

APPLICATION OF PROBLEM EDUCATIONAL TECHNOLOGIES IN HIGHER EDUCATION SYSTEM

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ABSTRACT

This article discusses the essence of problem-based learning technologies, which are one of the teaching technologies in the higher education system. The importance of problem-based learning in effective higher education has been highlighted. The role of this educational technology in stimulating active learning and shaping research methods in thinking has been discussed. The article also discusses the pedagogical and psychological capabilities of the teacher in the implementation of this process, problem-based learning technologies that serve to develop creative thinking.

KEYWORDS: *Problem Learning, Problem, Problem Statement, Problem Solving, Stage, Thinking, Thought Process, Problem Situation.*

1. INTRODUCTION

Problem-based learning is the creative pursuit of students, small conduct research, make certain assumptions, is an education aimed at developing skills such as reasoning and drawing certain conclusions.

The first ideas of this type of education were based on the American psychologist and educator John Dewey. In 1894, he founded an experimental school in Chicago based on play and hard work, not on a curriculum. In the 60s of the last century, problem-based education was further developed on the basis of the views of such researchers as L. Rubinstein, M.I. Mahmutov, V. Okon, I.Ya. Lerner. S.L. Rubinstein's idea that "thinking begins with a problem situation" was accepted as the psychological basis of problem-based learning.

Problem-based learning is based on a problem or problem situation, and problem-based learning technology serves to solve them. In essence, the problem is solved by studying the causes of it, looking for important, effective ways, methods and means to solve it, gathering evidence to prove their effectiveness, interpreting the evidence in a new, new way.

In the field of pedagogy, the concept of "problem" is often used to address organizational, pedagogical, psychological, educational and pedagogical issues.

The main purpose of problem-based learning is to teach students to fully understand the problem and to be able to solve it. For problem-based learning to be adequate, it must be an integral part of the whole learning process. The main goal of problem-based learning is to teach students to fully understand the problem and to be able to solve it. In order for problem-based learning to be adequate, it must be an integral part of the whole learning process.

2. LITERATURE ANALYSIS AND METHODOLOGY

In applying problem-based learning to the teaching process, the teacher must distinguish between

commonalities and differences between academic and learning problems. What they have in common is that there are objective contradictions in both, the difference between scientific and educational problems is that the problem in the scientific problem has not yet been solved, and the problem in the educational problem has been solved, the way to solve it and the result lum. Only these ways and results can be explored by students. The ultimate goal of problem-based learning is to teach students to see and solve problems, and this can only be done through thinking activities.

In essence, problem-based learning is based on certain technologies. They are:

- study and analyze the problem from different perspectives;
- compare and summarize the available evidence;
- identify additional evidence and compare them;
- draw conclusions about the problem;
- Students ask problems independently
- develops students' independent thinking skills;
- students learn to find the cause, effect and solution of the problem;
- a good opportunity to assess the knowledge and skills of students;
- Students learn to analyze ideas and results
- Students are highly motivated;
- The problem is the knowledge of the learners should correspond to the level;
- It takes a long time.

Problem-based learning technologies are based on activating and accelerating student activity. The main idea of these technologies is to encourage the person to think, to understand the essence of the problem, to solve the problem situation, to feel (see) the problem, to conduct research to find a solution and to solve the problem. counting.

Stages of problem-based learning technology:

- Problem situation
- Learning problem
- Research to solve a learning problem
- Problem solving

3. RESULTS

Problem-based learning is a teacher's activity aimed at effectively solving the problem of what part of the knowledge is given to the student and in what way. Problem-based learning is the simultaneous interaction of teachers and students in the classroom, which develops an important feature of the student's personality - the ability to think creatively. According to N.G. Dayri, the main goal of problem-based learning is to bring student performance to the same level as the teacher's role in mastering the complex part of the content being studied in the classroom. Problem-based learning is about influencing students to think freely, express themselves freely, and develop their thinking. The student should be able to listen attentively, think independently and individually, think collectively, analyze, discuss in public, and articulate ideas.

If the teacher effectively introduces the new topic and makes effective use of the exhibitions, and finally works with individual students, the learning process can be considered effective or active.

But this method of teaching is traditional.

Problem-based learning requires the teacher to be precise, to take into account every minute of the lesson, and to use all his or her abilities and skills to produce the desired effect during this time. An important condition for solving this problem is the readiness of the teacher for the next lesson. The preparation process should take into account all aspects of problem-based learning and develop a methodology for it. Teachers face a number of challenges in preparing for problem-based learning. The teacher's innovative creative laboratory is important in overcoming these challenges.

One such challenge is choosing a problem-based approach to the lesson. This is because the chosen method should not only ensure the mastery of the study material, but also provide independence in the activities of students.

The second difficulty arises in identifying the nature of problem-based learning, i.e., does the teacher involve all students in the group in solving the problem, or does he or she assign the task to individual groups of students? This difficulty is due to the teacher's lack of understanding of the problem situation and the description of the problem.

The third challenge is to keep students interested in the lesson and to develop it continuously. This is because the teacher's experience and skills may not be enough to keep students focused on one point on a regular basis.

Based on the data collected on problem-based education, it should be noted that this type of education has 3 scientific and methodological aspects. Creating a problem situation, Problem solving, Problem solving.

Problem situations can be created in all classes. It is up to the teacher to decide how much to beat him during the lesson. The importance of a problem situation is that it focuses students' attention on a problem and teaches them to think. When creating a problem situation, the teacher should tell the students what to focus on.

4. DISCUSSION

EDUCATION OF THINKING

ATTENTION:

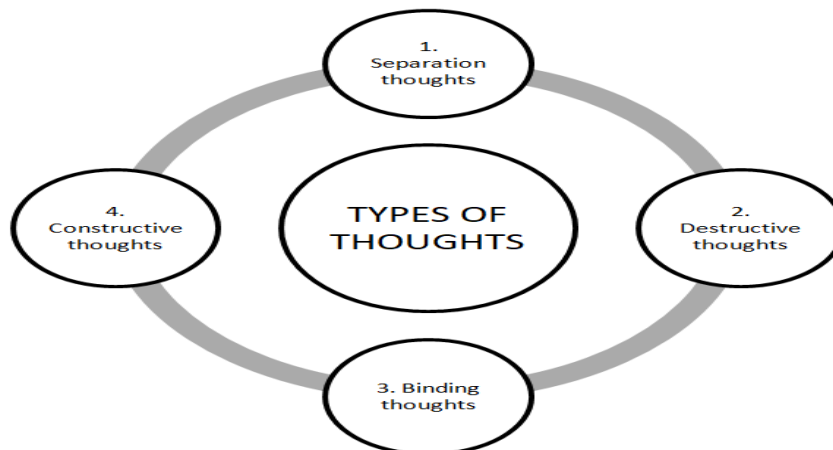
- To develop logical thinking
- To develop critical thinking
- To develop creative thinking

NOT ACCEPTED:

- Manage thoughts
- To cultivate the ethics of thinking
- Thought education

FEATURES OF THOUGHT

- Thought is powerful
- Thoughts retain their power in words
- Thoughts affect a person's biological field and psyche.



PROBLEM EDUCATIONAL LEVELS

- 1st degree. The teacher creates a problem and shows how to solve it. Level of learning.
- Level 2. The teacher creates the problem and works with the students. Level of cooperation.
- Level 3. The problem is created by the teacher, and the student solves the problem independently. Independent degree.
- Level 4. The teacher announces the topic, the student creates the problem, solves it independently and concludes. Creative degree.

Of course, there is one unknown in problem education:

- Method of operation unknown
- The object of activity is unknown
- Terms unknown
- Goals are abstract
- The sequence of the activity process is unknown

The problem-based approach is a way of analyzing the causes and consequences of a problem situation, building their skills to find a solution, and activating their cognitive activity by ensuring that students are confronted with the problem situation.

- Emergency - A fire broke out in a city warehouse and most of the grain died. What measures should be taken to get out of such an emergency situation and to replace the grain that has died in the past?
- Dispute situation - The company sent abroad refined semi-processed cotton. Under the contract, foreign partners are responsible for ensuring that the quality of the product is not compromised until it is delivered abroad. However, despite all the measures, the quality of the product was found to be low. The partners filed a lawsuit alleging that the company had sent low-quality products. How can this conflict be resolved?
- Choice situation - Choice situation □ Problem: Which measure to prevent the devaluation of money is effective in the context of Uzbekistan? □ Money issue □ Production development □ Artificial price controls.
- Hypothesis - Suppose that the Siberian rivers turn and the Aral Sea flows. How will the ecological situation of the Aral Sea change?

- Denial situation - Do you agree that a state in a state of economic crisis cannot get out of the current economic crisis if it is not rich in natural resources?
- Unbalanced situation - In a market economy, state intervention in the economy should be minimal, and in Uzbekistan, the state is the main reformer and manager. Analyze this imbalance.

5. CONCLUSION

In conclusion, the use of problem-based learning technology in educational practice in modern conditions, while ensuring the effectiveness of the teaching process, develops students' ability to think independently, critically and creatively. The social requirements for improving the quality and effectiveness of education require teachers to use project and problem-based learning technologies purposefully and effectively in the teaching process. So, problem-based learning helps students to develop the ability to think, to make decisions, to base their opinions, to effectively develop their skills. After all, the acquisition of knowledge on the basis of thinking and analysis ensures that it is strong and thorough.

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