of their technologies as a value is a difficult task without improving such professionally important qualities as creativity.

The education of gifted children in a general education institution can be carried out only on the basis of the principles of differentiation and individualization (training of individual groups of students according to their abilities, preparation and implementation of individual educational programs, training according to individual programs in some subjects, etc.)

The teacher's personal plan and the development of individual training programs specifically for gifted students include the use of modern information technologies (including distance learning), in which a gifted child can receive targeted support depending on their needs. The teacher is especially important in individualizing the upbringing of gifted children.

A teacher can be a qualified specialist to conduct classes with a group of gifted children. The main task of the teacher is to help students develop a more effective personal development strategy based on self-determination and the formation of the ability to self-organize. As a rule, this task can be solved by two-way research and constant conversation. The main role of the teacher is to coordinate the student's lifestyle and various alternatives to the content of education.

Below we will consider the main methodological features and forms of work with gifted children that contribute to the development of this quality.

The main form of education for gifted children is elective classes. This form includes classes in small groups, which allows you to differentiate training, which allows you to use different methods of educational activity. Such classes

help to take into account the different needs and abilities of each gifted child. In addition, such classes provide an opportunity to create associations or sections, which, in turn, allow students to learn not only the trajectory of research work, but also the pace of individual work and development in any subject allows independent choice.

When we talk about individual work programs with gifted children based on the ever-increasing volume and complexity of information, we should not forget about the significant shortcomings of these programs. Frankly speaking, it is permissible to increase the amount of data and continue to complicate them up to a certain point, otherwise the reader may overwork. The development of the student's abilities should take place within the framework of the subject's involvement in research, because the formation of creative abilities is possible only by turning the child into an interesting creative process [2].

When using modern pedagogical technologies in the educational process, only the teacher, who is his supervisor, will be the main guarantor of achieving this goal. From this point of view, when introducing new pedagogical technologies and information and communication technologies, which are their main basis, priority should be given to the level of training of the teacher who is his supervisor. The positive or purposeful solution of topical issues on the agenda of the pedagogical process largely depends on the professional potential and pedagogical abilities of the teacher. Pedagogical technology is the assimilation of pedagogical knowledge in order to optimize the forms of education, in the process of which the pedagogical and educational activities of students, methods and means of teaching, allowing to determine their interaction, are a set of systematic methods. Pedagogical technologies are used in the educational process at the local and special methodological level [2].

In order to improve the organization and management of students' learning activities, the biology teacher must first apply it at the local (modular) level in a certain part of the lesson. At the same time, a new topic is first studied, control tests, various game exercises, competitions, trainings are conducted to control and evaluate the knowledge and skills acquired by students. After students are involved in this activity and have acquired certain skills and competencies, they can conduct lessons based on pedagogical technologies, i.e. apply them at a certain methodological level.

At a special methodological level, all stages of the lesson are organized based on the requirements of pedagogical technology. In this case, the teacher, depending on the educational, pedagogical and developmental goals of the subject, which technology to use, features of the organization of students' educational activities based on this technology, what students need to know in the classroom. * the training tasks should specify ways to track and evaluate the knowledge gained by students. Extracurricular activities and extracurricular classes in biology teaching, organization of excursions based on a competent approach; conducting laboratory classes; biology problem solving skills; using modern pedagogical technologies in professional activities; have the competence to organize and conduct classes at the level of modern requirements.

Recommendations for the organization and conduct of the module Lessons from the module "Methods of teaching biology" are conducted in theoretical and practical form. Theoretical classes provide information about the content of the created educational and methodological complexes in biology, the requirements for mastering lessons, the features of biology and the methodology of teaching science. Practical classes teach the formation of lesson plans based on modern requirements, assessment of students' knowledge, extracurricular and extracurricular activities, excursions, observation and analysis of lessons [1]. Classes include the use of technical tools, express questionnaires, control questions, brainstorming, group thinking, working in small groups and other interactive teaching methods.

To the group of technologies used in biology lessons:

1. Didactic gaming technologies;
2. Problem-based learning technologies;
3. Modular learning technologies;
4. Collaborative learning technologies;
5. Design technologies;
6. Includes traditional educational technologies.

Below is a brief description of the didactic game, problem-based, modular learning, collaborative learning and design technologies used in biology lessons, as well as the features of lessons based on them.

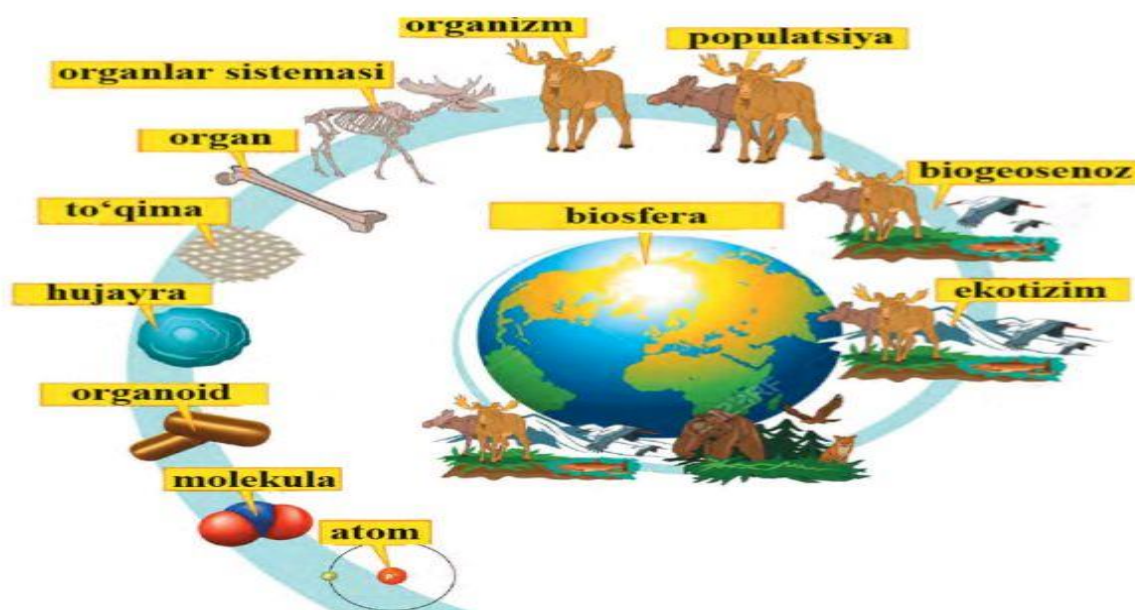
Didactic game technologies. The use of didactic game technologies in biology lessons makes it possible to increase the effectiveness of the lesson. There are various types of didactic game lessons, such as story-role, creative, business, conferences and game exercises. In the 8th grade, digestion, respiration, multiplication

It would be useful to use role-playing methods on the structure of organ systems, the basics of animal and plant breeding, the achievements of Uzbek scientists in the field of breeding, press conferences on topics such as poultry farming. They act as scientists and specialists working in the field of breeding, correspondents of newspapers and magazines published in the country [1].

Technologies of problem-based learning. This organization of students' learning activities allows them to structure their creative activities. When working with tables, the student also fills in the table and justifies his opinion. Brainstorming lessons are devoted to the study of a specific topic of the program. Zoology, botany, biology in the 10th grade allow students to structure creative activities by comparing plants and animals. For example, to identify the rudiments in a person. In which organisms did they develop and what do they indicate? [3]

Modular learning technologies. The study tasks that students must complete include instructions on how to complete them. In the 6th grade, a modular program on the topic of family is provided for students to work in small groups, to work with students in small groups, to get acquainted with the peculiarities, wild and cultural representatives

of families, their role in human life and nature, the development of our economy to determine the position and develop skills of independent work with a textbook.



Figure№ 1. Levels of organization of living matter.

Technology of co-education. In this technology, it is desirable to train in a team, work in small groups, use the techniques of "saw" or "zigzag", "read together". The topic "Internal structure of carp" can be seen by the "saw" method. The text of the topic is logically completed with ideas divided into the following parts: Group 1: the digestive system of carp. Group 2: Carp respiratory system. Group 3: The circulatory system of sturgeon fish. Group 4: Tasks such as the division system and carp metabolism are given in collaboration with a group of students. In this case, a group of students, in turn, shares their knowledge on the assignment with their peers, as if the teeth of a "saw" came in a row.

Design technology. Presentations on this technology, work with animation "video puzzles", audio and video, slides, examples and tasks, laboratory and practical work will help students develop in the future, deepen their understanding of life. For example, you can show multimedia by blood type. In ancient times, a king lived here. He was old and extremely cruel. One day the king wanted to hide and ordered the doctors to transfuse the prisoners' blood. The first time he bled out, the king felt fresh and energetic. The second time, when he bled out, the king felt ill and died. Tell me, guys, what is the reason? Answer: The reason is that the blood of one person does not match the blood of another. People have 4 different blood types. The Rhesus factors of each blood group must match. When the king had his first blood transfusion, his blood type matched the prisoner's, and when he had the transfusion the second time, the blood groups did not match, and therefore he died).

CONCLUSION

In the modern world, society needs teachers who quickly adapt to existing conditions, have intellectual potential and strive for comprehensive development. Naturally, it is necessary to unlock the potential of as many children as possible in order to meet the needs of society. In order to solve a number of issues in the development of talent as a quality, the teacher needs to conduct the educational process regularly and outside of school hours.

Special attention should be paid to determining the type of giftedness when choosing suitable methods of working with gifted children, so it is possible to build pedagogical activities aimed at obtaining clear positive results. The teacher meets certain conditions. In addition to creativity, the child must make a choice of the most optimal development strategy for him, based on his personal characteristics.

The use of modern pedagogical technologies in biology lessons is highly effective, allows students to develop their interests and needs in mastering the basics of natural science. Modern educational technologies in the process of teaching biology ensure the assimilation of teaching materials, textbooks, texts, various didactic materials by the teacher and the student. Creative abilities of students create conditions for self-development and formation in the future. In-depth study of biology involves the use of visual anatomical models, dyes, reagents, and so on. Therefore, in the future we want to focus on the development of talents in a new qualitative form in the study of biology outside of lessons.

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