

## PEDAGOGY AND EDUCATION

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### CONCEPT OF A MODERN COURSE IN TEACHING BIOLOGY

***Abstract.** The article discusses the use of new innovations in modern education, including biological education, a different approach to teaching, the materiality and unity of the worldview, the general nature of the laws of dialectics. Also, since learning is a process of activity, it is about the creation of special models of communication between teacher and learner in this process.*

***Keywords:** modern education, innovation, 3 A technique, narration, worldview, modern education system.*

The transfer of concepts to skills is possible in all biology courses. The development of skills is related to the development of concepts. In order to develop knowledge, skills and habits, it is important to first develop their content. First simple skills should be formed, and then more perfect and complex skills (1, p. 149). At present, due to curriculum reforms in the field of education, qualitative changes are being made in the teaching process. The subject-oriented curriculum in terms of content is aimed at mastering these concepts, covering the field of science and its system of perfect concepts. The purpose of the implementation of all practical skills is to serve to increase the strength and sustainability of knowledge (5, p. 5).

21st century education is radically different from traditional teaching in terms of teaching process, methods, techniques and tools. With the emergence of activities in different formats between teachers and learners, it has become necessary to organize the management of education in higher and secondary schools in accordance with the problems of the time. Today, we cannot be satisfied with students who memorize various scientific knowledge. Learners need to be taken out of the "folder" format where knowledge is stored. Teaching can be considered effective when the young generation, who are able to apply knowledge creatively,

are critical of the proposed ready-made knowledge, and think constructively, apply what they have learned (2, 3, 4, 6).

The modern world - a modern education system, a modern school - requires a creative teacher and a different methodology. That is, the teaching of biology with a constructive approach is a requirement of the time to convey biological knowledge to secondary school students. For this purpose, the main goal should be to train students as teachers in a new format in the field of biology teaching methods in higher education.

A new era requires a new format, new methods and tools. In an already globalized world, as with any development, problems are quickly dictating mobilization to cover the entire world. The field of education also has to respond effectively to changes in the world against the background of changes. To do this, it must enrich its human resources in both education and technology to integrate into the world's innovations. It also includes updating the material and technical base of educational institutions. The methods and techniques we currently use in teaching biology continue to affect the effectiveness of teaching. But we must continue to work and look for different, new opportunities. The new tools used in the world, increasing the interest of learners by introducing different methods of using ICT, will increase the quality of teaching. "Professional development is a must" (Prof. Dr. Kurshad Yilmaz - 10.12.2020 - Speech at the online webinar at NSU).

In general, in biology teaching, both the student and the teacher must be aware of the innovations taking place in the country and in the world, be able to discuss the educational reforms and choose the most effective ones for teaching. He thinks that any knowledge, skills and methods he learns should not be considered as a standard, and I always repeat it in the audience. The ability to take a critical approach to everything that exists will allow you to get to the heart of what is being learned, as well as to apply it creatively. Also, since learning is a process of activity, special models of communication between teacher and learner must be created in this process. This includes the 3 A technique: - Understand; Explain; Understand.

In other words, in order to understand in every process of activity, the main condition is that we first understand what we want to explain. Because of this

- Education; Education is the result; Development.

That is - training - education - upbringing = development.

According to Confucius, "reading, reading, and repeating without hesitation" was considered the most effective teaching. At present, it is considered effective that not only the study of scientific knowledge, but also the creative application of what is taught is important. It is considered promising to take modern learners out of the format of the folder where knowledge is stored and turn them into active participants in the learning process. In particular, "From live observation to abstract thinking, then application in practice" is of particular importance in the teaching of biology.

Education and training is a process in which several components must be involved: knowledge, skills, habits. The connection between them, in turn, forms the desired education. There is a special point that first of all, a teacher must know his profession well, love the audience and be open to innovations.

Worldview. In the process of teaching biology, pedagogical and dialectical principles must be taken into account in order to form a comprehensive worldview. Basically, the teaching of biology should be based on three aspects of the worldview: the materiality and unity of the worldview, the general nature of the laws of dialectics. In general, the worldview serves the purpose of training and education, and thus indirectly serves the formation of personality. In the school biology course, living organisms must be considered as constantly moving, evolving matter: from the beginning to the highest, from the simplest to the most complex, the principle of development must be taken into account.

What is the essence of a modern lesson and how should it be organized? The science of biology, which deals with living organisms, is very different from other sciences. In this regard, every teacher who teaches biology has the opportunity to make the teaching process more attractive and interesting. At present, various pedagogical and technical innovations help us to do this. For example, different methods of interactive learning; goals and principles of constructive learning; ICT; ETR (e-learning resources); e-learning tools; e-books, etc.

What is accountability in education? - Demonstration of the most exemplary works of students, assessment of the impact of artificial intelligence on education will have a greater impact on personal development. The necessity to apply technology dictates increasing attention to this area. The development of society between countries, states and enterprises must be evaluated. To understand how the world has changed; To clarify learning together, to create conditions, to be ready to change. Improving the young generation, preparing them for the new world, directing them to a different format (6).

What are the factors that make technology necessary in the teaching of biology? Computer technology plays an invaluable role in showing some objects and events that cannot be observed for various reasons. For example:

- if they are not large (nucleus structure)
- if it is fast-transmitting (the process of transmitting nerve impulses from neuron to neuron)
- if observation is not possible (embryo development)
- if it is difficult to explain, or rather to understand (protein synthesis)
- if it is not possible to demonstrate (deep water animals, alpine meadows), etc.

Recent events have shown that the world does not need to raise "knowledgeable monsters" in the name of science. "People should not be discriminated against, justice and perseverance are needed, equality should be ensured, but equality is not always fair, that is, the value of the just should be given. It seems that it is always difficult to create equality, because here justice must be taken into account. It would be wrong to speak of justice only in relation to learners or without evaluation. In order to create a fair environment in the field of education, both the heads of educational institutions and the interaction of educators are taken into account. If leaders can evaluate their staff at the required level, if teachers try to train learners at a high level by attracting their full potential, then it is possible to speak of justice. We know that learning is an important factor in teaching. Because if the teacher himself stops learning, he becomes an ordinary board, does not attract the attention of the audience. Being able to look at oneself and one's activities from the outside leads educators, like all areas of life, to rise.

For example, there is a saying: Fish: - How can we go to the ocean?

Answer: - We are in the ocean ....

That is, when we look at the place we are, the life we live, our activities from the outside, we can notice what is happening.

It should be borne in mind that the changes in the field of education in recent years, reforms, the application of learning technologies in teaching, modern training, different methods, techniques and tools will be effective if applied on the spot and at the level. It should be noted that any methods and opportunities used should not be taken as a standard, the age and level of knowledge of the audience should be taken into account, adapted to local conditions and environment. In recent years, it has become clear that basic education can no longer meet demand. For this reason, the approach of the education sector to modern challenges is considered an important factor. One of the urgent problems of today is the new goal of education, the goal of which must be to meet modern requirements, new world standards. In fact, the idea that "life begins after school for learners" is wrong. They must live their lives in school in a comprehensive way, learn and practice. In this case, the formation of competent, creative, knowledgeable, leadership, critical thinking, logical thinking, the managers of tomorrow will take place.

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