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APPLICATION OF ACTIVE AND INTERACTIVE TEACHING METHODS IN THE EDUCATIONAL PROCESS OF HIGHER SCHOOL

The article discusses the features of active and interactive teaching methods. The analysis of the application of these methods in the educational process of higher education is carried out, it is said that a teacher of a higher school must not only transfer scientific knowledge, but also be able to choose the optimal teaching strategy, use modern educational technologies, creating the prerequisites for creativity. The authors note that the educational process, based on the use of active and interactive teaching methods, is organized taking into account the inclusion in the learning process of all students in the group, without exception. The article also indicates the possibility in the process of teaching the teacher to choose both one method and use a combination of several. According to the authors, a successful application depends on the consistency and correlation of the selected methods and tasks.

Keywords: technology, method, training, competence, higher school.

Introduction

The organizational basis for the implementation of the state policy of the Republic of Kazakhstan in the field of education is the State Program for the Development of Education of the Republic of Kazakhstan for 2011–2020, which ensures the continuation of the modernization of Kazakhstani education [1].

Modern trends in the development of higher education determine a fundamental change in approaches to the organization of the educational process in higher education. The introduction of a multi-level education system, the creation of a single educational space, the implementation of a competency-based approach, necessitate a completely new approach to the organization of training.

A teacher of a higher school should fulfill not only the function of a translator of scientific knowledge, but also be able to choose the optimal teaching strategy, use modern educational technologies aimed at creating a creative atmosphere of the educational process [2].

The educational activities of students in the broadest sense are considered as one of the types of cognition that proceeds on the basis of the reflective-transforming activity of the subject. Scientific knowledge as a study is an activity aimed at obtaining fundamentally new knowledge.

Active teaching methods are built according to the «teacher – student» interaction scheme. From the name it is clear that these are methods that involve the equal participation of the teacher and students in the educational process.

The idea of active teaching methods in pedagogy is not new. The founders of the method are considered to be such distinguished teachers as Y. Komensky, I. Pestalozzi, A. Disterweg, G. Hegel, J. Russo, D. Dewey. Although the idea that successful learning is built, first of all, on self-knowledge, is still encountered by ancient philosophers [3].

According to researchers, active learning is such an organization and conduct of the educational process that are aimed at the comprehensive activation of educational and cognitive activities of students through a wide, preferably comprehensive, use of didactic and organizational and managerial tools, their widespread use of various means and methods of activating [4].

Interactive learning develops students' abilities and skills of productive communication in the context of the educational process, the ability to argue their point of view, clearly formulate and express their thoughts, analyze difficult situations, identify the main and secondary, the causes of their occurrence, find ways and means of resolving them [5].

Object of research: active and interactive teaching methods.

Subject of research: modern educational technologies.

Purpose: to analyze the use of active and interactive learning technologies in the educational process of higher education.

Tasks:

– development of students' abilities and skills of productive communication in the educational process;

– the ability to argue their point of view, clearly formulate and Express their thoughts,

Research objectives:

– to increase the efficiency of information exchange of managerial, educational and educational nature;

– to exercise self-control to students, applying the acquired knowledge in practice.

Research methods and results

Today, there are many developed active teaching methods, for example, in practical pedagogical activity in the lesson, you can use the following methods, this is the brainstorming method, the fundamentalist method, case study method, the cluster method, the decision tree method, the Socratic method dialogue, project method, «take position» «method», «chain» method, etc.

With active learning, the student to a greater extent becomes the subject of educational activity, enters into a dialogue with the teacher, actively participates in the cognitive process, performing creative, search, problem tasks. Students interact with each other when completing assignments in a pair, group.

In the learning process, the teacher can choose as one active method, or use a combination of several. But success depends on the consistency and correlation of the selected methods and tasks.

Consider the most common methods of active learning:

Presentations are the easiest and most affordable method to use in class. This is a slide show prepared by the students themselves on the topic.

Case technologies – have been used in pedagogy since the last century. It is based on the analysis of simulated or real situations and finding a solution. Moreover, there are two approaches to creating cases. The American school offers a search for the only correct solution to the problem. The European school, on the contrary, welcomes the diversity of decisions and their justification.

Problematic lecture – in contrast to the traditional one, the transfer of knowledge during a problem lecture does not take place in a passive form. That is, the teacher does not present ready-made statements, but only raises questions and indicates the problem. The rules are deduced by the students themselves. This method is quite complicated and requires students to have a certain experience of logical reasoning.

Didactic games – unlike business games, didactic games are strictly regulated and do not imply the development of a logical chain to solve the problem. Game methods can be attributed to interactive teaching methods. It all depends on the choice of the game. So, popular travel games, performances, quizzes, club of cheerful and resourceful are tricks from the arsenal of interactive methods, as they involve the interaction of students with each other.

Basket-method – based on a simulation of the situation. For example, a student should act as a guide and conduct a tour of the historical museum. At the same time, his task is to collect and convey information about each exhibit.

The peculiarity of this method is that the teacher does not give a qualitative assessment and any statement is perceived as permissible [6]

The teacher in the implementation of these methods acts in several main roles. In each of them, he organizes the interaction of students with a particular area of the scientific and information environment, sets out text material, demonstrates a video sequence, answers students' questions, tracks the results of the process, etc.

The educational process, based on the use of interactive teaching methods, is organized taking into account the inclusion in the process of cognition of all students in the group, without exception. Joint activity means that everyone makes his own special individual contribution, in the course of work there is an exchange of knowledge, ideas, ways of activity. Individual, pair and group work is organized, project work, role-playing games are used, work is done with documents and various sources of information [7].

Interactive methods are based on the principles of interaction, student activity, reliance on group experience, and mandatory feedback.

To do this, the teacher divides the students into subgroups, coordinates the implementation of the tasks given to them, encourages independent search for answers, etc. The role of the teacher in interactive learning involves the implementation of the functions of a consultant. The teacher not only refers to the already accumulated experience of students, but also helps them in finding solutions to the tasks. To effectively present knowledge in the lessons on the innovative method, the teacher uses:

- work in small groups, dividing students into pairs, triples, etc.;
- carousel technique;
- heuristic conversations;
- lectures, the presentation of which is problematic;
- brainstorming techniques;
- business games;
- conferences;
- seminars in the form of debate or discussion;
- multimedia tools;
- technologies of full cooperation;
- method of projects, etc.

In the process of conducting an interactive lesson, the Brainstorming method allows you to quickly solve the problem posed to the group, taking into account the maximum use of students' creative activity. The teacher invites the participants to put forward a large number of solutions, among which may be the most fantastic. After that, the most successful ones are selected from all the ideas, which will make it possible to answer the question posed.

As you can see, there are a variety of interactive teaching methods. And the use of each of them makes it possible not only to develop the student's communication skills, but also to give an active impetus to the socialization of the individual, to develop the ability to work in a team, and also to eliminate as much as possible the psychological tension that arises between the teacher and students.

Here is an example of a practical lesson: Preparation consists in dividing the students of the study group into subgroups of 6 people each. At the same time, each of the students individually and independently solves the tasks assigned to him on any of the topics studied in the practical lesson before. The number and quality of tasks is assumed to be equal for all students in the group. Thus, already at the preliminary stage, training takes place in an interactive form.

A practical lesson is the students' defense of a subgroup of an assignment done independently. Since the work of the subgroup as a whole, and not of each student individually, will be evaluated, time is given for discussing individually obtained solutions to problems within the subgroup. Each member of the subgroup should be ready to defend the solution, therefore, the task of all the other members of the group, when discussing the proposed solution together, is to achieve an exclusively correct approach in choosing a solution method and to detect and correct any errors, if any. Thus, within the subgroup, all tasks to be defended for this subgroup are discussed.

The student acquires the following very useful skills:

- 1 the ability to set out a method for solving a problem,
- 2 defend the correctness of the chosen approach,
- 3 respond to questions posed by other group members
- 4 questions (during the explanation of the solution of their problems);
- 5 to delve into the process of solving the newly stated problem,

6 detect inaccuracies in the solution (when discussing solutions to problems of other members of the group). An important feature of this approach is the involvement of all students without exception in the learning process, during which not only the consolidation of the acquired skills takes place, but also a situation arises that allows each of the students to establish a communication process that provides the highest quality training for the entire subgroup to protect individual tasks.

When the discussion is over, and the subgroup is ready for the defense process, the student of this subgroup makes an appropriate mark on the board, where all the subgroups and task numbers for which protection is provided for in the lesson are marked. Thus, the teacher has information about the readiness of the group to answer. The process of defending the task itself also takes place in an active form, since the student gives a solution to one of his tasks, demonstrates the effectiveness

of the chosen method, and answers the teacher's questions regarding the subject of discussion (here the student's feedback with the teacher arises).

The number of students who can be selected for an answer from each subgroup is determined by the number of tasks assigned to protect, the time allotted for such protection, the number of subgroups in the group. For example, if there are 4 subgroups and 2 academic hours for the lesson, it is quite possible to check 3–4 tasks, i.e. approximately 12–16 students can be listened to by the teacher.

The result is the set number of points of the rating system. For example, an approach taken from practice may be proposed:

3 marks – the problem is solved correctly, the method is chosen most rationally, the student correctly answers all the questions posed by the teacher;

2 marks – the problem is solved correctly, but not the most rational method (or the student hesitantly answers the questions posed, makes mistakes, but corrects himself);

1 marks – the student can correctly solve the problem only with the help of leading questions teacher, but in the process of mastering the necessary teaching material;

0 marks – the student cannot give a solution to the problem and cannot answer the leading questions of the teacher and discovers complete unpreparedness for the topic being studied.

In the educational process of higher education, discussion is often used. The discussion is one of the most effective technologies of group interaction, which has special capabilities in training, development and education.

The term «discussion» is derived from the Latin «discussion» (consideration, research). This term can be considered in relation to various areas of human life and activity. For example, in the social field - this is a way of organizing joint activities in order to intensify the decision-making process in a group. If we consider the discussion in medicine, then this is a psychotherapeutic technique for influencing the positions and attitudes of the subject in a socially created discussion group [8].

The discussion ensures that students are actively included in the search for truth; creates the conditions for their open expression of their thoughts, positions, attitudes to the topic under discussion and has a special ability to influence the attitudes of its participants in the process of group interaction. The discussion can be considered as a method of interactive learning and as a special technology.

As a method, discussion is actively used to organize intensive mental and value-oriented activities of students in other technologies and teaching methods: socio-psychological trainings, business games, analysis of various situations and problem solving.

Aims of the discussion: solving group problems or influencing the opinions and attitudes of participants in the learning process.

Group discussion solves the following tasks:

- training participants to analyze real situations;
- building skills to create problems;
- development of ability to work with other participants;
- demonstration of the ambiguity of solving various problems.

Group discussion participants should:

- listen and hear each other;
- do not interrupt;
- do not evaluate each other;
- do not offend or offend;
- shut up by a sign;
- participate in everything;
- comply with the regulations.

There are various forms of discussion dialogue:

- round table (different positions - free expression of opinions);
- expert groups (discussion in microgroups, then expression of judgment from the group);
- forum (the group enters into an exchange of views with the audience);
- symposium (formalized presentation of prepared opinions, messages on this issue);
- debate (presentation of binary positions on the issue: evidence – refutation).

The role of the teacher in organizing a group discussion:

- designation of a problem;
- Motivation for discussion by all participants;
- collecting various opinions and arguments;
- summarizing group work;
- communication of objective information on the topic of discussion and your comment.

The main thing is to ensure that the intensity of meetings does not subside to the end.

Let us give an example of a lesson – discussion on the topic of «Civil Society». When studying the topic, the problem is posed: What are the features of civil society in Kazakhstan? Students analyze this problem, express their point of view. To continue the discussion in the right direction, a number of questions are offered that will help to feel the essence of the problem. Students come to different conclusions, each group proves its position. Everyone wins as a result of such work, since everyone takes part.

The use of active and interactive teaching methods in teaching practice helps to increase the intellectual activity of students, and therefore, the effectiveness of the lesson. Even the most passive students are involved in vigorous activity with great desire, they observe the development of original thinking skills, a creative approach to problems to be solved. It is important to note that the discussion element must be included at all stages of the lesson. After all, the art of discussing and defending one's point of view, based on our own experience, is still poorly developed in our students. And in the future we still have to work actively on this problem.

Conclusions

Using active and interactive learning technologies allows you to:

- improve the exchange of information of a managerial, educational and educational nature;

- exercise self-control for students, applying the knowledge gained in practice.

In addition, interactive learning technology contributes to the speedy mental development of students. In addition, the exchange of information between the student and the teacher increases the confidence of the teenager in the correctness of his conclusions. The use of interactive learning technologies occurs with the direct interaction of students with the learning environment. It acts as a reality in which students gain experience, which is the central activator of educational knowledge.

In ordinary passive or active teaching, the teacher is given the role of a kind of filter. He is forced to let through all the educational information. In contrast to these traditional methods, interactive learning provides for the role of the teacher as an assistant to the student, activating the flow of information [9]

Interactive teaching models, compared with traditional ones, change the interaction of the student and teacher. The teacher gives way to students, creating the conditions for the manifestation of their initiative. Students are full participants in such lessons. Moreover, their experience is as important as the experience of a teacher who does not provide ready-made knowledge, but encourages his students to search.

The technology for the development of interactive learning suggests that the teacher in the lesson performs several tasks. One of them is to act as an informant expert. For this, it is necessary to prepare and present textual material, demonstrate the video sequence, answer the questions of the lesson participants, track the results of the learning process, etc.

Also, with interactive training, the teacher is given the role of the organizer. It consists in establishing the interaction of students with the physical and social environment.

Interactive learning allows you to simultaneously solve several problems, the main one of which is the development of communicative skills. This training helps to establish emotional contacts between students, provides an educational task, as it teaches you to work in a team, listen to the opinions of your friends, provides high motivation, strength of knowledge, creativity and imagination, sociability, an active life position, individuality value, freedom of expression, emphasis on activity, mutual respect and democracy.

The use of interactive forms in the learning process, as practice shows, removes the nervous load of students, makes it possible to change the forms of their activities, to switch attention to key issues of the topic of classes.

The teacher of the department needs to delve deeply into this type of training. The application and preparation of students for one or another interactive form of training for the study of a particular discipline (the topic of the lesson) should be reflected in the work program of the discipline and in the methodological recommendations for preparing for the lesson in an interactive (specific) form.

The use of intensive teaching methods in the university contributes to the desire of the teacher and student to a single goal that generates cooperation; awareness of common interests; mutual good faith, self-giving; enthusiasm for occupation; activization of independence and creativity.

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Г. Ж. Ельмуратов, А. Б. Калиева, Б. Ж. Ельмуратова, М. Ж. Кулумбаева
Жоғары мектептің оқу процессіндегі белсенді және интерактивті әдістерді қолдану

Торайғыров университеті,
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Г. Ж. Ельмуратов, А. Б. Калиева, Б. Ж. Ельмуратова, М. Ж. Кулумбаева
Применение активных и интерактивных методов обучения в учебном процессе высшей школы

Торайғыров университет»,
Республика Казахстан, г. Павлодар.
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Мақалада оқытудың белсенді және интерактивті әдістерінің ерекшеліктері қарастырылады. Жоғары мектептің оқу үрдісінде осы әдістерді қолдануға талдау жасалып, жоғары мектептің оқытушысы ғылыми білімді ғана емес, сонымен қатар оқытудың оңтайлы стратегиясын таңдай білуі, шығармашылыққа алғышарттар жасай отырып, заманауи білім беру технологияларын пайдалана білуі тиіс екендігі айтылған. Авторлар оқытудың белсенді және интерактивті әдістерін қолдануға сүйенетін оқу үдерісі, топтың барлық студенттерінің таным процесіне қосылуын есепке ала отырып ұйымдастырылатынын атап өтті. Мақалада педагогтың оқыту процесінде бір әдісті таңдау, сондай-ақ бірнеше әдісті қолдану мүмкіндігі көрсетіледі. Тиісінше, авторлардың пікірінше, табысты қолдану таңдалған әдістер мен қойылған міндеттердің жүйелілігі мен арақатынасына байланысты.

Кілтті сөздер: технология, әдіс, оқыту, құзыреттілік, жоғары мектеп

В статье рассматриваются особенности активных и интерактивных методов преподавания. Проводится анализ применения данных методов в учебном процессе высшей школы, говорится о том, что преподаватель высшей школы должен не только передавать научных знаний, но и уметь выбирать оптимальную стратегию преподавания, использовать современные образовательные технологии, создавая предпосылки для творчества. Авторы отмечают, что учебный процесс, опирающийся на использование активных и интерактивных методов обучения, организуется с учетом включенности в процесс познания всех студентов группы без исключения. В статье также указывается на возможность в процессе обучения педагогом выбора как одного метода, так и использования комбинации нескольких. Соответственно, по мнению авторов, успешное применение зависит от системности и соотношения выбранных методов и поставленных задач.

Ключевые слова: технология, метод, обучение, компетентность, высшая школа.

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