

USE INTERACTIVE TECHNIQUES IN ELEMENTARY SCHOOL MATHEMATICS CLASSES

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Annotation: The article talks about the importance of the use of interactive methods in elementary school mathematics lessons in improving the effectiveness of the lesson and in the formation of sharpness and mathematical thinking of students.

Keywords and phrases: Interactive method, strategy, continuing education, thinking, textbook, tutorial, Creative Work, discussion.

One of the important requirements for the organization of modern education is to achieve high results in a short period of time, without excessive mental and physical exertion. Between short periods of time, the delivery of certain theoretical knowledge to students, the formation of skills and competencies in them from a certain activity, as well as the control of the activities of students, the assessment of the level of knowledge, skills and qualifications acquired by them requires a higher pedagogical skill from the teacher and a new approach to the educational process. Today, in a number of developed countries, a lot of experience has been accumulated in this regard, and the methods that make up the foundations of this experiment are carried out in the name of interactive methods. Modern pedagogical technologies, interactive methods, which are considered an integral, important part of the educational reform process, are unwittingly interested in the educational process. Experience shows that it effectively absorbs knowledge, which are modern interactive strategies. Because the students who fill the classrooms today are the sometimes delusional children who are driving a silent, innocent childhood gauntlet. Among them, there are not even students who look superficially at Education, looking forward to the end of the 45-minute course process.

Interactive method-serves to activate the acquisition of knowledge, develop personal qualities of students by increasing activity between students and the teacher in the educational process. The use of interactive techniques will help increase the effectiveness of the lesson.

The main criteria for interactive education are: the possibility of conducting informal discussions, freely stating and expressing educational material, creating opportunities for students to take initiatives, giving assignments to work as a small group, class team, and other techniques that have a special importance in improving the effectiveness of educational work. Currently, one of the main directions in the field of improving educational methods is the introduction of interactive educational and educational methods. All science teachers, including primary school teachers, are increasingly using interactive techniques in the course of their classes. As a result of the application of interactive methods, students' skills to independently think, analyze, draw conclusions, state their own opinion, be able to defend it on the basis of it, conduct healthy communication, discussion, debate develop and develop.

When organizing classes using interactive methods, due to interaction between the teacher and students, the effectiveness of the lesson increases, the new lesson is studied by the student through independent movement, reflection, discussion, independent to the goal set, the student tries to find answers in small groups with active participation in the lesson, that is, both thinks, evaluates, writes, speaks and listens, the most Having realized the content of the assignment at the core of interactive methods, students unwittingly enter the educational process with interest. Interactive strategies of mathematical education based on modern pedagogical technologies are able to ensure the relaxation, clarification of the educational process, the inclusion of a wide community, the transformation of the teacher into only a guidance supervisor, the freedom and commitment of teaching, and, most importantly, extreme curiosity and efficiency for students. Our task is to develop as easy, interesting, lush and at the same time effective ways to instill in the minds of students the system of mathematical data presented. The application of interactive strategies involuntarily turns the process of a compulsory mathematics lesson into a psychological game or competition, encouraging the above-mentioned passive students to also, albeit a little, but to express their thoughts to the general public, to actively participate, without being indifferent to the controversies in the classroom as a whole. Whereas the traditionally structured course requires students to only gain knowledge, the new model of mathematics education places critical, independent thinking training in increasing educational Amaras with knowledge at a higher level. In this case, during the lesson, great attention is paid to the conscious discipline taking the place of traditional, forced obedience in the relationship of the teacher and the student, for which it is necessary to instill in the student the qualification of critical, independent thinking. In this regard, it is important to take into account the following:

- 1) principles of approaches with a certain system that require that the teaching process in Mathematics be organized using modern pedagogical technologies;
- 2) advanced pedagogical ideas about the need to effectively apply pedagogical technologies to the system of continuous mathematics education;
- 3) activation of the teaching process as well as the theory of pedagogical technologies in continuing education;
- 4) theory of the development of critical thinking;
- 5) The Theory of positive development of personality;

In general, the highest developmental effect in teaching mathematics can be achieved if:

- when interactive teaching methods are used in the system of continuous mathematical education as a means of developing independent, critical thinking of students;
- if the process of applying pedagogical technologies in the system of continuous mathematical education is provided by the opportunities for the formation of solid interests in relation to the acquisition of mathematical knowledge in them, taking into account the real educational opportunities as accurately as possible;
- in the system of continuing education, the process of teaching mathematics is seen as a complex mental activity, which becomes complete only when the steps of calling, understanding and thinking in the template lesson are correctly implemented;
- if in the system of continuing education, the teaching of mathematical concepts with practical content is used as a means of implementing 3 main (educational, educational, developmental) goals.

To do this, it is advisable to carry out the following works:

- 1) pedagogical technologies in teaching mathematics to students determination of the educational-developmental role;
- 2) to determine the criterion for choosing interactive methods in the teaching of mathematics

to students, the principles of applying Vaus;

3) to determine the methods of using existing textbooks and teaching aids in the application of advanced pedagogical technologies in the system of continuous mathematical education;

4) development of educational and methodological, didactic dissemination materials intended for schools on the application of interactive methods in the process of teaching mathematics. The methods that are entering today's National Education - in the name of interactive methods-imply the goal of achieving results in a short period of time without exerting excessive mental and physical effort on the part of the student and teacher. For a short period of time, the transmission of certain theoretical knowledge to the student, in which skills, qualifications have been developed in the field of certain activities, the formation of spiritual qualities, as well as their control, as well as assessment require a high pedagogical skill and agility from the teacher.

The interactive lesson process should be organized in such a way that all students in the class are activated, that is, during the course of the lesson, training a certain part of its materials is studied independently by students (singly, in pairs or in groups), then this material is in the class every will be discussed in a way. Practical work is also done in this way. Let them realize that students are studying in the educational process, the teacher is helping them to study and learn. The teacher is also the organizer, leader, supervisor of the educational process. The student should feel free in the classroom and the educational activity should satisfy him emotionally, only then he will be able to freely express his thoughts. In addition, the teacher must be able to test the student's knowledge, determine his skills and qualifications, and of course put the right question so that he knows his personal opinion.

To activate students, the correct choice of methods used in the course of the lesson and the exact formulation of questions will pay off. To do this, it is necessary to carefully consider the path, method of achieving this goal, with a clear definition of the goal to be set for the lesson, the topic. This means that the teacher must be able to foresee what each interactive method he uses will give the student and organize the lesson correctly.

In doing so, it is necessary to comply with the following rules:

Rule 1: it is necessary to achieve the active participation of all students in the class in the technological process. To do this, it will be necessary to choose a topic that everyone will be able to participate in and a suitable method for it. Gamesham is chosen on this basis, if role-playing games are played, the game is repeated several times so that each student can divide everyone into roles.

Rule 2: in order to use interactive gaming technologies, it is necessary to pay attention to the issue of preparing students from the psychological side. Because not all students are ready to actively participate in the lesson, to enter into a role and freely express their opinion. Situations such as nesting, pinching, and usually fledging from the outside can occur. To prevent this, it will first be necessary to use small-scale, short-time exercises, stimulate activity and introduce turn-based participation rather than volunteering.

Rule 3: in fact, interactive methods are more effective when working with small groups. Therefore, it will be advisable to spend them in student classes of no more than 30 people. Because the quality of teaching can be inversely proportional to the number of students. It is better not to have too many students in the classroom to hear the opinion of each student, to attract each to the activity, to monitor the actions of each student. The room should also have enough width to move freely, so that the teacher can walk around when divided into small groups.

Rule 4: the classroom should also be prepared separately. For small groups, it is necessary to combine tables and partitions, to name and name them, to change places around, leaving enough passages for creative work. If it is necessary to work on the board and stage, the chairs are placed facing the board or half-facing, it is wrong for students to sit with their back on the board. All the

necessary equipment for the game and for the method is prepared in advance with the participation of students, if necessary by the teacher.

Rule 5: the essence of the method and the rules of the game must first be thoroughly explained and all conditions must be agreed in advance. For example, when working in a group, the tasks of the group, the form of publication of the results, each type of work and the time to be allocated, the evaluation criteria are published.

This means that each student must have a clear knowledge of his or her mission and be psychologically prepared to complete it. Another issue should be paid attention to individually, any feedback, patient hearing of the proposal, respect for each other and working with the community is also agreed and studied. Rule 6: it is necessary to pay attention to the issue of the distribution of tasks and roles to students, the separation of students into groups. If only students are placed at their disposal, the composition of the groups remains consistently the same, while only bolder, more active and curious students participate in the game, and shy, passive students are left out. Even in the group, some students are a constant leader, and the participation of some students is almost imperceptible. That is why the choice must be random and act. For example: taking tokens with turned backs to groups, they will be allocated by drawing, number, color, the roller will be able to be selected by writing into the envelope.

For example, the following:

- The method of stray chains is used to restore some sequence in the elementary grades. In this, the teacher puts a sequence regarding a topic, concept, algorithm separately and irregularly. Readers must construct a chain that is logically linked to irregularly located words. This method can be used both in a group of 4-6 people and work with the whole class.

For example from the 4th grade textbook-the rule of finding an unknown additive:

- To find an unknown additive, one must subtract a known additive from the sum, which is modified to: subtract a additive to find an unknown one must be known from the sum of the additive. Words are written on separate sheets of paper and placed on the display board in a concave position. Students restore order, or each group is given a set of words and the groups restore order.

- The method of discussion is used when looking for a way to solve a problem with students, for example: solving a problem, doing measurement work, finding a convenient method of solution, etc. The class can be divided into quarters and work in a group.

- Problematic questions create a problematic situation in the classroom, a problem applied by independent learners to achieve resolution. A problematic question and assignment is clearly said by the Teacher, written on the board, it is proposed to search for the solution in pairs. A military group response is heard and generalized to a single solution. The distribution of lesson time, the rules for organizing work are planned and recorded on the class board in advance, in agreement with students:

Mutual respect.

Right hand rule.

Take turns speaking.

In the course of the lesson, intelligent, creative thinking.

Activism.

Not to criticize other people's opinion.

Mastering new ideas.

Achieving the active performance of students of all classes in the course of the lesson. To achieve proof-telling, basing the presentation of small groups on the topic. Offering interesting ideas. Creative approach. Efficient operation.

- The method of division into small groups-it can be applied on the basis of different methods according to the experience, skill, creative approach of the teacher. When dividing into groups, an

attempt is made not to offend, humiliate the students of the class, to divide them into groups, without disagreement, from the point of view of aesthetic taste. For this purpose, on the basis of various games or for example: colored paper is used in different shapes, small size, pre-prepared cross-shapes (circles, triangles, rectangles, pentagons, etc.), taking into account the total number of students of the class. Ready-made color forms are distributed to readers (in this case, the different reader optionally chooses the shape of the color he wants). Based on the shapes or colors students choose, the most comfortable small group of students from a teacher's classroom with ease is the pair of students sitting in one Parta, or, a quartet of students in 2 consecutive Partas. Solving some problems-especially the use of the power of these small groups-frees the teacher from the obligation to prepare the class separately and to change places, pushing the Paras. If working in such an order is learned, it will not take too much time to divide the class into groups, to form groups.

One of the most effective ways to be invited to work in a group is to encourage questions and answers on the topic, and an even more effective method is to encourage the formation of an independent question on the topic mentioned. If groups are given the task of drawing up a question on the topic, drawing up an example and an issue and inviting them to a class, the student's attention to the lesson increases, his opinion Awakens, if it is also necessary to formulate a question and know the correct answer to it themselves(of course not all the time, the answer to

- The cluster method also helps students to create conditions for free, open thinking and a leisurely statement of personal thoughts on optional topics. This can be used in the process of training with students, organized individually or on a group basis.

The cluster method teaches students to identify connections between concepts, to remember all concepts related to the subject.

The word cluster means a link, a bundle. It is a method to identify concepts that students have learned after learning a subject in determining the concepts that students know about a subject. To implement the method, a key word or sentence is written in the middle of the board. Readers are invited to write on the board remembering all the words and vocabulary associated with this word. Attempts are made to have a lot of links, all words are written (until there is no last word left), errors are ignored, all readers are given a chance. It is advisable to start work from examples. For example, let's propose to assemble the main types of examples of being in the 3rd grade. After the students offer all the examples, the teacher demonstrates his option, and these works are compared.

The cluster method can refer to time units, equations, issue types, etc.

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