

*Ta'limning zamonaviy transformatsiyasi*  
**PROBLEM-BASED LEARNING TECHNOLOGIES IN  
TECHNOLOGICAL SCIENCE**

---

*Kuliyeva Shahnoza Halimovna,*  
*Associate Professor at Bukhara State University*  
*Ro'zinazarova Nafisa Bahodirovna,*  
*Karakol district 10 secondary school teacher*

**Abstract.** *This article describes the technology of using interactive methods in passing topics that are difficult for students to learn from technology.*

**Keywords:** *creative, technology, lesson, interactive, technology, problem, ability.*

Humanity has stepped into the 21st century - the age of advanced technology and information technology. These technologies can be managed effectively only by a mature generation with intellectual and comprehensive knowledge. Also, it is the responsibility of this generation to protect, ecologically balance and preserve the unique planet Earth, which is like a dot in the Universe and has been given life, like the apple of an eye, ecological balance, use of its material and natural resources rationally and sparingly, to make man spiritually the honorable task of realizing and realizing the responsibility of contributing to the solution of globally important problems such as raising Educating intellectual young people who are capable of performing these tasks is one of the urgent issues of today.

There are several distinct aspects of describing the intellectual and technical development of educational technology:

- Educational technology as a theory and practice of educational approaches to learning.
- Educational technology as technological tools and media, for example, public online courses that facilitate the transfer, development and sharing of

knowledge. This is what people usually mean when they use the term "edtech".

- Educational technology for learning management systems (LMS), such as student and curriculum management tools and learning management information systems (EMIS).
- Learning technology such as learning management systems for logistics and budget management and back-office management such as Learning Record Store (LRS) for learning data storage and analysis.
- Educational technology itself as a subject of education; such courses may be called "computer studies" or "information and communication technologies (ICT)".

Problem-based learning means studying the educational material in a way that creates cognitive tasks and problems similar to scientific research in the minds of students. Problematic situations arise in the student's (student's) thinking activity, and they encourage the student (student) to objectively search and learn to draw logically correct scientific conclusions.

Problem-based education is a subjective form of expressing the need to develop scientific knowledge. It is a situation that objectively arises between knowledge and ignorance in the process of the development of a new society. A problem situation is a certain mental state of the student, which arises due to the realization of a conflict in the process of completing a certain task.

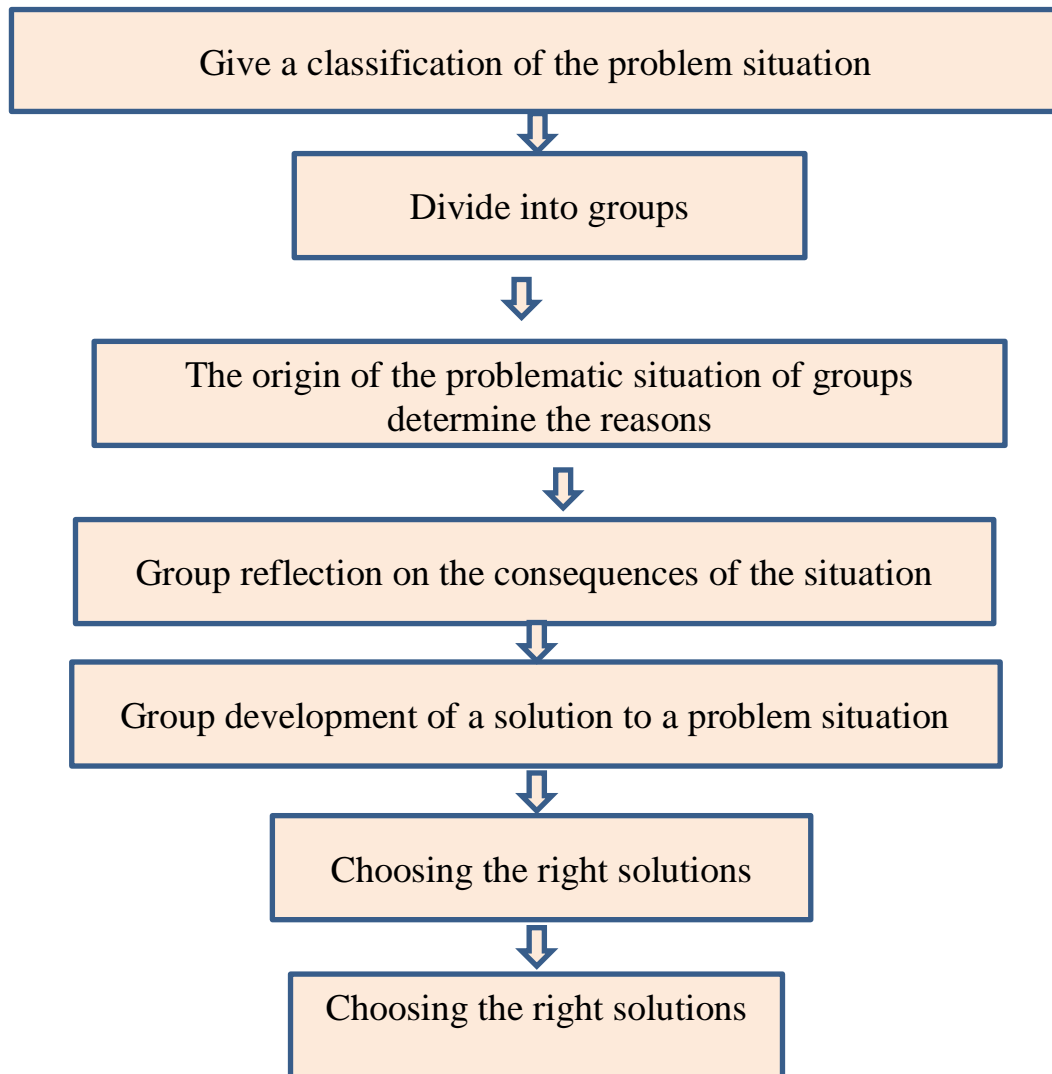
The "problematic situation" method is a method aimed at forming the skills of students to analyze the causes and consequences of problematic situations and find their solutions. The complexity of the problem chosen for the "Problem Situation" method should correspond to the level of knowledge of the learners. They must be able to find a solution to the given problem, otherwise, failure to find a solution will lead to the loss of interest and self-confidence of learners.

The stages of the "Problem situation" method are as follows:

- The educator chooses a problem situation on the subject, determines the goals and tasks. The teacher explains the problem to the students.
- The teacher introduces students to the purpose, tasks and conditions of the

task.

- The teacher divides the learners into small groups.
- Small groups study a given problem situation. They determine the causes of the problem and each group makes a presentation. After each presentation, the same points are collected.



At this stage, about the consequences of the problem during the given time they present their opinions. After the presentation, the same thoughts will be collected. They discuss and analyze different options for solving the problem. They develop ways to solve the problem situation. Small groups make a presentation on the solution to the problem situation and offer their options. After all the presentations, the same solutions are collected. Together with the teacher, the group chooses the most optimal options for solving the problem situation.

**List of used literature:**

1. Abdalova S. Mustaqil ta'limni boshqarish va o'quvchilarning ijodiy qobiliyatini rivojlantirishda kreativ texnologiyalarning o'rni //Ta'lim menejmenti.-Toshkent, 2011.
2. Abdullayev G.A. Texnologiya. "O'qituvchi"-1989.
3. Niyazova, O. A., and A. O. Imamova. "IMPROVING THE ORGANIZATION OF THE PROVISION OF MEDICAL SERVICES AND THE DIGITAL ENVIRONMENT." *European International Journal of Multidisciplinary Research and Management Studies* 3.02 (2023): 41-46.
4. Jalolov, N. N., and A. O. Imamova. "THE ROLE OF NUTRITION IN THE MANAGEMENT OF CHRONIC HEPATITIS." *European International Journal of Multidisciplinary Research and Management Studies* 3.02 (2023): 28-34.
5. Imamova, A. O., G. O. Toshmatova, and R. Khobiljonova Sh. "Protecting works and hygienic assessment of nutrition of preschool children in Tashkent." (2023).