DEVELOPMENT OF INTELLECTUAL ABILITIES OF STUDENTS THROUGH MATHEMATICS IN PRIMARY GRADES

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Abstract: This article covers the issues of developing students' intellectual abilities by teaching mathematics in elementary grades. Mathematics plays an important role in forming students' logical thinking, problem solving and analytical skills. The article examines methods of increasing students' thinking potential with the help of various didactic games, interactive methods, problem situations and creative tasks. Recommendations aimed at improving mathematics education in elementary grades, developing students' problem analysis, drawing results, and creative approaches are given.
Key words: mathematics, elementary school, intellectual ability, logical thinking, didactic games, interactive methods, problem situations, creative assignments.

Primary education is the main stage of intellectual development of students. Teaching mathematics is especially important in developing students' logical thinking skills and problem solving skills. Through mathematics education, students learn analytical thinking, gain experience in applying theoretical knowledge to practice, and develop a creative approach to solving various problems.

This article talks about how to develop the intellectual abilities of elementary school students through the teaching of mathematics. Various methods and pedagogical approaches aimed at improving the mathematical knowledge of elementary school students and developing their thinking skills are considered.

Influence of mathematics on intellectual development

Mathematics plays an important role in logical and intellectual development of children. Below are the aspects of mathematics that form the main intellectual skills:

1. Development of logical thinking: By solving mathematical problems, students learn to analyze different situations and draw logical conclusions. This enables them to solve various problems through a systematic and precise approach.
2. Problem Solving Skills: Students develop their problem solving skills by solving various problems, equations and examples in mathematics. This process teaches them how to approach complex situations in life creatively.
3. Formation of analytical thinking: Mastering mathematical concepts and applying them to real situations develops analytical skills in students. This helps them to analyze the facts, find connections and make the right decisions.
4. Creative approach: In mathematics, it is possible to achieve the same result in different ways. This teaches students to use creative and unusual approaches to solving problems. Students develop creative thinking skills by solving examples in different ways.

Methods of developing intellectual abilities in mathematics classes

1. Teaching using didactic games

Game activities are very effective in developing thinking and problem-solving skills of elementary school students. Making mathematics lessons interesting and lively through didactic games encourages students to delve deeper into the subject. For example:

o The game "Pyramid of numbers" develops students' calculation skills and increases their logical thinking.

o Using "mathematical quests", presenting students with problem solving in the form of an adventure, develops their creative and analytical approach.

2. Problem teaching methods
Problem-based teaching technology encourages students to increase their thinking activity and apply the knowledge they have learned in practice. In lessons, the teacher presents students with problem situations for which the solution is not known and directs them to find a solution independently. For example, by giving students different problems and directing them to independently analyze and find a solution, they develop their mathematical skills.
3. Interactive methods
By organizing mathematics lessons in an interactive way, students can be encouraged to actively participate in the learning process. Interactive methods include:
o "Question-answer" methods encourage students to actively participate in the thinking process, to search for answers to problematic questions.
o "Reporting" technique develops students' ability to express and analyze their point of view.
Modern technologies increase students' interest in solving mathematical problems. Bringing lessons to life through interactive presentations, mathematical programs and mobile applications positively affects students' independent and creative thinking. For example, solving mathematical problems visually with the help of an interactive board helps to strengthen the knowledge of students.

1. Work in small groups

Working in small groups of students develops the skills of collective communication and cooperative problem solving. By working in a group, students exchange ideas with each other, try to find different solutions, and learn to rationalize their ideas. This method is important in developing their analytical skills.

Mathematics education in primary grades plays a very important role in the development of students' intellectual abilities. Mathematical science should be used effectively to achieve goals such as the development of logical thinking, the formation of problem-solving skills, and the improvement of analytical skills. Through interactive methods, didactic games, technologies and problem situations, lively and effective conducting of lessons develops students' mathematical abilities and directs them to be successful in the future.

Students' intellectual abilities can be developed through the use of creative and problem-based approaches, cooperation and technological tools in mathematics lessons. These methods create a solid foundation for students' future learning processes and serve to further develop their thinking skills.

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