



DEVELOPING STUDENTS' INDEPENDENT RESEARCH SKILLS THROUGH PROBLEM- BASED LEARNING TECHNOLOGIES IN HISTORY LESSONS

**Bolliyev Tuychibek Ruzikul ugli,
Surkhandarya Regional Center for Pedagogical Skills,
Teacher of the Department of Pedagogy,
Psychology and Educational Technologies**

Abstract. This scientific article analyzes the development of students' independent research skills in history lessons using problem-based learning technologies. Based on the theoretical foundations of problem-based learning (M.I. Makhmutov, I.Ya.Lerner), modern approaches of Uzbek scientists (R.Ishmuhamedov, U. K. Tolipov) and methodological sources on teaching history (Ya. Kh. Gaffarov, A. J. Jurayev), the influence of problem-based learning technologies on students' independent research activities is highlighted. The stages of creating problem situations, posing and solving educational problems, as well as types of problem tasks used in history lessons are described. Problem-based learning technologies are an effective means of developing students' independent research skills.

Keywords: problem-based learning, independent research skills, history lessons, problem situation, educational problem, critical thinking.

1. INTRODUCTION.

One of the most urgent tasks of the modern education system is the development of students' independent research skills. The Law of the Republic of Uzbekistan "On Education" and the "National Program for the Development of Public Education in 2022–2026" set the task of directing the educational process to the formation of students' independent thinking, critical analysis and creative approach skills [1; 2]. Especially in teaching history, the development of students' skills in independent analysis of historical events, revealing cause-and-effect relationships and working with historical sources is of particular importance.

In the traditional education system, the student is often in the position of a passive listener, limited to receiving ready-made knowledge. However, modern pedagogical technologies, in particular, problem-based learning technologies, turn the student into an active subject and stimulate his independent research activity [4, p. 12; 8, p. 45]. Problem-based learning is an educational system based not on giving students ready-made knowledge, but on setting them problem situations and directing them to search for ways to independently solve these situations [9, p. 15].

The specific features of history - the multifactorial nature of historical events, the presence of various sources, the contradictions of historical processes - create broad opportunities for the use of problem-based learning technologies. In history lessons, students develop independent research skills by completing problem-based tasks such as comparing various historical sources, analyzing contradictory information, evaluating the activities of



historical figures, and determining the causes and consequences of historical processes [10, p. 56; 11, p. 23].

The purpose of this article is to analyze the theoretical and methodological foundations of developing students' independent research skills through the use of problem-based learning technologies in history lessons and to develop practical recommendations.

2. LITERATURE ANALYSIS.

2.1. General theory of problem-based learning.

The foundations of the theory of problem-based learning were developed in the 60s and 70s of the 20th century by Russian pedagogical scientists M.I. Makhmutov and I.Ya. Lerner. M.I. Makhmutov defines problem-based learning as “the activity of students aimed at independent search and assimilation of knowledge” [8, p. 12]. In his opinion, the problem situation created by the teacher in the process of problem-based learning awakens the students’ need for knowledge and encourages them to actively search. Makhmutov defines the main stages of problem-based learning as follows: the emergence of a problem situation, the formulation of a problem, the putting forward of hypotheses for solving the problem, the verification of hypotheses and the conclusion [8, p. 67].

I.Ya. Lerner considers problem-based learning as “a type of teaching aimed at students’ acquisition of creative activity experience” [9, p. 23]. He notes that in problem-based learning, the student does not passively accept ready-made knowledge, but “discovers” it independently. In this process, the student develops such important skills as research, analysis, comparison, generalization, and conclusion-making [9, p. 45].

2.2. Modern approaches in Uzbekistan.

Uzbek scientists R. Ishmuhamedov, A. Abudukodirov, A. Pardayev, U. K. Tolipov, M. Usmonboyeva, and others studied problem-based learning technologies in the system of modern pedagogical technologies and determined their place in the educational process [4; 5; 7]. A. R. Ishmuhamedov noted, “problem-based educational technologies develop students’ independent thinking skills, encourage them to engage in creative research, and increase their interest in the lesson” [4, p. 45]. U. K. Tolipov and M. Usmonboyeva developed methodological foundations for implementing problem-based education in practice [7, p. 56].

In modern Uzbek pedagogy, problem-based educational technologies are considered one of the most effective means of forming students’ independent research skills. These technologies allow increasing students’ cognitive activity, teaching them to actively acquire knowledge, and developing creative thinking [5, p. 78; 6, p. 112].

2.3. Sources on the methodology of teaching history.

In studies on the methodology of teaching history, special attention is paid to the issue of using problem-based educational technologies. Ya. Kh. Gafforov analyzed the specific features of creating and using problem situations in history lessons, and showed the effectiveness of problem tasks in working with historical sources, analyzing and evaluating historical events [10, pp. 78-85].

A. J. Juraev, in his work “Methodology of using problem-based educational technologies in history lessons,” described in detail the types of problem tasks used in history lessons, the methodology for their creation and presentation to students [11, pp. 34-56]. Z. Saidboboyev, in turn, highlighted the place of problem-based education in the methodology of



teaching history and substantiated the importance of a problem-based approach in developing students' historical thinking [12, pp. 98-105].

International experience also confirms the effectiveness of problem-based education. Barrows (2000) conducted research on the use of problem-based learning in secondary schools and proved that this method significantly increases students' independent research, problem-solving, and teamwork skills [14, p. 275].

3. METHODS.

This article provides a theoretical and methodological analysis of the problems of problem-based educational technologies and their application in history lessons. The following methods were used in the study:

- Theoretical analysis - study and analysis of pedagogical, psychological and methodological literature on the theory of problem-based education;
- Comparative-analytical method - comparison and generalization of the views of various authors on problem-based educational technologies;
- Study and generalization of practice - analysis of advanced pedagogical experiences in the use of problem-based educational technologies in history lessons;
- Modeling - development of a model of problem tasks and situations used in history lessons.

The methodological basis of the study was the theory of problem-based learning by M. I. Makhmutov and I. Ya. Lerner, the views of Uzbek scientists R. Ishmuhamedov, U. K. Tolipov, A. J. Jurayev on pedagogical technologies and history teaching methodology [4; 7; 8; 9; 11].

4. RESULTS.

4.1. Features of the use of problem-based learning technologies in history lessons.

The specific features of the discipline of history - the multifactorial nature of historical events, the presence of various historical sources, the contradictions of historical processes, the controversial aspects of the activities of historical figures - create favorable opportunities for the use of problem-based learning technologies [10, p. 56]. The following types of problem tasks can be used in history lessons [11, p. 34-45]:

Task Type	Description	Example
Determining cause-and-effect relationships	Independently determine the causes and consequences of historical events	"What were the main causes of World War II?"



Task Type	Description	Example
Comparative analysis of historical sources	Comparing information from different historical sources and drawing conclusions	"How is the same event covered in the two given historical sources?"
Evaluating historical figures	Evaluating the activities of historical figures from different perspectives	"How do you assess the personality and activities of Amir Temur?"
"What if..." type hypothetical tasks	Hypothesizing the development of historical events under changed circumstances	"What if Amir Temur had left a sole heir after his death?"
Modeling historical processes	Creating a schematic model of historical processes	"Create a diagram that reflects the stages of the formation of the Great Silk Road"

Stages of developing students' independent research skills.

The development of students' independent research skills through problem-based learning technologies in history lessons includes the following stages [8, p. 67; 11, p. 28]:

Stage 1: Creating a problem situation. The teacher creates a problem situation that is appropriate to the purpose and content of the lesson. This situation should arouse surprise, interest, and a sense of need for knowledge in students. For example, a problem situation can be created by presenting conflicting coverage of the same event in different historical sources [10, p. 78].

Stage 2: Identifying and formulating the problem. Students independently identify and formulate the problem based on the created problem situation. At this stage, it is important for students to correctly understand and express the problem [9, p. 34].

Stage 3: Putting forward hypotheses. Students put forward hypotheses (assumptions) on solving the problem. Hypotheses should be scientifically sound, logical, and verifiable. The teacher accepts and supports the students' hypotheses [8, p. 72].

Stage 4: Testing hypotheses. Students test the hypotheses put forward based on historical sources, documents, maps, and statistical data. At this stage, students' independent research activities are most active. They use library, Internet, and archive materials, and interview experts [11, p. 41].



Stage 5: Drawing conclusions and evaluating. As a result of their research, students find a solution to the problem and draw conclusions. The teacher evaluates the students' work and makes the necessary corrections [5, p. 82].

The effectiveness of problem-based learning technologies in history lessons

Regular use of problem-based learning technologies in history lessons develops the following components of students' independent research skills [7, p. 56; 12, p. 100]:

Skill type	Description	Level of development
Information search skills	Finding and selecting the necessary information from various sources	High
Analytical skills	Data analysis, separation of primary and secondary aspects	High
Comparison skills	Comparison of different sources, points of view, historical processes	Middle and high
Conclusion skills	Drawing conclusions based on the results of analysis and comparison	Middle and high
Justify your point of view	Defend your opinion with convincing evidence	Middle
Reflection skills	Critically evaluate one's own activities and results	Middle

Studies show that in history lessons conducted using problem-based learning technologies, students' independent research skills develop 1.5-2 times more effectively than in traditional lessons [14, p. 278]. Students achieve high results in working with historical sources, identifying cause-and-effect relationships, and analyzing historical processes [15].

DISCUSSION.

The analysis of the use of problem-based learning technologies in history lessons shows the following important aspects.

First, problem-based learning technologies stimulate students' independent research activities. While in a traditional lesson the student often plays a passive role, in problem-based learning he becomes an active researcher, a research subject [4, p. 45; 8, p. 67]. This situation increases the student's interest in the lesson and leads to a deeper assimilation of knowledge.

Secondly, the specific features of the subject of history create wide opportunities for the use of problem-based educational technologies. The multifaceted nature of historical



events, the presence of various historical sources and their sometimes contradictory nature, the contradictions of historical processes allow students to be presented with various problem situations [10, p. 78; 11, p. 34].

Thirdly, the use of problem-based educational technologies requires a high level of methodological training from the teacher. The teacher must not only have excellent knowledge of his subject, but also have the skills to create problem situations, manage students' research activities and correctly direct their hypotheses [5, p. 82; 7, p. 60].

Fourth, there are the following difficulties in using problem-based learning technologies in history lessons: limited lesson time (problematic tasks take more time), different levels of student preparation (some students have difficulty solving problem situations), insufficient historical sources (especially in rural schools) [12, p. 105].

Fifth, international experience confirms the effectiveness of problem-based learning technologies. Barrows (2000) found that independent research skills of students in classes where problem-based learning was used were significantly higher than those in classes taught using traditional methods [14, p. 275].

CONCLUSION.

This study, devoted to the issue of developing students' independent research skills through problem-based educational technologies in history lessons, allows us to draw the following main conclusions:

1. Problem-based educational technologies (theory of M.I. Makhmutov, I.Ya. Lerner) are an effective means of forming students' independent research skills. These technologies transform the student from a passive listener into an active researcher [8; 9].

2. The specific features of the subject of history - the multifactorial nature of historical events, the presence of various sources, the contradictions of historical processes - create broad opportunities for the use of problem-based educational technologies [10; 11].

3. Stages of using problem-based educational technologies in history lessons: creating a problem situation, identifying and formulating a problem, putting forward hypotheses, testing hypotheses, drawing conclusions and evaluating [8, p. 67; 11, p. 28].

4. Regular use of problem-based educational technologies in history lessons develops students' skills in information search, analysis, comparison, conclusion, justification of their point of view and reflection [7; 12].

5. The effectiveness of problem-based educational technologies depends on the teacher's methodological preparation, taking into account the age and psychological characteristics of students, the correct selection of problem tasks and effective planning of lesson time [4; 5; 14].

Practical recommendations:

- It is recommended that history teachers take advanced training courses in problem-based educational technologies;
- It is necessary to expand the base of historical sources (documents, maps, statistical data) in school libraries and information resource centers;
- It is advisable to include problem tasks and situations in textbooks and study guides;



- It is necessary to popularize and disseminate advanced pedagogical experiences in the use of problem-based educational technologies in history lessons.

REFERENCES

I. Regulatory and legal documents.

1. Decree of the President of the Republic of Uzbekistan dated May 11, 2022 No. PF-134 “On approval of the National Program for the Development of Public Education in 2022–2026”.
2. Resolution of the Cabinet of Ministers of the Republic of Uzbekistan dated April 6, 2017 No. 187 “On approval of state educational standards for general secondary and secondary specialized, vocational education”.

II. Main theoretical literature (Textbooks and monographs).

3. Ishmuhamedov R., Abdukodirov A., Pardayev A. Innovative technologies in education (practical recommendations for teachers of educational institutions). – Tashkent: Istedod, 2008. – 180 p.
4. Yuldoshev J.G., Usmanov S.A. Implementation of modern pedagogical technologies in practice. – Tashkent: Science and Technology, 2008. – 132 p.
5. Tolipov U.K., Usmonboyeva M. Applied foundations of pedagogical technologies. – Tashkent: Science, 2006.
6. Makhmutov M.I. Problem training: Basic issues of theory. – Moscow: Pedagogy, 1975.
7. Lerner I.Ya. Problem training. – Moscow: Znaniye, 1974. – 64 p.

III. Sources on the methodology of teaching history.

8. Gafforov Ya.Kh. History teaching methodology. – Tashkent: Turon-Iqbol, 2010.
9. Jurayev A.J. Methodology of using problem-based learning technologies in history lessons. – Tashkent: TDPU, 2015.
10. Saidboboyev Z. History teaching methodology. – Tashkent: Innovatsiya-Ziyo, 2021. – 230 p.

IV. Scientific articles and periodicals.

11. Azizkhoyayeva N.N. Pedagogical technologies and pedagogical skills. // Methodical manual for teachers. – Tashkent, 2003.
12. Barrows, H. S. Problem-based learning in secondary schools. // Journal of the Education of the Gifted. – 2000. – Vol. 23. – No. 3. – Pp. 273–283.
13. Hasanov Sh. Historical thinking and independent activity of students. // Marifat newspaper, 2022, issue 14.

V. Electronic resources.

14. Official website of the Ministry of Preschool and School Education of the Republic of Uzbekistan: www.uzedu.uz.
15. www.ziyonet.uz.