

# THE ESSENCE OF TEACHING PRIMARY SCHOOL PUPILS TO LOGICAL THINKING IN THE PROCESS OF MATHEMATICS.

**Asilova Sanobar Xatamboevna**

Namangan State University Theory and history of pedagogy  
direction II-year master's degree.

**Annotation:** One of the most pressing issues today is the formation of an understanding of logical thinking in primary school pupils. The article provides feedback on the possibility of imparting logical knowledge to an elementary school pupil in the course of mathematics science clubs, and ways to shape pupils' logical thinking.

**Keywords:** school, education, circle, teacher, pedagogical technology, idea, consciousness, worldview, logic, encouragement, development.

**"If the teaching methods in the school do not change, the quality of the education, the content and the environment will not change."**

*[Sh. Mirziyoyev. From a video conference to discuss issues of improving the education system, accelerating the development of science. 30.10.2020]*

The great creative work that is taking place in our country today, the laws and decisions adopted in the field of education, the goals set in our national program, encourage today's teachers to work harder and do more research. The future of our country depends on our children, who are educated in schools nowadays, to grow up to be mature and well-rounded people. Fulfilling this task requires modern teachers, especially primary school teachers, to constantly, improve their skills, to understand the essence of consistent methods of advanced pedagogical technologies and to use them skillfully in their lessons. One of the most important tasks today is the active use of advanced pedagogical technologies in the educational process, increasing the effectiveness of education, analysis and implementation. It is important to develop pupils' horizons, minds, and

worldviews, to make them free-thinking, free participants. By teaching pupils to think logically in the classroom in the elementary grades, the teacher begins to nurture a free-thinking individual. Logical reasoning expands a pupil's worldview. Learns to express and justify their opinions. If a pupil has an interest in science, he or she will be willing to do each assignment in the classroom, even if it requires a logical approach. Therefore, the teacher must first be able to instill in pupils an interest in science. To do this, teachers are encouraged to organize each lesson using individual preparation, visual aids, and innovative technologies. Being creative and avoiding monotony increases a pupil's interest in science. The greatest achievement of a teacher is to develop and develop the abilities and talents in pupils from the elementary school. Nowadays, one of the main tasks of teaching mathematics in primary school is to develop thinking skills and to form the skills and competencies necessary for pupils to apply the acquired knowledge in conscious life activities. In the learning process, the main task of the teacher is to teach pupils to find solutions to problems by using simple mathematical methods to solve mathematical problems. A master educator is one who teaches pupils to work independently, mentally, practically, and logically in teaching mathematics. This is because the main task of teaching mathematics in primary school is to develop pupils' abilities and interests based on the formation of pupils' intellectual thinking. Solving problem-solving problems is important for developing pupils' thinking skills. For example, if we want pupils to have a correct understanding of addition, they need to take steps to find the sum in the classroom each time. In this way, the pupil develops the ability to use mathematical operations correctly when each operation, such as division, multiplication, and division, is performed independently in the classroom. Problem solving is an important part of teaching mathematics. Problem-solving develops pupils' thinking skills. Solving problems independently in the primary grades stimulates pupils' interest in science. It can be more fun if it is a logical task. For example, in Grade 3 math, pupils were given the following assignment.

**Task 1. Using arithmetic operations, make the following from 3 to 5 numbers:**

**a) 2 b) 4 c) 11 numbers**

To complete this task, pupils begin to explore independently. The process of logical thinking begins. There will be a variety of answers and new ideas in the classroom. Each pupil tries to find a clear answer based on his / her field of thinking, level of knowledge, speed, and justify the answers he / she finds. An environment is created for pupils to listen to each other, respect each other, and strive to understand each other. That is, there will be healthy competition. It can be considered as a method of education.

**The answer is:**

**a)  $5 + 5 : 5 = 2$**

**b)  $5 - 5 : 5 = 4$**

**c)  $55 : 5 = 11$**

**Assignment 2. Using arithmetic operations, make 31 out of 6 3 numbers.**

This task is also designed to help pupils think logically and find the right answer. Assignment 2 is also very interesting for pupils.

**The answer to Task 2 is as follows:**

**1)  $(3 \times 3 \times 3) = 27$**

**2)  $27 + 3 = 30$**

**3)  $3 : 3 = 1$**

**4)  $30 + 1 = 31$**

**Task 3. Using arithmetic operations, make 5 numbers from 3 to 30.**

**The answer to Task 3 is as follows:**

**1)  $3 + 3 + 3 = 9$**

**2)  $9 \times 3 = 27$**

**3)  $27 + 3 = 30$**

**Assignment 4. Find a two-digit number such that multiply it by 7 and subtract 1 from the result to get 90. What number is this?**

**The answer to Task 4 is as follows:**

$$1) 90+1=91$$

**2)  $91:7=13$  that is, the number to be found is 13.**

Logical tasks activate the process of teaching mathematics. Develops mental activity, mathematical memory, correct thinking, coherence and correct and reverse thinking in pupils.

In conclusion, the development of logical thinking activities in primary school pupils in the process of mathematics lessons allows pupils to make decisions, compare, draw conclusions, justify their opinions on each issue, and teaches free thinking. The role of the teacher is to stimulate pupils' logical thinking in the process of teaching mathematics. The process of activating the teaching of mathematics, teaching pupils to think logically, requires great skill and responsibility from the teacher. This is because there is no set standard for teaching logical thinking in mathematics. For this reason, the teacher develops the mental activity of pupils during the lesson, depending on their interests, abilities and knowledge, the level of acceptance. We have talked about how pupils can think logically through a single math lesson. By teaching pupils to think logically from the classroom, we can achieve positive results in education in the future. Young people who think in a healthy way, who can express themselves freely, are, of course, our future.

References.

1. Karimov I.A. "High spirituality is an invincible force" Tashkent "Spirituality" 2011.
2. Jumayev E.E. "Theory and methods of elementary mathematics" - Tashkent. Arnoprint, 2005.
3. Jumayev M.E. "Methods of teaching mathematics in primary school" - Tashkent. IlmZiyo 2003.
4. Bikbayeva N.U, Yangiboyeva E.Ya. "Third grade mathematics" - Tashkent. The Teacher 2020.