

## USING INTERACTIVE METHODS IN ELEMENTARY SCHOOL MATH LESSONS

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**Annotation:** This article explores the use of interactive methods in teaching mathematics at the primary school level and emphasizes their importance in the learning process. It examines how these methods can be adapted to different grade levels and how they contribute to developing students' logical thinking, independence, and interest in the subject. The article also provides recommendations for organizing engaging and effective lessons based on modern pedagogical approaches.

**Keywords:** Interactive methods, mathematics, primary education, student engagement, learning process, logical thinking, arithmetic operations, problem-solving, game-based learning, didactic materials, cognitive development, collaborative learning, activity-based learning, modern pedagogy, visual aids, creativity, independent learning

Today, the use of interactive methods in teaching mathematics in primary education is becoming important. Mathematics is not only about numbers and actions, but also logical thinking, a systematic approach and the ability to find the right solutions in problematic situations. Interactive methods increase students' interest in the lesson, encourage them to be active, and teach independent thinking. During the lesson, children act not only as listeners, but also as active participants, expressing their opinions and debating. This, in turn, improves the quality and effectiveness of education.

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For example, performing math tasks in groups, organizing competitive games, and solving problem situations help students not only consolidate their knowledge, but also develop communication skills, learn how to exchange opinions, and listen to others. In addition, another important aspect of interactive methods is that they allow you to take into account the individual characteristics of each student. Each child thinks in his own way, learns the material in different ways - someone perceives better by ear, someone through visual perception, and someone through practical activity. Interactive methods take this diversity into account, ensuring that each student participates in a way that is appropriate for them. Therefore, the use of such methods in

elementary school math lessons promotes students' interest in learning, asking questions, conducting experiments, and discussing tasks. This helps them to develop as active and independent individuals not only in the classroom, but also in life.

Especially in the modern digital age, interactive methods, combined with new technologies, open up even wider possibilities. For example, interactive whiteboards, online testing platforms, and animated math games are dramatically changing students' attitudes toward the subject. With the help of these tools, mathematical concepts are presented vividly, clearly and vividly. These tools allow you to monitor the level of knowledge of students, identify their mistakes and carry out corrective work with an individual approach.

The process of learning mathematics in elementary school should help children to perceive the world around them, form numerical representations and solve real-life problems. From this point of view, interactive methods are considered not only as a means of conducting an interesting lesson, but also as a powerful pedagogical tool that provides solid knowledge. For example, solving examples through outdoor games, finding cards with numbers hidden in the classroom, and completing appropriate tasks develops children's resourcefulness, quick thinking, and a spirit of competition and cooperation. The combination of competitiveness and teamwork is especially important for the formation of social skills of primary school students.

Creating problematic situations in a math lesson is one of the most effective forms of an interactive approach. For example, the task: "The boy bought 3 apples and 2 bananas, but on the way to the checkout one banana fell — how many fruits does he have left?" — encourages the child not only to count, but also to analyze, make assumptions, and imagine a real-life situation. This develops the student's logical thinking.

Also, learning mathematical concepts through movement, a kinesthetic approach, is especially effective for younger children. For example, children themselves participate in the formation of numbers, using various shapes on the table to study geometric shapes or perform tasks related to numbers using movements. In this process, children gain knowledge through movement, body and emotions, which forms strong signals in the brain and promotes better memorization of information. When using interactive methods, it is important that the teacher provides students with the opportunity to "discover" knowledge for themselves. That is, instead of giving them a ready-made formula, encourage them to find it on their own, observe the relationship between the numbers - while the teacher plays the role of guiding, inspiring and helping. Such methods transform the student from a passive listener into an active participant. As a result, the student appreciates the knowledge that he himself has discovered, remembers it better and can apply it in practice.

Another effective area is mathematical project activity. With the help of small projects in the classroom, children begin to understand how to apply mathematics in real life. For example, the Odnoklassniki Birthdays project — compiling statistics, plotting, and analyzing the most popular and rare dates — helps not only work with numbers, but also develop logical thinking skills, information analysis, and conclusions.

Interactive methods are often considered to be just interesting games or physical activity. In fact, these methods are aimed at activating inner thinking, organizing communication that leads to deep understanding, developing dialogues, discussions and versatility. If the task in the lesson is related to the real life of the student, if it arouses his personal interest, the effectiveness of the lesson doubles.

In general, teaching mathematics in elementary school using interactive methods arouses interest in the subject, promotes the formation of a logically thinking, active and social personality. In this process, the teacher acts not just as a source of knowledge, but as a spiritual and intellectual support, guiding rather than imposing.

Now let's take a closer look at how to use interactive methods at each stage of elementary school.:  
1st class:

At this stage, students learn numbers, basic arithmetic operations, and geometric shapes. Lessons should be fun and active.

- Brainstorming: Students are given numbers, and they have to come up with possible operations with them. For example: "What can be done with the numbers 3 and 4?" It helps to understand the relationship between the numbers.
- Game lessons: For example, "Math Games" for learning addition and subtraction.
- Familiarization with geometric shapes: Children receive shapes (square, circle, triangle, etc.), participate in shape recognition games, which speeds up memorization.

2nd grade:

Students learn addition, subtraction, multiplication and division.

- Group work: Students are divided into groups. One group solves addition and subtraction problems, the other group solves multiplication and division problems. Then they present their solutions.
- Math games: For example, "Mathematical Dominoes" to consolidate arithmetic.
- Mathematical dialogue: A discussion of tasks between students, for example: "There were 4 apples, we added 3. How many did it become?" — develops thinking.

3rd grade:

The lessons are aimed at developing logical thinking.

- Problematic situations: For example: "There are 12 books in the house, 5 have been read. How much is left?"
- Role—playing game: One student is a seller, the other is a buyer, they solve mathematical problems through dialogue.
- Math project: For example, organizing a school event with a budget calculation.

4th grade:

At this stage, analytical thinking develops, and students face difficult tasks.

- Group discussion: Students divide into groups, solve problems and discuss their solutions.
- Math flashcards: Each student is given a card with a task to solve.
- Independent work: Students solve complex problems and present their solutions, developing responsibility and critical thinking.

Conclusion: The use of interactive methods in teaching mathematics in elementary schools not only enlivens lessons, but also significantly increases the level of thinking, interest and learning among students. With proper planning on the part of the teacher, each lesson becomes not only productive, but also memorable. Mathematics is becoming not a difficult subject for children, but an exciting activity that develops thinking and resourcefulness.

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