

## **Development of Logical Thinking in Primary Grades**

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**Annotation:** This article discusses the use of digital technologies in the development of logical thinking in elementary grades. To develop the worldview and logical thinking of primary school students, it was thought about working with different types of assignments.

**Keywords:** Logical thinking, digital technology, logic, logicity, logical assignment, primary education.

News, new technologies, and modern educational technologies are increasingly appearing in various forms in the modern day-to-day modernizing and developing era. It is no exaggeration to say that computers, phones, laptops and similar gadgets have found their place in almost all regions of the world. It was at this time that these items found their place for schoolchildren, teachers, university students and even housewives and other professions. Books and textbooks are also appearing in electronic formats. It is not a secret to anyone that in this era, elementary school students often spend their time with such items. If we speed up textbooks and educational tasks using digital technologies of this kind, we would save students from the quagmire of ignorance. Therefore, if we present each task and information to the students in an interesting way, I think that the result will not be bad.

Digital technology, as it is known, includes everything related to electronic computing and data transformation: gadgets, electronic devices, technologies, programs. Compared to analog technologies, digital technologies are more suitable for storing and transmitting large amounts of data and provide high-speed computing. In this case, the information is transmitted as clearly as possible, without distortion. The main disadvantages include high energy consumption and negative impact on the climate

Logic tasks are puzzles aimed at developing the student's logical thinking. During the performance of these tasks, the student develops quickness, development of brain activity, responsiveness, and quick exit from difficult situations. When logical tasks are created for primary school students, they should have the following features:

- the logical assignment should be suitable for the child's age;
- based on the principle from simple to complex;
- it is desirable that the pictures shown in the task should be chosen according to the child's age, that the colors chosen should be bright and attract the child's attention.

It is also convenient to deliver logical assignments to the student digitally. When completing logical tasks, delivering it to the student in the form of an application, in the form of a game, and collecting incentive points for the student after passing each stage will increase the student's interest in this game. It will also be very interesting to give logical tasks in the form of the game "Math" played through the Telegram messenger. In this case, this game is played in the telegram

group of the school team, and the students continue to play it. It will be seen who is collecting what points. This, in turn, creates a desire in the student to win, to collect more points than everyone else, to show himself, and the game continues. During the game, the student's logical thinking accelerates, the student's interest in this subject increases. Both game activities and teaching activities are performed together.

Solving examples and problems is also good for developing logical thinking. Mathematical tasks, problems and examples strengthen the child's memory, sharpen the mind and increase the speed of thinking. Mathematical tasks also have logic and help to strengthen the student's knowledge. Logical thinking is developed by tasks aimed at sharpening any mind, requiring thinking and thinking, drawing conclusions. For example, reading fairy tales and stories, memorizing poetry, answering questions, learning a language, etc.

**Conclusions and results.** Thought is considered not only a product of human mental activity, but also a high form of intelligence and conscious behavior. In the process of thinking, thoughts, ideas, hypotheses arise in a person, and they appear in the mind in the form of thoughts, conclusions, judgments. Thinking is connected with the environment through intuition, perception, and imagination. There are basically two types of thinking:

1. Clear thinking. There are two types of clear thinking:
  - a) Observation, feeling.
  - b) Understanding the connection between the object and the module based on the acquired knowledge;
2. Abstract thinking. Analytical thinking also appears in its place in two forms:
  - a) Analytical thinking.
  - b) Logical thinking.

Logical thinking is a product of a person's mind, thoughts, and this form of thinking requires only its cultivation and development. According to scientists, there are 16 million neurons in the human brain, and only 30% of them are used during a person's life. Based on this, it can be concluded that the human brain still has many openings. and its development requires more mental activity. For example, reading a book, memorizing a poem, thinking, finding an answer to a riddle, working on an example, solving problematic situations, working on a problem, etc. Figurative thinking is at the top of the primary school age and retention of information in the memory of students requires working with this type of information. In the previous period, teachers were asked to read a fairy tale, explain its content, answer questions with students and develop their logical thinking process. But now the development of science and technology has increased, and every classroom has been equipped with devices such as modern televisions, electronic devices, graphic organizers, and modern loudspeakers. This serves for the further development of education, increasing its quality and efficiency. The use of such devices in the classroom for useful purposes creates a foundation for students to become modern students in the modern world. It is not for nothing that computer classes are taught in schools starting from the 1st grade in order to teach students how to use electronic devices and computers correctly.

**Conclusions and recommendations.** The development of logical thinking in primary school students is an important process, which leads to the development of a scientific worldview and leads the student to moral and spiritual maturity. For this, qualities such as patience, skill, ability, communicativeness, creativity, demandingness are required from the teacher. No matter how high a teacher's knowledge is, it is a bit more difficult to interest students in science in the modern world. Because students spend their free time using gadgets instead of reading books. At this point, digital technologies, game lessons, electronic and interesting logical assignments will help us as the most important helpers. Using such assignments requires students to learn through play.

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