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## THE ROLE OF ACTIVE TEACHING METHODS IN THE FORMATION OF STUDENTS' COGNITION AND CREATIVITY

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## РОЛЬ АКТИВНЫХ МЕТОДОВ ОБУЧЕНИЯ В ФОРМИРОВАНИИ ПОЗНАВАТЕЛЬНОЙ И ТВОРЧЕСКОЙ ДЕЯТЕЛЬНОСТИ У СТУДЕНТОВ

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*Abstract.* Higher education as a subject of study of this article in the summer provides for the process of teaching pedagogical disciplines. When conducting seminars in a higher educational institution, the cognitive activity and creativity of students of individual methods of developing physical activity for the purpose of research. Recognition of students and creative activity of children. Conversation “brainstorming”, “game activities” “round table” competition of practical works and methods of their discussion is used. It recognizes students on the basis of methods, determining the conditions for the development of culture and creativity. Specific recommendations are given. Student creativity the fact that active learning has a great influence on improvement, also identified. Results in higher educational institution to improve the process of teaching pedagogical disciplines contributes to. This article is recommended for university professors for use in seminars.

*Аннотация.* В данной статье в качестве предмета исследования рассматривается процесс преподавания педагогических дисциплин в высшем учебном заведении. Исследования были проведены с целью определения использования некоторых методов развития познавательной деятельности и творческой активности студентов при преподавании семинарских занятий в высшем учебном заведении. Для развития познавательной и творческой активности студентов были использованы следующие методы: метод эвристического общения, «мозговой штурм», «круглый стол», «деловая игра», соревнование практических работ и их обсуждение. На основе этих методов определены условия развития познавательных и творческих способностей студентов, даны конкретные рекомендации. Также было обнаружено, что активное обучение оказывает большое влияние на развитие творческих способностей студентов. Полученные результаты будут способствовать улучшению процесса преподавания педагогических дисциплин в высшем учебном заведении. Материалы этой статьи рекомендуется преподавателям вуза для использования на семинарских занятиях.

*Keywords:* active learning, brainstorming, group learning, round table, seminar; laboratory lesson, practical exercises.

*Ключевые слова:* активное обучение, мозговой штурм, групповое чтение, круглый стол, семинар, лабораторные занятия, практические упражнения.

When organizing practical classes using active teaching methods, the teacher provides pre-programming of students' thinking, directing their cognitive activities in the right direction and remote control of assimilation processes in the performance of educational tasks. The teacher should also be able to communicate directly with students in group discussions, directly monitor their opinions, and identify and correct them during the discussion. Therefore, the use of active teaching methods in group lessons provides a solution to two tasks: on the one hand, the solution of educational problems of students' mastery of the material, on the other hand, the teacher's mastery of this process, clarifying and correcting students' learning. Such a result in group classes is possible only with an excellent organization of educational communication, developing the theoretical thinking of students, forming the ability to analyze facts, events, phenomena in the conditions of their occurrence and development. The organization of discussions and management in education require their own approach [1, p. 202].

Discussion is one of the main methods of interactive learning, since it not only allows to increase the mental activity of students, but also is suitable for various types of training, which can also be used in seminars, practical and laboratory classes.

Let's look at the features of organizing and conducting group lessons using educational discussion, which is a form of interactive learning. If we look at the discussion as a mental activity (thinking and speaking), the following phenomenon emerges: the purpose of the discussion is to solve the problem; its means are hypothesis testing and dispute testing; outcome, a result that satisfies all or most of the participants.

Using the discussion in educational institutions, it is necessary to conduct a deeper analysis and understanding of the problem of "dispute" by all students, so that the topic is well understood on their part, and secondly, it is necessary to develop students' interest in reading, awaken a sense of reflection, develop cognitive activity, and learn the subject more deeply. Third, after all the work done, the teacher achieves an important result-holding debates in a civilized framework in compliance with the "rules of the game". Students learn to participate in the discussion, as well as in how it is conducted [2, p. 42].

Conducting seminars with a discussion approach it is important to answer the following questions: how to achieve an optimal balance between the reflection of the problems discussed (or rather, the number of them) and the depth of their analysis; how to achieve reflection on the problems by studying what you read instead of memorizing the book or just reading it; how to express your thoughts when you speak and make conclusions about the books you read meaningful; how to activate passive students or, vice versa; how to deal with wrong thinking or misinterpretation of what you read?

The general scheme of preparing and conducting a training (practical) lesson using the discussion at the seminar: thinking about the purpose of the seminar on this topic; selecting and formulating the questions of the seminar; develop additional questions for discussion in the workshop; development of practical tasks to prepare students for the seminar; ask the group key questions; ask basic and additional questions to listen to and discuss students' speeches, questions and answers; reflections such as questions, changes, additions and clarifications in the course of criticism; summarizing the workshop and creating issues for the future; assessment of the degree of achievement of goals; future results [3, p. 21]. What does the workshop plan mean in methodological terms? The teacher can summarize his or her own plan on paper or in the game: it is necessary to delve into what skills will be used.

For example, a teacher wants to gain a deeper understanding of the subject of psychology or another specific problem (personality, personal attitude, or action) and at the same time wants to

teach them how to analyze everything from the problem of genetic origin (what caused it) to its current state, by defining the process of hypothesizing, testing, and verification procedures. If this goal is partially achieved in each seminar: discussion, students not only learn about the procedures for analyzing scientific problems, but also learn their content. The choice and formulation of questions for the development of the discussion is completely subordinate to the goal. They will be included and specified in the main issues of the plan. If the teacher focuses the students thinking on the theoretical analysis of the problem, discussion question should be the same as if you want a response, based on reasoning and not on the memories of [4, p. 128].

The content of materials in the development of practical tasks in the preparation of students does not differ from other practical lessons, however there is still a difference in the methodological plan. It is possible to discuss in the seminar that the task in preparation for the seminar is aimed at a deeper understanding of the theory through the analysis of practice and the acquisition of a position in theory. In practical classes, as a rule, students learn to apply a certain theory in practice. In a discussion seminar (theoretical lesson), practical tasks are used to learn the theory, and in a practical lesson, theory helps to better understand practical problems. That's the difference. Students prepare questions for the workshop plan, and each of them can express their views on these issues. Only from the teacher, from his methodological skills, the student can freely share their thoughts. Debates and discussions take place only when the speakers at the seminar express different views. Contrary to what other participants say, expressing an original idea requires courage on the part of the student, who is often afraid of being ridiculed (this is often the case with freshmen). So, the role of the teacher is important here: the discussion depends on how he behaves. The most important thing is to have pedagogical tact in listening to the answers to debates and messages, but at the same time to actively participate in the discussion, to have a positive impact on its course and outcome, to inspire students to think without imposing their ideas. Here the teacher's methodological skills, bordering on art, are clearly visible.

So, what is the method of organizing a discussion workshop, or more precisely, the method of organizing and managing an educational discussion? If we pay attention to the actions of the teacher conducting the discussion, the process of managing the discussion is similar to the following sequence: the introduction is directed to open the topic of the lesson, to achieve the goal: and both the teacher and the students strive to achieve it. Here is a brief description of the procedure for conducting a lesson in the form of a free discussion. Giving the floor to the first student (on a voluntary basis) according to the seminar lesson plan.

Listen carefully to the student's report, observe its content and logic. If the content deviates from the question or declarative (unreasonable, descriptive, "book") question, if the student does not include his own thoughts, if he is repeating what was read in the book or heard in the lecture, the teacher asks a question. For example, "Why do you think so?" or "How does your answer relate to the topic?", "What can we conclude?" etc.

If the narrator does not find an answer, the question is asked to the group and the person who wants to can also answer. If there is no correct answer, the discussion continues until the correct answer is found. Thus, the discussion method can be applied to all types of lessons: from lectures to laboratory classes. Its effectiveness is determined by the extent to which it is possible to activate the thinking of students and at what level they manage to master the quality of education, interest in the issues studied, and the desire to delve into the process of further independent work with literature.

There are some methodological lists in the discussion that are not included in the teacher's list above. First, this is what needs to be done if a wrong opinion is expressed, that is, a distorted view, a clear misconception. Inexperienced teachers try to quickly correct the situation by creating the

right phrase in the mouth of the speaker. From a methodological point of view, such an attempt is inexpedient. In this case, it is a good idea for the teacher to address the group: “The following statement was made ... Do you all agree, or do you have other ideas?” or: “Who has the additions or suggestions?” With this address, he inspires others to think and actively discuss the issue to correct their or a friend's mistake. This is the first thing. Second, it is necessary to support the student who has made a mistake, without lowering his self-esteem, and to build confidence in the need to express themselves openly. Now if he makes a mistake, nothing will happen — they feel that they will correct him and help him to understand. In general, it is important for all participants in the discussion to correct misconceptions with the participation of students [5, p. 217].

Another methodological aspect is the regulation of the time of the seminar-discussion. The fact is that the more active the discussion, the better it is (interesting and effective), but it is difficult to achieve it in the allotted training time. What should I do in this case? There are two ways this can be solved: either hurry up the panelists and find time to discuss all the issues of the workshop plan or put aside the unanswered questions and focus on the issue that is causing an active discussion. In the first case, this can be done “systematically”, but the discussion immediately becomes boring, and the discussion of other issues-boring, formal and not memorable. Therefore, the second way out of this situation is psychologically justified, when the teacher plans one important issue for active discussion, he achieves the goal of the discussion.

Another small but serious methodological question: how to get inactive students to talk? Why are some of them “actively” silent? Out of ignorance? Can't they explain verbally? Can't they speak in public? Or do they not care too much about expressing their thoughts verbally, but prefer to listen to others? The search for answers to these questions led to one answer: the main reason is the lack of speaking skills, because no one teaches this skill anywhere, and everyone learns on their own, so such skills do not always exist. Therefore, the question arises as to how to teach a student to speak, to express himself openly, to defend his opinion. How to teach? To form the ability to act in accordance with general psychological laws, i.e. to practice oral presentation. How to overcome the fear of public speaking. Here, the method suggests to start with “small” steps: to involve a silent person in a conversation, to encourage different opinions.

This technique often works flawlessly, because the silent student has his own opinion, the teacher does not say whether it is right or not but notes the specifics of his game. However, the student is convinced that the truth is on his side. If the teacher always does this, not only the student but also other silent students will be able to express themselves freely. In general, in order to manage the discussion, it is necessary that the rule is unchanged: never criticize the views expressed and, in addition, do not ridicule anyone for the wrong position, wrong opinion or theory. The discussion in pedagogy is not about determining the correctness of a theory, but about how students understand a practical problem through theory. The presence of not one, but many points of view (which, of course, is a condition for discussion), among which there may be both correct and incorrect, theoretically accurate or inaccurate assessment, but each idea expressed will have a greater or lesser grain of truth, even less, which must necessarily be supported and noted.

Now let's consider a way to organize students' learning activities using such active learning methods as: 1) heuristic communication, 2) “brainstorming”, 3) The “round table” method, 4) the “activity game” method, 5) competition of practical works and their discussion. And other, more active methods used by some enthusiastic teachers.

Heuristic communication. Heuristic communication, by its psychological nature, is a conversation for collective thinking or finding an answer to a problem. Consequently, in pedagogy, this method is considered problem-based learning, since it is no different from an interview to find a

problem. Pedagogy draws a formal-quantitative boundary between them: if heuristic communication deals with only one topic, then it considers a set of problem situations in the search for problems. However, these differences are not noticeable, because in practice it is impossible to observe the invisible boundary between the problem during the conversation: the conversation between the teacher and the audience turns into a conversation on many issues related to the topic. But this is a different training method mentioned above. In order to expand heuristic communication, meets the execution conditions when applying problem-based learning methods. The process of heuristic communication caused by a problem situation is not only one of the methods of interactive learning, but also requires special management skills from the teacher.

"Round tables" are usually organized to discuss the problems faced by representatives of various scientific fields. The exchange of views allows us to find solutions to more than one problem, and in the future, they can pave the way for the discovery of common scientific results or the achievement of political stability in society. In training, the method of "round tables" is used to increase the effectiveness of combining theoretical issues as a result of scientific discussions with the participation of specialists from different professions. Within the framework of the student educational and methodological conference, student "round tables" can be held with students-teachers, a group of students-sociologists or students - psychologists. The most important thing is to choose a general topic that is included in the program, which includes psychology or other disciplines (pedagogy, sociology) and requires a deep, comprehensive consideration of the professional (psychological) interests of students. There is an experience of conducting similar classes at another university at the invitation of students and teachers in the specialty of psychology. In short, the "round table" method can include various types of structures in the teaching of psychology, if we do not lose sight of one thing-this is the understanding of the need for a comprehensive consideration of the theoretical issue from different positions and from the point of view of its practical implementation. If there is no such need, or it exists, but cannot be implemented by all parties, the round table turns into a regular workshop.

Activity game method. The university trains specialists of various professions, activity games are often used to teach management activities. This is sometimes referred to as a learning method: "activity management game". If we define "the essence of the activity game as a whole", then the activity game E. A. Khrutsky says, is a method of imitation (imitation, image, reflection); to find ways to solve management decisions in various situations with the help of the game; management decisions are played in accordance with the rules established or developed by the participants of the game. The essence of activity game method as a teaching method is the educational modeling of the activity situations that students should teach, and, therefore, the use of modeling, rather than real objects, to train future specialists to perform professional activities. At the same time, students can play different roles: teacher, methodologist, education inspector, student-trainee and even a student (the best student, the worst student who makes many mistakes in dictation, etc.). Such activities can be planned in advance of the game (writing a script, assigning roles, choosing a situation, etc.) and can be carried out in a practical lesson.

Active learning methods are very helpful for learning, especially in the early stages of higher education. Stavropol State University has developed a game lesson "Introduction to the University", which introduced the student to the working conditions of the university, where the introductory activity game "Student-block-semester" was held with first-year students. From the 2nd year, speaking in front of teachers and classmates, the student gradually becomes accustomed to the audience, and sometimes learns to concentrate in a stressful situation, to activate the thought process. In the 3rd year, the student must be ready to work in the workforce while preparing for an

internship. It should be noted that when a future young specialist starts working, he has no experience working in an adult group. The fact is that the future young specialist at the time of starting work had no experience working in a group of adults, he had not yet seen what formal and informal (interpersonal) relationships are. When a student has the opportunity to model “adult” work roles during training, the process of adaptation in the team becomes easier [6, p. 47].

Educational game — is a problem form of learning. The best approach to studying problems in the educational process is a game that includes group exercises for making decisions in a simulated reality. From this point of view, the game as an active form of educational activity of students is one of the main forms of organization of problem education in the educational process of the university.

The educational game combines two special principles of teaching: the principle of modeling future professional activity and the principle of the problem. The problem-solving process in the educational game should be research. Solving most problems is equally important. The repetition of the same type of games forms the appropriate skills of the student. In the process of solving one problem in educational games, a number of invisible problems are revealed, ways of solving them are demonstrated, and the horizons of students are expanded.

Currently, educational activity games that solve problem situations have been developed. Educational games should be conducted at the final stage of training in higher educational institutions, when the most favorable conditions for their use allow senior students to have a certain level of knowledge and ability to independent activity. At the final stage of training, the specialization of training opens up new opportunities for planning and organizing problem situations in solving educational problems. It is possible to build educational game complexes, which allow students of different specialties to find solutions to complex problems, to create interdisciplinary connections, to study real interdisciplinary relationships, which are not usually defined by traditional teaching methods. Building a model of future professional activity in the game modeling center, which, on the one hand, reflects the most characteristic features and properties of the real object, on the other hand, fully reflects the important aspects of the studied subjects. Game-based learning is limited to the teacher’s planning, organization and management to achieve professional goals - to solve pedagogical tasks. There are three ways to achieve the goal of student activity: to gain the knowledge, skills and abilities necessary for future professional activity; to evaluate yourself by playing a role that is of great importance to the student; and to win a competition between groups of students. The practical method of professional training is to ensure the active formation of managerial skills, improving the effectiveness of educational institutions through gaming activities.

In this case, the activity game method turned out to be more effective than other methods, because it allows the student to perform a specific role (teacher, deputy director, inspector of education, etc.) bringing him into a state of real action, performing a role that encourages him to think concretely and achieve a real result in achieving the goal based on an objective, concrete vision. One of the relatively new methods of active learning is training. In some higher educational institutions, training has been used as a method of practical training in training groups to motivate situations of interpersonal interaction in the course of activities. Various situations that arise in training groups are perceived as conditional games in the educational sense and therefore are real situations in which it is necessary to act with full responsibility for the result of the activity. There is a special sense of responsibility for the result of the action: in individual training and during free discussion, even more responsible than in group training, because the responsibility is also very great for the group partners, because the success of each action is the key to the success of the

whole group. In this aspect, the training resembles the method of a business game, where the participants of the game are also responsible for each other.

But the difference between these methods of teaching is obvious: one of them serves to teach the practical application of theory (on the principle of “work based on theory”), and the other — for the practical training of the theory itself (“theory from everyday life practice”). It is no accident that the method of group learning is used in teaching social psychology, its theoretical content is completely devoted to the laws of intergroup and intergroup relations. It is best to understand and assimilate them in practical classes in the form of group training, where the theoretical state of science is modeled and read by other methods (lecture, reading scientific literature).

The first lesson takes more time for the introductory part, because it is necessary to explain the rules, to pay attention to the motivation of the participants, to explain the meaning of the work. The first lesson in the group is important for the development of group metrics, the involvement of participants in the work, as well as for determining the future direction of movement.

The main part is usually devoted to the topic of the lesson, which is included in a particular block, and is conducted according to the program. It is important to monitor the progress of the group, motivate the participants to take classes, and take time to process aggression, internal conflicts, or complaints from the teacher-psychologist. The main part of the lesson will then be modified to suit the needs of the group and will include exercises to improve the group activity appropriate to the moment. The choice of exercise depends on the stage of development of the group and what needs to be changed: the position of the group changes depending on the position of two or three participants.

The choice of meaningful exercises is influenced by many factors: the age of the participants and the level of development of the group with thinking peculiarities. The more cohesive the group, the easier and more "meaningful" the exercises will be for the participants. These are exercises in which there is physical contact between the participants or which are performed with their eyes closed, as well as exercises that are aimed directly at the personality of the participants. Sometimes there are also exercises that involve a few exercises in the classroom, and most exercises that cover the entire lesson.

The main part includes not only exercises according to the topic, but also conversations, drawing, creating collages, listening to songs and compositions, examples, stories, poems, jokes, etc. Participants can talk about what is happening in their lives and in the group. What happens in a group becomes a group experience that can be realized by individual participants and the entire group. To do this, there are exercises, works, stories, etc. that are discussed and analyzed by the participants. For example, a story is usually read and then discussed in groups. Every participant understands this. Drawing, creating a collage can be as an individual or group work. There may also be artwork done by two groups or two people together. The authors of the work can also show their works in the group, or the audience can tell about the picture. Thus, the experience gained by each of them becomes available to each group. Special extracurricular activities focus on symbolic completion and regular classes. From time to time, participants should be encouraged to evaluate the experience gained as a result of group lessons. It is important that participants complete the lessons so that they do not become dependent on the group. These may include the following questions: “What do you remember from today's lesson?”, “Was there anything that surprised you in class?”, “Name what you liked and did not like in class”, and so on.

It is necessary to discuss in the seminar that the task in preparation for the seminar is aimed at a deeper understanding of the theory through the analysis of practice and the acquisition of a position in theory;

In practical classes, as a rule, the emphasis is on teaching students to apply a certain theory in practice;

In a discussion seminar (theoretical lesson), practical tasks are used to learn the theory, and in a practical lesson, the theory should be considered as an aid to a better understanding of practical problems;

The most important thing is to have pedagogical tact in listening to the answers to the debates and messages, but at the same time to actively participate in the discussion, to have a positive impact on its course and outcome, to inspire students to think without imposing their ideas. Here the teacher's methodological skills, bordering on art, are clearly visible.

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