DEVELOPMENT OF PEDAGOGICAL COMPETENCE IN STUDENTS THROUGH PROBLEM-BASED EDUCATIONAL TECHNOLOGIES

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ABSTRACT

This article addresses the issue of developing students' pedagogical competence through the use of problem-based learning technologies. Theoretical foundations of problem-based learning, its role in the educational process, and mechanisms for effective practical implementation are analyzed. Based on the research results, it is substantiated that problem-based learning technology is an important factor in shaping students' analytical thinking, independent decision-making, and creative approach.

Introduction.

Today's global process of education, as well as the ongoing processes, requires a modern teacher to have physical strength, thinking skills and creative abilities. As noted in the "Concept of Higher Education Development until 2030" in the Republic of Uzbekistan, the development of independent activity, personal responsibility and modern competencies of students as one of the physical exercises. In this regard, the process of developing pedagogical competence in students is an important profession from the point of view of the use of problem-based learning technologies.

Problem-based learning is an effective technology for improving students' skills in activating their own thinking, obtaining independent knowledge and providing practical assistance. In the process of independently mastering new knowledge

through problem situations, students are able to pose scientific questions, develop hypotheses and substantiate them. Problem-based learning enhances the interaction between the teacher and the student, in which the teacher participates in the role of a teacher and advisor, and the student appears as an independent seeker of basic knowledge.

In the process of applying the computational process, students acquire the form of the program components of pedagogical competence - analytical thinking, independent decision-making, creative, productive work, data correction and analysis. Problem-based learning teaches students to abandon the passive stage of knowledge acquisition and to actively search for, independently process information and independently develop new knowledge. In the process of solving problems, students learn to apply their theoretical knowledge in practical applications, which forms real pedagogical competencies that are necessary for professional activities for documents.

As a pedagogical concept, in the context of analyzing the pedagogical and psychological aspects of the development of teachers' learning and cognitive competence, it will be useful to first analyze our approach by studying the scientific works of domestic and foreign scientists.

One of the effective teaching technologies in the current education system is problem-based learning. Its task is to encourage active learning and form a scientific and research style in thinking. Problem-based learning corresponds to the goals of educating a creatively active personality. There are various definitions and descriptions of problem-based learning in the pedagogical literature. The essence of problem-based learning is the independent

acquisition of new knowledge by creating a problem situation.

Turning to the content and essence of the pedagogical and psychological aspects of the concept of developing the learning and cognitive competence of teachers of higher educational institutions: it is necessary to dwell on the etymological analysis of the concepts of "competence" and "competence". The concepts of "competence" and "competence" have been interpreted differently by scientists. First of all, when it comes to the competency approach, the word "Competence" comes from the word "to compete" and means "knowledge in this or that field".

Methodology. A problematic situation arises in a specific educational environment, which is purposefully organized using specific pedagogical tools. It is also necessary to develop special methods for creating such situations, based on the characteristics of the topics studied. Thus, a problematic situation in education is not just a state of mental strain associated with an "unexpected obstacle in the path of thought". It is a state of mental tension specifically required by the goals of knowledge. The basis of such a situation is previously mastered knowledge and mental and practical methods of action to solve a newly emerging task. If new knowledge is not connected with previous knowledge, mental strain will not be problematic. Such strain does not guarantee intellectual search. A problematic situation differs from any thinking difficulties in that the student realizes the internal, hidden connections of the object (concept, fact) that requires difficulty with the task, issue that is known to him before and at the same time.

Thus, the task that students know and the method of its independent solution cannot be an educational problem, and secondly,

they cannot be an educational problem even if they do not know the methods of solving a task and the means of searching for it.

The important signs of an educational problem are: the setting of an unknown that leads to the formation of new knowledge; the presence of a certain knowledge reserve in students necessary for conducting research to find the unknown.

An important stage of students' mental activity in the process of solving an educational problem is to come up with a method for its solution or to put forward a hypothesis and substantiate the hypothesis. The educational problem is developed sequentially with problematic questions, and each question serves as a stage in its solution.

A prerequisite for problem-based learning is to create in students a positive attitude towards the process of searching for truth and its results.

In-depth study of problem-based learning began in the 1960s, based on the idea that "Thinking begins with a problem situation."

The sequence of cognitive activity in a problem situation is as follows:

• problematic situation;
• search for ways to solve the problem;
• solution to the problem;

Life in today's society, which is called information technology or post-industrial, requires a person to act actively, make independent decisions, and adapt to changing life conditions. In turn, this way of life requires a person to have certain qualities. In particular:

• independent acquisition of the necessary knowledge, skillful application of the acquired knowledge in solving various problems;

• competent work with information (knowledge of how to collect the necessary facts to study a given issue, analyze them, propose hypotheses aimed at solving problems, identify patterns, identify and solve new problems);

• knowing exactly where and how the acquired knowledge can be applied and understanding the area of application of this knowledge;

• independent critical thinking, the ability to see emerging difficulties in the real world and search for optimal ways to eliminate them;

• have the ability to think creatively, generate new ideas;

• be sociable in different social groups, know how to work together or find a way out of non-standard situations;

• work independently on one's spirituality, intellect, and cultural potential.

Not only the content of education, but also the teaching technologies used play an important role in the formation of a person with the above qualities. One of the possibilities for transforming the educational process into a learning and cognitive activity is the implementation of problem-based learning technology. Because in the process of problem-based learning, both teachers and students constantly test their intellectual, physical, and spiritual capabilities to solve educational and practical problems. The skills and qualifications formed in this process lead to the formation of the necessary qualities for living in the conditions of the information society.

The basis of problem-based learning is the ideas of the American psychologist, philosopher, and educator J. Dewey (1859-1952). In 1894, he organized an experimental school in Chicago, where the basis of education was not the curriculum, but games

and labor activities. Reading, arithmetic, and writing classes were conducted in accordance with the needs of children that arose spontaneously depending on their physiological maturity. J. Dewey identified four needs for learning: social, constructional, artistic, and research. Children were provided with the following as sources of knowledge: words, works of art, and technical devices. Children were involved in play and practical activities - labor. The new methods, methods, and principles of teaching used in this school were not theoretically grounded and were not expressed as concepts.

Currently, research in this area is being continued in different countries of the world, and complex developments of problem-based teaching technologies are being created in both general education and higher education. Problem-based teaching is the active interaction of the student with the educational content presented in a problematic way. In this process, the student approaches the objective contradictions of scientific knowledge and their solutions, learns to think and creatively master knowledge.

In science, two concepts related to problem-based learning are used: the concepts of "problem" and "problem situation". Although in some cases they are understood as synonyms, the objects designated by these terms differ in their scope. The problem is divided into a sequence of problem problems. Thus, a problem problem can be seen as a simple, specific case of a problem.

When applying problem-based learning to the educational process, the teacher must distinguish the commonality and difference between scientific and educational problems. Their commonality is the presence of objective contradictions in both, the difference between scientific and educational problems is that in a scientific problem the problem has not yet been solved, while in an educational problem the problem has been solved, the way and result of its solution are known. Only these ways and results should be sought by students. The ultimate goal of problem-based learning is to teach students to see and solve problems, and this is achieved only in the process of thinking.

Problem-based learning requires the teacher to act precisely, to take into account every minute of the lesson, to use all his capabilities and skills to achieve the desired effect at this time. An important condition for solving this problem is the teacher's preparation for the upcoming lesson. In the preparation process, it is necessary to take into account all the manifestations of problem-based learning and develop its method. Teachers face a number of difficulties in preparing for problem-based learning. In overcoming these difficulties, the teacher's innovative creative laboratory plays a great role.

One of such difficulties is the problem-based organization of the lesson and the choice of the method of studying the problem. Because the chosen method should not only ensure the mastery of the educational material, but also ensure the independence of students in their activities.

The second difficulty arises in determining the form of problem-based learning, that is, will the teacher involve all students in the class in solving the problem or will he assign the task to certain groups of students? This difficulty arises from the teacher's lack of ideas about the problem situation and the statement of the problem.

The third difficulty is to arouse students' interest in the lesson and continuously develop it. Because the teacher's experience and skills may not be enough to consistently focus students' attention on one point.

Based on the collected data on problem-based learning, it should be noted that this type of education has three scientific and methodological forms. Creating a problem situation, posing a problem, and finding a solution to the problem.

A problem situation can be formed in all educational activities. How often it is formed in the lesson depends on the teacher. The importance of a problem situation is that it focuses students' attention on one place (the problem) and teaches students to search and think.

In the process of solving a problem, the teacher does not tell students the most necessary idea, but must provide arguments and facts that form this idea.

In conclusion, problem-based learning technologies are an effective tool for developing students' pedagogical competence. This technology activates students' cognitive activity, encourages them to think independently, take a creative approach, and acquire skills for solving real pedagogical tasks. The widespread use of problem-based learning technologies in the modern educational process not only increases the quality and efficiency of teaching, but also satisfies the need of society to train competitive and enterprising specialists. Therefore, it remains a pressing issue to pay special attention to problem-based learning approaches when designing and implementing the pedagogical process in higher education institutions.

References

1. Xodjayev B.X. Umumiy pedagogika nazariyasi va amaliyoti. Darslik. - T.: «Sano standart» nashriyoti, 2017 yil. -416 bet.

2. Tursunov.Sh.R   Talabalarda vatanparvarlik ruhini shakllantirishda innovatsion yondashuvlar: P.f.f.d.(PhD) darajasini olish uchun yozilgan diss. Samarqand. SamDU 2023-y. 72-bet.

3. N.Jalilov. "Bo'lajak chaqiriqqacha harbiy ta'lim o'qituvchilarining kreativ sifatlarini rivojlantirish" P.f.f.d.(PhD) darajasini olish uchun yozilgan diss. Toshkent: TDPU 2024 y 3-7 b.

4. O'zbekiston Respublikasi Prezidentining 2019-yil 8-oktabrdagi "O'zbekiston Respublikasi Oliy ta'lim tizimini 2030-yilgacha rivojlantirish konsepsiyasini tasdiqlash to'g'risida"gi PF-5847-son farmoni. T.; 2019-y. Qonun hujjatlari ma'lumotlari milliy bazasi, 09.10.2019 y. 06/19/5847/3887.

5. O'zbekiston Respublikasi Prezidenti Sh.M.Mirziyoyevning 2020-yil 29-yanvardagi Oliy Majlisga Murojaatnomasi

6. Incheon declaration/Education 2030: Towards inclusive and equitable quality education and lifelong learning for all (World Education Forum, 19-22 May, 2015, Incheon, Republic of Korea). 6 p. 26 p.