
THE ROLE OF INNOVATIVE TECHNOLOGIES IN THE PROCESS OF IMPROVING STUDENTS' PROFESSIONAL-METHODICAL COMPETENCE

Matonat Pardayeva

Independent Researcher Of Tashkent State Pedagogical University, Tashkent, Uzbekistan

ABSTRACT: The professional level and qualification of personnel working in the educational system of our republic, and continuous improvement of professional pedagogical competencies in accordance with the requirements of the time is considered one of the urgent issues of today. Article 46 of the newly revised Law of the Republic of Uzbekistan "On Education" describes the obligations of pedagogues: quality organization of educational activities; use of information and communication technologies, advanced and innovative forms and methods of teaching and upbringing; it is emphasized that they should regularly improve their qualifications and undergo periodic certification in terms of their suitability for the position they hold.

KEYWORDS: Students, competence, professional-methodical skills, technology, innovation.

INTRODUCTION

In fact, in the introduction of the updated education system, teachers of each general education school have the ability to improve their professional competence in their subject, in addition, to educate a mature generation, and to use them in practice on the basis of consistency in their pedagogical activities. is considered an urgent demand today.

THE MAIN RESULTS AND FINDINGS

The use of innovative technologies in the educational process and the improvement of the professional and methodological competence of future biology teachers were carried out by such scientists as N. Muslimov, J. Tolipova, Sh. Sharipov, Sh. Mardonov, R. Joraev, among the methodologists of our country. covered in his works. Within the framework of the problems of improving the methodology of teaching biology, creating a concept of teaching biology, using innovative technologies in the continuous education system, improving the scientific and theoretical foundations of teaching biological sciences, A. Gofurov, O. Mavlonov, J. Tolipova, I Special studies were carried out by Azimov, U. Rakhmatov, G. Ergasheva, N. Toshmanov, M. Umaraliyeva.

Scientists from the CIS and foreign countries such as O.A. Kozireva, E.F. Zeer, A.A. Kiveryalg, A.K. Markova, V.A. Yakunin, N.V. Kuzmina, V.A. Slastenin conducted scientific research work. Also, the issues of development of didactic tools for increasing the effectiveness of teaching biology and their effective use were studied by scientists of developed foreign countries M. Berkman, B. Bishop, J. Miller, M. Clores, E. Kose.

In the course of education, under the direct guidance of the professor, the student learns the nature and characteristics of the laws, phenomena and events that occur in living organisms with the help of educational content, methods, tools and forms, knowledge, vision acquires skills, qualifications and competencies. It can be seen that the learning process for students is a learning process, and its activity is a learning activity.

In the course of education, the teacher organizes, manages, controls, evaluates the cognitive activities of students and creates a foundation for comprehensive development of the individual by implementing educational, educational and developmental goals.

For the teacher, the educational process is inextricably linked with the activity of students, and it is considered a work process, professionally competent activity that analyzes and summarizes this process and makes changes in appropriate cases. It is possible to achieve the intended goals of teaching only when the students' cognitive activity and the teacher's pedagogical activity are harmoniously organized in the lesson.

It is appropriate to organize students' cognitive activities in individual and small groups in order to create subject-subject relations in the process of education.

The technologies used in the process of innovative education are called innovative educational technologies or educational innovations. Educational innovations are forms, methods and technologies that are used to solve existing problems in the field of education or in the educational process based on a new approach and can guarantee a more effective result than before. Educational innovations are also called "innovative education".

There are three levels of innovative technology:

1. General methodological level. At the general pedagogical level, the general laws, conceptual foundations of innovative technology, specific features of the organization and management of the cognitive activity of the teacher and student are developed.
2. At the special methodical level. At this level, a set of teaching methods, tools and forms is understood to be used to inculcate the content of education in the minds of students in order to realize the goals and tasks of the teaching process of a specific subject, course.
3. Local level. At this level, a technology aimed at solving the specific didactic and educational purpose of this part is understood in a certain part of the educational process. The above-mentioned three levels of innovative technologies complement each other.

Biology teachers of general education schools can effectively use the above three levels in their pedagogical activities. But in the process of teaching biology, it is considered appropriate for the teacher to use technologies at the local level.

In the process of teaching biology, to activate the cognitive activity of students, to determine the knowledge, skills and competences acquired by the students in relation to the previous topic, to systematize them, to control the acquired knowledge, skills and competences in relation to the new topic and assessment, as well as the use of technologies at the local level in the process of learning a new subject is appropriate. First of all, the teacher needs to know whether the technology or its method is suitable for the subject being studied.

In the process of improving students' professional-methodical competence, the teacher uses local innovative technologies "Case-study", "Insert", "Cluster", "Venn diagram", "Brainstorming",

"Working in small groups", "Chain of terms", " Vocabulary sheets", quick games and various forms of play exercises are recommended.

The use of "Case" in the teaching of problematic issues in the content of the biology course is highly effective. "Case" is derived from the English word "case stadiyes" which means process or situation. Initially, this technology was used in the training of businessmen and entrepreneurs, based on the content of the science taught at the moment, problem situations were created in relation to the external and internal, objective and subjective factors of the processes in living organisms and to solve them Educational discussions are organized.

Insert is an innovative technology at the local level, which is used by students to create a foundation for understanding the main ideas and factual materials in the educational material. In order to develop the skills of working with the help of inserts, educational materials and a special table are distributed to them. Students are recommended to study the tasks given in each paragraph and mark them in a special table using certain symbols.

The use of the cluster method is important in the process of improving the professional and methodical competence of students and improving the quality of education, in order to systematize and ensure the stability of the acquired knowledge of students. Cluster cluster means family tree in English. This local technology is the basis for the development of analytical and critical thinking skills, making it possible to understand the connection between the ideas, theories, laws and concepts that are mastered and mastered by students. prepares.

Venn diagram requires analysis, synthesis and comparison of the facts and concepts of the studied topic. Venn diagram is important in the process of improving the quality of biological education. This diagram can be used to analyze, synthesize, and compare most topics in biology. The Venn diagram plays an important role in monitoring and evaluating students' knowledge, skills and abilities, systematizing, strengthening, and generalizing specific concepts to universal concepts.

CONCLUSION

In short, as a result of the effective use of innovative technologies at the local level in the teaching of biology, it is possible to improve the professional and methodological competence of future biology teachers, to activate their cognitive activities, to increase their interest in science, and to provide a basis for a wide and detailed study of the basics of science. In this way, the ground is created for cooperation between students.

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