ПЕДАГОГІКА

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WAYS OF APPLICATION OF INTERACTIVE LEARNING METHODS IN HIGHER SCHOOL

Azerbaijan, one of the improving countries, joined the Bologna process and created the need to make serious changes in the programs, guides and methods used in this educational system. The Bologna imposes a number of requirements on the educational systems of the countries are in this process. One of them is the modernization of the higher education system, the modernization of the methods used in classes and their adaptation to the requirements of modern life. It is appropriate to use discussion maps in seminar classes, along with other methods. Discussion maps are interactive learning methods. One of these methods is the "Babylon map". The "Babylon map" method develops students' abilities including arguing different opinions, logical, critical, creative and independent thinking, investigating ways to solve problems and finding solutions. In the presented article, the ways of using the "Babylon map" method in the seminar classes of the higher schools are given. The article emphasizes that this method is effective and provides examples of how to use it. It is recommended to use in the classes to develop the abilities of students to think freely, make independent decisions, and search for solutions to emerging problems. This method is advisable to use in the teaching of humanities (Anthropology, Pedagogy, Social pedagogy, Education management, Monitoring and evaluation in higher education, etc.). The globalization process in the today's world requires the integration of the Azerbaijani education system into the world education system by taking into account the national characteristics and national values.

Among the advanced countries, Azerbaijan joined the Bologna process and created the need to make serious changes in this education system such as programs, and methods used in classes. The Bologna process sets a number of requirements for the education systems of the world countries, the need to achieve higher education in this countrymeeting the common European standards. One of them is the modernization of the higher education system, the modernization of the methods used in the class, modernization and adaptation to the requirements of modern life.

Key words: *seminar, university, discussion map, Babylon map, lesson on problem, discussion, work in groups.*

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ШЛЯХИ ЗАСТОСУВАННЯ ІНТЕРАКТИВНИХ МЕТОДІВ НАВЧАННЯ У ВИЩІЙ ШКОЛІ

Азербайджан, одна з країн, що розвиваються, приєднався до Болонського процесу і створив необхідність внести серйозні зміни в програми, посібники та методи, які використовуються в цій освітній системі. Болонський процес висуває низку вимог до освітніх систем країн, які перебувають у цьому процесі. Однією з них є модернізація системи вищої освіти, модернізація методів занять та адаптація їх до вимог сучасного життя. На семінарських заняттях поряд з іншими методами доречно використовувати дискусійні карти. Дискусійні карти – це інтерактивні методи навчання. Одним із таких методів є «карта Вавилона». Метод «Карта Вавилону» розвиває вміння учнів, зокрема аргументувати різні думки, логічне, критичне, творче та самостійне мислення, досліджувати шляхи вирішення проблем та знаходити рішення. У представленій статті

наведено шляхи використання методу «Карта Вавилону» на семінарських заняттях вищої школи. У статті підкреслюється ефективність цього методу та наводяться приклади його застосування. Рекомендується використовувати на заняттях для розвитку здібностей учнів вільно мислити, приймати самостійні рішення, шукати рішення виникаючих проблем. Цей метод доцільно використовувати при викладанні гуманітарних дисциплін (Антропологія, Педагогіка, Соціальна педагогіка, Менеджмент освіти, Контроль та оцінка у вищій школі та ін.). Процес глобалізації в сучасному світі вимагає інтеграції азербайджанської системи освіти в світову систему освіти з урахуванням національних особливостей і національних цінностей.

Серед передових країн Азербайджан приєднався до Болонського процесу і створив необхідність внести серйозні зміни в цю систему освіти, як програми, так і методи, які використовуються в заняттях. Болонський процес висуває низку вимог до систем освіти країн світу, необхідність досягнення вищої освіти в нашій країні на рівні загальноєвропейських стандартів. Однією з них є модернізація системи вищої освіти, модернізація методів, що використовуються на занятті, модернізація та адаптація до вимог сучасного життя.

Ключові слова: *семінар, університет, карта дискусії, карта Вавилону, урок з проблеми, дискусія, робота в групах.*

Topicality of the problem. A number of important tasks in the reform program aimed to implement the public policy "to maintain and develop the potential from all levels of the education system, as well as at post-higher education and additional levels of education, to create the appropriate legal framework regulating the education system, to implement the state policy based on the democratization of political, economic and social life, the demands of the society stated in the Constitution of the Republic of Azerbaijan" have been defined in the direction of improvement of traditional educational technologies, modernization by applying advanced world experience (Azərbaycan Resbublikasının təhsil sahəsində islahatları proqramı., 2012: 5; Azərbaycan Respublikasının Təhsil haqqında qanunu., 2009: 7; Veysova Z., 2010: 75).

In order to improve the scientific-methodical level of teaching, increasing the activity level and interest of students in class is always a topical and important issue.

Seminar training, one of the main forms of training in higher education, develops serious mental self-activity in students, helps them to use the scientific literature and research. Therefore, the quality of the seminar also depends on the preparation, academic activity and independence of the students. The most important aspect is that the student gets the ability to work properly with books and other information sources (Alıyev Y., Talıbov Y., Eminov A, İsayev İ. , 2006: 120; Gardner Howard, 1993: 27) .

For this purpose, it is recommended to use interactive training methods along with existing ones.

Application of interactive training, investigation and determination of application methods to the higher education system is scientific novelty of the problem.

It is expedient to use discussion maps, one of the interactive learning methods, in seminar classes, together with other methods. One of discussion maps is the "Babylon map". The "Babylon map" method develops the abilites to argue different opinions, improve logical, critical, creative and independent thinking, investigate ways to solve problems and find solutions in students.

Currency rate of the problem. "Babylon map", an interactive learning method, is based on the "Constructivism" learning theory as one of the methods of discussion maps. The constructive approach is not based on the ready-made provision of knowledge, but on adapting the student to the economic and technological requirements of the environment the student surrounded in the process of independent creativity.

In the "constructive" learning process, it is referred to a developmental methodology defining a problem and prompting it to seek new solutions in contrast to traditional methods and principles (Stil C., Meredit K., Templ Ç., 2000: 17; Steele C., Meredith K., 1995: 38).

In the lessons organized by the "Babylon map" method, there is a special place for express an opinion on a certain problem and to exchange ideas on how to solve the problem. Reasoned analysis allows students to think about their point on the issue under discussion. This method is more useful for the younger generation to learn the current problems deeply and consciously.

As mentioned, the "Babylon Map" is a type of the "Discussion Maps" method. Lessons organized in this way can be seen as a synthesis of "Discussion" and "Problem-Based Learning" methods.

The "Babylon map" method involves organizing the lesson interactively, and it is an interactive arrangement of the "Problem-Based Learning" method.

Problem-based learning consists of two interacting elements: it is problem-based teaching and problem-based learning (Jean Piaget's, 2023: 32).

Problem-based learning is a special form of learning activities of pupils and students. At this time, knowledge acquisition and types of activities are carried out by analyzing problematic situations, identifying problems, make suggestions, justifying them, proving judgments (verifying their solutions).

The mental work of the learners takes place under the guidance of the teacher and is aimed at the understanding and learning of new concepts and the activation of the mental abilities of the students.

Acquaintance with the education systems of foreign countries shows that their education systems are constantly developing. This development also applies to their learning theories such as Jerome Bruner's "Exploratory learning and problem-based learning", J. Piaget's "Stages of cognitive development"; John Davy's "Experimental and active learning", "Constructivism" and H. Hardner's "Multiple mental abilities" theories (Paşayev Y.X., Rüstəmov, 2002: 78; Cerom B., 1998: 83).

At the center of these theories is the active learner, which is explored in the different contexts such as teacher-student interactions, student and content learned, and student and peers. In these theories, it is emphasized that the students should not memorize what they learned in a mechanical way, what they learned should make sense to them.

Goals and tasks. There is a great need to modernize the education system first of all during the era of development of science, technology and psychology.

The development of the young generation should be taken into account when building the education system. Currently, there are a number of modern teaching theories, and based on them, it would be possible to adapt education to the needs of the times through evolution in our republic.

New methods and teaching technologies should be developed and applied to increase the activity and interest of students in class to raise the scientific-methodical level of teaching. For this purpose, it is beneficial to use interactive training methods as well as existing training methods (Kazımov N.M., 2005: 221; Mehrabov A., Abbasov Y. Zeynalov Z., Həsənov B., 2006: 75).

Investigating the essence of these methods, applying them to teaching and studying their results are the goals and tasks of the research.

Methods: The "Babylon map" method, one of of the "Discussion maps" methods, was used as a teaching method.

The "Babylon map" involves organizing the lesson interactively, and it is an interactive arrangement of the "Problem lesson" method. Lessons in this type can be regarded as a synthesis of "Discussion" and "Problem lesson" methods. Forms can be used as work in pairs or in small and large groups. It is more appropriate to use this method in the teaching of humanities. For example, it can sometimes be used in the teaching of Anthropology, Pedagogy, Social Pedagogy, Educational Management, Monitoring and Evaluation in Higher Education and other subjects.

Research method used in this contex is experiment. The essence of the experiment was to apply the "Babylon map" method in experimental groups during the teaching of humanities in the higher school and to study its effectiveness by comparing it with control groups.

Theoretical and methodological bases of research. The "Babylon map" belongs to the group of interactive training methods. The "Babylon map" method develops in students the ability to think independently, reason, argue the expressed opinion, logical, critical, creative thinking, investigate ways of solving problems and find ways out. "Babylon map" is a type of discussion. "Babylon map", an interactive learning method, is based on the "Constructivism" learning theory as one of the methods of discussion maps. The constructive approach is based not on the ready-made provision of knowledge, but on adapting the student to the economic and technological requirements of the environment they are surrounded in the independent creative process.

In the "constructive" learning process, in contrast to traditional methods and principles, it is referred to a developmental methodology defined a problem and prompted it to seek new solutions. According to the theory of "constructivism", the teacher should think about the following: "not the direct transfer of knowledge, but the creating of enthusiasm for it; "asking questions rather than giving ready answers"; "Research of the learner's future development"; "Involving the student in the process of gathering knowledge rather than just giving only information"; "Proper planning of "learning moments" enabling more effective application of traditional didactic approaches and taking advantage of it" (Deyvi C., 2004: 132).

In the theories, it is emphasized that the student should not memorize what they learned mechanically, but should understand its meaning, what they got as a knowledge should have meaning for them.

The essence of the experiment is that the interactive learning method "Babylon Map" is applied in the class, compared with the groups using traditional learning methods, the effectiveness of the methods is checked and a conclusion is drawn (Paşayev Y.X., Rüstəmov F.A., 2002: 34).

Main part

A lesson conducted using the "Babylon map" method. The algorithm of the lesson conducted by the "Babylon map" method can be presented as follows. A topical content is chosen for the taught subject and it should allow for contrasting approaches. Problems related to the topic are defined.

A problem related to the topic is set in the lesson. Conflicting questions are asked about the problem. Individually, the stage of defining positions and finding arguments is carried out. Hypotheses are made, arguments are listened to and lists are made regarding the given problematic questions (such as "Why did the causes of the problem arise?").

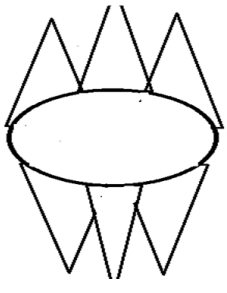
Hypotheses are grouped and based on this, several pairs or groups are created to organize the research work. Research work is conducted, the causes of the problem, possible complications are determined in the groups, the positive and negative sides of the problem are analyzed, and ways to eliminate them are determined.

At the next stage of the lesson, the points of the groups are listened and the arguments are analyzed. A discussion is held with the whole audience, the expected results of the investigated problem are listed and recorded. After the end of this stage, the teachers express their opinion on the problem, the discussion continues and a general opinion on the ways to solve the problem is presented. General conclusions are drawn and decisions are made.

The lesson should be conducted in the form of dialogue and cooperation. Ideas must be discussed with someone.

The activity of students in class is evaluated based on pre-prepared criteria.

In the organization of the research work, the scheme reflecting the "The Babylon Map" should be used in each group. Notes are made on the image presented below. The studied problem of the lesson is marked in the middle of circle. The lower triangular parts of the figure indicate the causes of the problem, its consequences, and why it cannot be solved. In each of the upper triangular parts, according to the problem, ways out of this problem and solutions are noted.



Presentation of the researched problem as a map makes it possible to visually describe the problems and makes the work a little easier.

During the presentation of group work, the "The Babylon Map" is drawn on a large-scale board or on a large white sheet of paper and filled in during a general discussion with the whole audience.

After filling the "Map" of each group, the opinions of the group representatives on each part of the problem are taken into account and opinions are exchanged. Arguments are also required when opinions are expressed, and the reason under their ideas is listened to. Students should explain about their point concisely, concretely, logically.

The teacher summarizes the results or solutions from the students by discussing them.

Then general conclusions are obtained, consisting of several clauses about ways to solve the problem.

The following problematic questions can be used during the teaching of relevant topics in the subject of anthropology.

"What do you see as the modern directions of anthropological research?". Problem: Modern human-being and problem of life. "What do you see as ways to fight against racism?". The problem: "The problem of racism". "Who can be called a patriotic person?". The problem: strengthening the spirit of patriotism.

The topic of ecology: "Why are the fauna and flora of the Caspian Sea getting worse?" Problem: "Ecology of the Caspian Sea".

"Why is the number of genetic diseases increasing in modern times?", Problem: "Increasing genetic diseases".

On the subject of "Stress": "Most people are exposed to stress. Why is stress a companion of modern people?" Problem: "Human stress problem".

Talking and discussing during the lesson requires special communication skills from the teacher. The richness of the language plays a special role at this time. Therefore, the teacher should increase the level of professionalism in this direction. The teacher have to try that student's interest in the discussion does not decrease and the teachers can achieve the goal they set for themselves in the lesson.

During the discussion, the teacher can use the "conversation tactic" when asking students guiding and thought-provoking questions (Bəşirov B., 1972: 115; Ceyn Xill, 1998: 37).

The results from the application of the methods:

The above-mentioned interactive method was applied in 30 groups that I taught in lectures and seminar classes in the teaching of humanities at the higher school (pedagogy, anthropology, social pedagogy, monitoring and evaluation in higher education, educational management).

The application of interactive methods began in 2014 and continues until now. The obtained results were evaluated and analyzed according to the following criteria.

Criteria: the increase of students' interest on the subject, the activity level of students in the lesson, the

Table 1

№	Criteria	The average number of students in the group	Increased interest in the subject (number of students)	The activity degree of students in class (number of students)	Full and interesting elaboration of individual works (number of students)	Increasing the level of self-development (number of students)
1.1.	indicators of lessons that interactive methods are used	30	27	30	26	28
2.2.	indicators of lessons that traditional methods are used	30	17	10	10	6

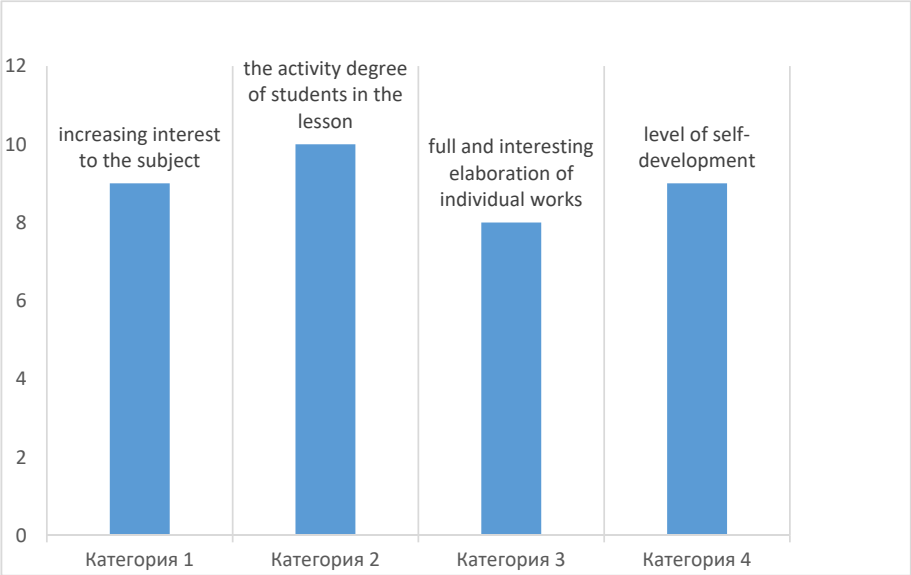


Fig. 1. Indicators in the groups I taught in 2014–2023

full and interesting performance of individual work, the level of self-development. The gained results were statistically calculated and presented in the graph and table below. Averages of statistical results Table 1.

According to the criteria mentioned above, the evaluation results statistically calculated and presented in the graph below (the evaluation was carried out on a 10-point scale) (Kərimov Y.Ş., 2008: 3).

As can be seen from the diagram, the groups the interactive methods, especially the "Babylon map" method is used, the students' interest in the subject, the level of activity, the full and interesting performance of individual work, and the indicators of the self-development level criteria were recorded as high on the 10-point evaluation scale. These indicators were 50% lower in the control groups traditional training methods taught.

Conclusion. Interactive training in the higher education system increases the interest of students on teaching subject, increases their activity and enables conscious learning of the material.

When seminar classes are organized with modern and interesting methods in the higher school students' interest on the subject increases and teachers can achieve the goals they set in the lesson.

Modern life requires flexible thinking from everyone. Abilities such as making independent decisions and looking for solutions to emerging problems should be formed, at this time the intellectual level of students improves. This method prepares students for the most unexpected events in life, give and opportunity to them to see existing difficulties and make necessary decisions.

Our research shows that interactive learning methods can be a powerful tool for improving the quality of lessons. At the higher school level, this method can give beneficial results when it is applied properly in the seminar lessons during the teaching of Anthropology, Pedagogy, Social pedagogy, Education management, monitoring and evaluation in higher education and other humanities. The use of interactive teaching methods in seminar classes at the higher school increases the

effectiveness of the lesson, modernizes it, develops students' ability to think independently, and increases their interest in the subject. It can be very useful to use the "Babylon map" method in seminar sessions.

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