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Problem-Based Learning At The Lessons Of History As The Basis For The Education Of A Creative Personality

By

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Abstract

Problem-based learning is one of the branches of scientific research in the field of improving the efficiency of the educational process. At the moment, it serves as an assistant in solving a huge range of tasks.These include the development of cognitive involvement, creative thinking, independence in finding solutions. The purpose of this article is to study problem-based learning to improve the effectiveness of students' activities at lessons of history. The objectives of this research are: firstly, to study the history of origin, basic concepts and essence of the problem-based learning method; secondly, to consider the main ways of implementing problem-based learning in the educational process; thirdly, to identify the importance of problem-based learning in improving the effectiveness of educational and cognitive activities of students.The significance of the problem-based learning lies in the fact that it is applied to the student's understanding of such facts as laws, rules, logical connections, and so on. It is effective when it is necessary to encourage the student to active mental activity, to find cause-and-effect relationship, to solve problems that require searching. The problem-based situation affects the cognitive and motivational-emotional sphere of a student who has a difficult situation that encourages the search for new knowledge and ways to overcome it. All this requires the teacher to show a personal example in an instructionalway of communication with students and understanding the psychological essence of the creative process.

Keywords:learning technologies, problem-based learning, problem-based situation, problem, levels of difficulty.

Introduction

The implementation of the problem-based learning methodology into the educational processis again relevant.It has broad opportunities for the development of logical thinking, creativeness, and the formation of students'cognition interest. According to the researchers, the general functions of problem-based learning are the following: 1) the successful acquisition of knowledge and methods of mental practical activity; 2) the development of independence in the search for knowledge and the acquisition of creative abilities; 3) the formation of dialectical-materialistic thinking, which will serve as a basis for further education.Problem-based learning has its own functions that are not applicable to other types of learning. The first function is the development of creative acquisition of knowledge (the use of certain logical techniques and methods of creative activity); the second one is the development of skills for further implementation of knowledge (the use of acquired knowledge in a new situation) and the ability to solve educational problems; the third function is to form and gain experience in creative activity (mastering the methods of scientific research, solving practical problems and

aesthetic attitude toward reality). Considering problem-based learning, it is also important to mention such an aspect as intellectual motivation, when students independently, with a high level of interest, fill in knowledge gaps, acquire intellectual work skills, learn to overcome difficulties. Intellectual motivation makes it possible to transfer initiative and responsibility into the hands of a student who will process information in the convenient form [2]. By creative thinking we mean the application of knowledge, the development of ways of action, the search for a previously unknown solution. Problem-based learning makes an invaluable contribution to the development of personality, its exploratory activity, and search potential. It also eliminates the possibility of solving the problem according to the sample. In addition, problem-based learning helps to solidify knowledge, because what is obtained by one's own efforts will be remembered much better than what is already served in a ready-made form. A huge advantage of this type of education is an interesting form of material presentation – students are involved in the process, and are increasingly interested in what they don't know. Ithelpstogainknowledgemorecomprehensively.

Methods

The methodology and research methods of this work are determined by the following principles of historical cognition: historicism, scientific objectivity, comparison, complexity and consistency. The general scientific methodsallowed us to see the development of events in dynamics, among them analysis, synthesis, comparison, induction, deduction, the method of generalization and concretization of information.

Resultsanddiscussion

Such prominent Russian scientists as I.Ya. Lerner, A.V. Brushlinsky began to engage in the historiographical component of the work, the development of the basic principles and ideas of problem-based learning in the 1960s and 1970s.Such concepts of the problem-based learning theory as 'educational problem', 'problem-based situation', 'problem-based teaching', 'problem-based question' were considered in the works of educator M.I. Makhmutov. He proposed to introduce a classification of the problem-based situations creation and educational problems in school.In his writings, he showed that, unlike traditional pedagogy with its reproductive orientation, the predominant goal in problem-based learning should be the development of thinking and cognitive independence of students. Psychologist A.M. Matyushkin identified the types of problem-based situations (depending on the learned action's component which acts as an unknown), determined the rules and sequence of their creation by the teacher during the process of education.In recent years, a number of theses have been devoted to the study of various aspects and further development of the theory of problem-based learning, including I. A. Safiullina's thesis "The concept of problem education M.I. Makhmutov as a didactic system" [9]. The most important element of problem-based learning is a problem-based situation. It appears when a person has a lack of knowledge to comprehend any information or perform some actions.Here there is a situation in which controversial issues of knowledge and ignorance appear. A problem-based situation in the process of education is of significant value only when it awakens a person's desire to eliminate the logical inconsistencies that have appeared. It does not appear always and not in all problem-based situations. Several conditions are necessary for its occurrence. For example, the situation that is given to students should provoke interest, they should think that they are able to find a solution, because they have a certain knowledge base [5]. In foreign pedagogy, a lot of attention is paid to the topic of problem-based learning, including higher educational institutions [11].

Thus, in the article "The influence of knowledge recipients' proactivity on knowledge construction in cooperative learning experiences", published in the journal "Active Learning in Higher Education" by Spanish researchers, attention is drawn to three components of effective education – student creativity, self-efficacy and motivation for co-education [11].Esther Aflalo shares other interesting observations in the article "Students generating questions as a way of learning", showing that the generation of student questions into the educational environment can potentially become a very effective learning strategy [11]. Scientists of the Institute of International Relations of Kazan Federal University also pay attention to this point – in the publication of I.I. Golovanova, N.V. Telegina, O.I. Donetskaya, attention is focused on the fact that the understanding of the elements of problem-based learning should be embedded in the professional competence of the teacher [12].In the publication of scientists from the Institute of International Relations of Kazan Federal University I. Kondratieva and N. Plotnikovais stated that the significance and the features of problem-based learning are necessary basis for the principles of the educational process and communicative-educational competencies [13-15].

Summary

Problem-based learning, as a pedagogical phenomenon, has been known for a long time. For example, its echoes could be already noticed in the heuristic conversations of Socrates and Jean Jacques Rousseau's guidance paper. The beginning of the history of problem-based learning in the current form is considered to be the introduction of the so-called research method, a huge contribution to the study of which was made by John Dewey. This method is successfully used by many Russian educators. Its creator is considered to be Yu.K. Babansky. It was he who called the research method the "search method". In the courses of Soviet pedagogy, the issues of similarity of scientific and educational research, the need to solve so-called "small scientific problems" were discussed. It was advised to introduce the concept of "methodology of educational research" into wide use as an alternative to the "research method". This term has undergone some changes along its historical path,it caused discussions around itself and gave food for thought to many famous educators [1].The main difference between problem-based learning and traditional teaching is that the teacher does not give ready-made knowledge. He immerses the student in the atmosphere of searching for a way out of the situation, carries him away with logical tasks, pushes the student to find the means to solve them on his own, since at this moment the student embarks on the path of acquiring new knowledge.In the traditional type, the emphasis is on the direct motivation: the teacher presents the materialinaninterestingway, uses textbooks and additional visual sources, the student is interested in cognitive work and attentively listens to the teacher.Also, traditional teaching can haveforward-looking motivation: the lesson is not quite interesting, there is no illustrative material, but this subject or topic is of key importance for learning, so it is necessary to listen to the teacher and memorize the material [3].The main component of problem-based learning is problem-based situation.Problem-based situations are divided on the basis of the following criteria: by fields of science or academic subject (history, physics, pedagogy, and others); by the degree of problematicity (very acute, medium, weak); by the vector of orientation to search for missing knowledge (knowledge, ways of action, determination of the consistency of existing knowledge in relation to the situation); by the type and nature of the content of contradictions (between ideas formed during the process of education and scientific knowledge that are proven empirically). A problem-based situation can turn into an intellectual difficulty for a student. It occurs when he does not understand how to explain a particular fact or process, cannot reach the goal with the help of existing knowledge. This difficulty pushes a person to a new investigation, makes him search answers to the questions. The problem-based situation is a certain system of

cognitive activity. It indicates that the thinking process begins at the moment of defining a defined task and solving it [8].According to A.M. Matyushkin "A problem-based situation is a special kind of mental interaction between a subject and an object; it is characterized by a mental state that arises in the actor (student) when he performs a task that requires finding (discovering or acquiring) new knowledge or ways of action previously unknown to the actor" [7].The main element of the problem-based situation is what needs to be discovered in order to perform the task and the necessary action correctly.We have identified two necessary conditions for the occurrence of a problem-based situation: 1) it should provoke students' interest; 2) it should be appropriate, and its solution will be feasible for the child.Having considered the essence and features of problem-based learning, we come to the conclusion that it develops the mental abilities of schoolchildren in case of the correct organization of educational activities.For example, any inconsistencies encourage thinking, searching for a way out of the current situation. It also teaches students to be independent, it manifests itself in an individual vision of the problem, problem statement, the choice of a plan of further actions, etc. In addition, the methodology of problem-based learning contributes to the development of creative thinking of students. Having considered the essence and features of problem-based learning, we understand that it is important to properly organize educational activities in order to promote the acquisition of material, the development of mental abilities, independence and creative thinking. This is explained by the fact that contradictions force the student to think about why this is happening, encourages him to draw his own conclusions and get out of a difficult situation.Independence manifests itself in his own path, the search for truth, an experience that belongs only to him. Nowadays, there is a certain criteriaof differentiation depending on the degree of student's independent involvement in the learning process. These include "problem-based presentation", "partially-exploratory activity", "independent research activity" and make the use of problem-based learning successful [4].

The problem-based presentation obliges the teacher to study the topic in depth, to rearrange the presented material to intensify the attention and thinking of students, to develop the ability toperceive and recreate images of historical eventsfiguratively,to analyze facts, to highlight their essential nature, to formulate concepts and identify patterns.

Another criterion is partially exploratory activity. The teacher more explicitly poses questions to the students, asking: "What would you do?", "How would you get out of this situation?", "What do you think about it?". The teacher encourages students to think and correctlydemands a response.

This type of activity is similar to a heuristic conversation in which a whole problem is broken down into parts and solved consistently, immersing the student in an atmosphere of search by the efforts of the whole class under the guidance of the teacher.The student feels his exclusive role, a lot of things can depend on him. During the lesson, the teacher can use this method to bring the class to a new topic [6]. In the process of exploratory activity, the student works independently to solve the problem. He chooses the sequence of activities, plans his steps, and achieves his goals. This type of work is carried out in laboratories when conducting experiments, writing essays, reports and other types of research, as well as in various circles that develop any skills and knowledge of the student [10].

Problem-based learning is one of the means of implementing the didactic principle of activity and consciousness of learning. It is important that this type of learning teaches students to face contradictions, to understand them, to look for ways to solve them. It also serves as one of the means of organizing dialectical thinking. The main ways of implementing problem-based learning include the following methods:

1 The method of problem-based presentation, which encourages students to use knowledge and skills to answer complex theoretical questions.
2 Partially exploratory activity of students. The problem is divided into component parts and solved consistently, by the efforts of the whole class under the guidance of the teacher.
3 Independent research activity implies an independent solution of the task set by the student. He chooses the sequence of his actions himself and independently achieves the goal.

The main stages of the lesson, including elements of problem-based learning are the following: 1. creating a problem-based situation; 2. learning goal setting; 3. search for solution; 4. expression of solution; 5. implementation of solution. The main types of students' motivation are the following: the need, motives, goals, and interests. There is a certain circumstance. Problem-based learning takes a lot of time at the lesson, requires active mental activity of students and a high level of professional competence of the teacher in the theoretical and practical aspects, it is not possible to completely switch to problem-based learning. It is advisable to apply only some of its elements in the learning process. Thus, this type of learning should be applied in synthesis with other types of learning, increasing the degree of the problem in the theoretical material, tasks and stories of the teacher.

Conclusions

Problem-based learning has a process of directly resolution of a problem. After a person has taken a problem to a solution,verbalize an idea, it develops into a problem-based task. Moreover, the acquisition of new knowledge occurs in the process of solving the problem itself. In addition, the systematic application of the problem method will help in mastering learning skills, be relevant in everyday life and further professional activity.

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