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## Interactive Methods in Elementary Mathematics Lessons and Their Description

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### Abstract

*We know that the science teaching system is becoming more and more modern. In particular, as a result of the acceleration, the outlook of primary school students is much broader than before. This article discusses interactive methods of teaching mathematics in primary school and their description.*

**Keywords:** *Interactive, mathematics, primary education, cluster, theoretical knowledge, pedagogical skills.*

### INTRODUCTION

One of the most important requirements for the organization of modern education high in a short time without spending excessive mental and physical effort to achieve results. Certain theoretical knowledge in a short time delivery to students, their skills in a particular activity, and building skills, as well as monitoring student performance, they Assess the level of knowledge, skills and competencies acquired by high pedagogical skills from the teacher and the learning process requires a new approach. Today, a number has developed countries have a great deal of experience in this area. The methods that form the basis are called interactive methods. It is an integral part of the education reform process modern pedagogical technologies, interactive methods in the educational process themselves they unknowingly become intrigued. Experience shows that effectively acquires knowledge with modern interactive strategies.

Because the students who fill the classrooms today are happy, innocent children they are sometimes imaginative children. There are even students who look forward to the end of the minute-long lesson process and look at education superficially. The interactive method is used by students and teachers in the learning process students' acquisition of knowledge by increasing the activity between activation serves to develop personal qualities. Interactive the use of techniques can help increase the effectiveness of the lesson. Interactive main criteria of education: informal discussion - discussion, reading the ability to freely express and express material, student initiative creating opportunities for demonstrations, working in small groups, class teams assignments and other methods of teaching has a special role in increasing the effectiveness of educational work. One of the main directions in improving teaching methods today is the introduction of interactive teaching and learning methods. All science teachers, including elementary school teachers more and more interactive methods in the classroom are using. Students' independent thinking as a result of the use of interactive methods, analyze, draw conclusions, express one's opinion,

based on it defense, healthy communication, discussion, debate skills formed and developed. Interactive means interaction between teacher and students

increases the effectiveness of the lesson, the student learns a new lesson independently, learns through reflection, debate, independently of the goal set the student actively participates in the lesson and tries to find answers in small groups, that is, thinks, evaluates, writes, speaks and listens, and most importantly, actively participates. Once students understand the content of interactive assignments, they will be able to engage in the learning process without their knowledge. Mathematics education based on modern pedagogical technologies interactive strategies to facilitate, identify, and broaden the learning process designed to cover the community, the teacher's only way - become a supervisor, free to teach, and commitment and, most importantly, great interest to students and can be effective. Our task is to present the mathematician make the information system as easy and fun as possible to instill in the minds of students, is multifaceted and at the same time effective. The use of interactive strategies makes the compulsory math lesson process involuntary turning it into a psychological game or competition, as mentioned above passive readers, albeit a little, but broad-minded in their conduct indifferent to public discourse, to class debates in general encourages active participation.

A traditional lesson requires students to learn only education in the new model of mathematics education, if any teaching critical, independent thinking is also important in increasing effectiveness will be placed. In this case, the teacher-student relationship during the lesson emphasis is placed on the need for conscious discipline to replace traditional, forced obedience focuses on the student's critical, independent thinking skills it is necessary to absorb. It is important to consider the following in this regard earns:

1) Modern pedagogical technologies in the process of teaching mathematics

had a certain system that required principles of approaches;

2) effective pedagogical technologies in the system of continuing mathematics education advanced pedagogical ideas about the need to apply;

3) activation of the teaching process and pedagogy in continuing education technology theory;

4) theory of development of critical thinking;

5) the theory of positive development of the person; In general, mathematics is one of the most effective developmental tools in teaching if available:

- Interactive methods of teaching in the system of continuing mathematics education a tool for developing students' independent, critical thinking used as

- The use of pedagogical technologies in the system of continuing mathematics education those who are taught the process are as clear about the real learning opportunities as possible in relation to the acquisition of mathematical knowledge in them provides opportunities for strong interest;

- The process of teaching mathematics in a system of continuing education is complex viewed as an activity, it is only a call to action, awareness, and that the stages of thinking are complete only when they are done correctly if considered; - Mathematician with practical content in the system of continuing education 3 basic concepts (educational, pedagogical, developmental) used as a means to an end.

To do this, it is advisable to do the following.

1) pedagogical technologies in teaching mathematics to students defining the educational-developmental role;

- 2) Criteria for choosing interactive methods in teaching mathematics to students and identify principles for their application;
- 3) advanced pedagogical technologies in the system of continuing mathematics education how to use existing textbooks and manuals determination;
- 4) on the use of interactive methods in the teaching of mathematics development of educational-methodical, didactic handouts for schools. In today's national pedagogy - In the name of interactive methods the incoming methods are more mental and physical than the student-teacher aim to achieve high results in a short time without spending effort implies Certain theoretical knowledge in a short time to convey to the student the skills and competencies in certain activities to do, to form spiritual qualities and at the same time to control them and pedagogical assessment from the teacher and requires agility.

The interactive lesson process should be organized in such a way that everyone in the class is present students need to be more active, that is, learning materials in the classroom a portion is studied independently by students (individually, in pairs, or in groups), followed by a comprehensive discussion in class. are given. Practical work is done in the same way. Students in the learning process that they are reading, and the teacher helps them to read and learn let them understand what they are giving. The teacher is the organizer, leader of the educational process, is also the controller. Student freedom in the classroom and learning activities it must satisfy him emotionally, so that he can express his thoughts can express freely. In addition, the teacher tests the student's knowledge, to determine his skills and abilities, of course, to know his personal opinion should be able to ask the right question.

Techniques used to engage students in the classroom making the right choices and asking the right questions can be very effective. To do this, you need to clearly define the purpose of the lesson and the topic, and carefully consider the way to achieve this goal. This means that the teacher must be able to anticipate what each interactive method will give to the student and organize the lesson correctly. The following rules must be followed: Rule 1: All students in the class are active in the technological process participation. All students are involved you will need to choose a topic and a suitable method. Games are also chosen on the basis that if a role-playing game is played, each student is assigned a role. The game is repeated several times to make it happen.

Rule 2: Encourage students to use interactive game technology psychological preparation should be considered. Because everyone the student is also free to take an active part in the lesson, to take on a role and to think not ready to report. Embarrassment, embarrassment, usually from the outside such as panic attacks. First to prevent this use small, short-term exercises to stimulate activity and voluntary participation will need to be introduced.

Rule 3: In fact, interactive methods are more common when working in small groups effective. That's why they have no more than 30 students. It is advisable to hold classes. Because the quality of teaching may be inversely proportional to the number of students. Every student listening to their opinions, engaging everyone in activities, the actions of each student preferably not too many students in the classroom to observe. There should be enough space in the room for the student to move around in small groups.

Rule 4: The classroom should also be prepared separately. For small groups combining tables and desks, numbering and naming them, place around you just have to be more discriminating with the help you render toward other people. Board and if you need to work on stage, the chairs are facing the board or half-facing it is considered incorrect for students to sit back on the board. All the equipment needed for the game and the method is pre-trained will be prepared with the participation of students, if necessary.

Rule 5: The essence of the method and the rules of the game are first thoroughly

explain and all conditions must be agreed in advance. For example when working in a group, group tasks, form of announcing results, each job type and time allotted, evaluation criteria will be announced. So, every student must be clear about his or her role and psychologically prepared to perform it. It is also important to pay attention to the fact that any opinion, feedback, patience, mutual respect and solidarity. Will also be agreed upon and studied.

Rule 6: Assign tasks and roles to students, students grouping should be considered carefully. If only students if left to chance, the composition of the teams will always be the same, and from the game only the bolder, more active and curious students participate and are shy, passive students will be left out. In the group, some students are regular leaders. some students' participation is almost imperceptible. That's why it's a choice should be random and move. For example: groups are turned their backs tokens are taken and sorted by drawing, number, color, roller can be selected by writing in an envelope. For example: The "lost chains" method is a sequence in elementary school used to restore. In this case, the teacher is concerned with a topic, a concept, an algorithm puts the sequence separately and randomly. The students are out of order they must form a chain that is logically connected to the words in which they are located. This method can be used in groups of 4-6 people or with the whole class. For example, in the 4th grade textbook, the rule for finding an unknown joiner is: —Unknown to find a join, you have to subtract a certain join from the sum, is changed as follows: Find the subtraction of the join from the sum for the unknown. The words are written on separate sheets of paper and exhibited students restore order, or each the group is given a set of words and restores the order of the groups. — Debate is a way to solve a problem with students in a discussion used in search, for example: problem solving, measurement, finding a convenient method of solution, and so on. Divide the class into quarters and can work in a group.

—Problem Questions Creating a problem situation in the classroom is a problem

used by independent learners to solve. Problematic the question and assignment are clearly stated by the teacher, written on the board, the solution pair search is recommended. Each group responds and generalized to a single solution.

The distribution of class time, the rules of organization of work are in advance students will be planned and written on the board:

Mutual respect. Right hand rule. It's your turn to speak. Independent, creative thinking in the classroom. Activity is not criticizing the opinions of others. Learn new ideas. Encourage all students in the class to be active in the classroom. Substantiate by presenting small groups on the topic to achieve. Suggest interesting ideas. Creative approach. Effective performance.

—The method of dividing into small groups is a teacher's experience, skill, creativity can be applied in a variety of ways, depending on the approach. To groups not to offend or discriminate against students in the classroom, to give them an aesthetic taste in terms of trying to divide into groups without disagreement. For this purpose based on different games or for example: in different shapes from colored paper, small in advance, taking into account the total number of students in the class prepared cross-section (circle, triangle, rectangle, pentagon and etc.) are used. Colorful shapes for students distributed (in this case, different students voluntarily choose the color of their choice selects the form). Based on the shapes or colors that students choose the teacher easily divides the students into groups.

For example:

White color 1st group

Green color 2 stgroup

Blue Group 3st group

Brown color 4 st group

Yellow 5st group

Red color 6th group

The most comfortable small group in the classroom is the students sitting at the same desk a pair or a quartet of students in 2 desks in a row. Some problems the solution is to use the power of these small groups in particular to separate the class the teacher from the obligation to prepare and move the desks and change places releases. If you learn to work in this order, divide the class into groups, no extra time is spent on forming groups. One of the most effective ways you can offer to work in a team one is a more effective way of encouraging questions and answers on a topic and encourage independent questioning on the topic. In groups the task of asking a question on the topic, creating an example and a problem and inviting it to the class if given, the student's attention to the lesson will increase, and the student's mind will be aroused if a question is asked and if they need to know the right answer, of course (everyone) not the time, the reader may not know the answer to some problematic questions) children will be more attentive in class, analyzing the quality of the questions asked learns. —The cluster method is also free and open to students on any topic help create the conditions for thinking and expressing personal opinions will give. Organize with students individually or in groups can be used during training sessions. —Cluster method to identify connections between students' concepts, related to the topic teaches to remember all concepts. —The word cluster is a bunch, a bunch means. This method allows students to know about a topic students after studying a topic in defining concepts identify the concepts learned. To implement the method a key word or phrase is written in the middle of the board. With that word to the students

you will be asked to write all the related words and phrases on the board. Try to have as many links as possible, all words (last word) until), errors are ignored, all students have a chance is given. It is advisable to start with examples. For example in 3rd grade. Let's suggest a collection of basic examples of being. All students after offering examples, the teacher demonstrates his or her version, and that cases are compared.

Teacher option:

—Cluster method —Units of time, —Equations, —Types of problems and may belong to others.

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