THE MAIN DIRECTIONS OF DEVELOPING THE LOGICAL THINKING OF FUTURE ELEMENTARY SCHOOL TEACHERS (IN MATHEMATICS LESSONS)

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Abstract. *This article discusses the main methodology of developing the logical thinking of future primary school teachers. This process is considered as an example of mathematics lessons.*
Keywords: *future primary school teachers, logical reasoning, mathematics lessons, method, tool.*

INTRODUCTION

At the present time, all conditions are being created for the continuous development of general secondary education as well as all areas of education in our Republic. Including the reforms carried out by our government in the field of education, a number of normative documents and decisions are being adopted, a number of measures are being taken to raise the quality of teaching in schools to a new level. In particular, special attention is paid to teaching in primary education, training of future primary school teachers as qualified and mature personnel based on the requirements of the times is one of the urgent problems of today.

MATERIALS AND METHODS

The logical thinking skills of future elementary school students are clearly demonstrated in written lessons. The logical thinking process has the following characteristics:

- logical thinking begins with the process of asking questions and solving problems;
- to create an atmosphere of logical thinking, it should provide clear arguments for students.

S.S. Gulomov said that it is possible to observe thinking during the writing process and it also creates convenience for the teacher. A student who writes is always active. He always thinks independently and uses all the knowledge he has. The student is able to provide sufficient reliable evidence to strengthen his opinion. In addition, it will have a social character in terms of its nature. Because the person writing the letter is writing for the reader. The most valuable thing for a student is the teacher's interest in his work and respect for him, he has the opportunity to share his thoughts with classmates, other teachers, parents and even strangers. is that That is why the topics of the written works have a certain consistency, and it is necessary to create an opportunity to consistently develop logical thinking in students. [5]

RESULTS AND DISCUSSION

It is known that the process of primary education is a very complicated process. Organizing this process on the basis of current requirements, that is, ensuring continuity in the continuous education system, requires great responsibility, effort, knowledge and potential from primary school teachers. We believe that a modern primary school teacher should have the following qualities:

- Loving the child
- To have extensive worldly knowledge
- A psychologist, a real pedagogue

- Knowledgeable in science teaching methodology
- Modern information technology library
- Knows foreign languages
- It is armed with modern teaching aids and visual aids
- Aware of educational news and decisions
- Ready to use international educational programs
- Aware of modern teaching requirements...

The student should be able to see the owner of all professions in the teacher. In his care - a doctor, in his wisdom - a teacher, in his frugality - an accountant, in his hard work - a farmer, in his organization - a military serviceman, in building the foundation of knowledge - a builder, in his search for a path to mature knowledge - an inventor, in his creativity - a tailor, etc. The role of the primary school teacher is important in determining which field and profession the student will take up in the future. Grades 1-4 are the foundation of the knowledge that a student can acquire, as well as 75% of the knowledge that should be acquired throughout his life. During this period, students will acquire elementary knowledge about all worldly and partially religious knowledge.

In the educational process organized with the help of innovative technologies, the student's logical thinking skills are formed in the following stages:

- arousing students' interest and passion for learning;
- to give them the opportunity to understand the acquired knowledge;
- encourage observation.

The process of logical thinking in future elementary school teachers begins at the stage when they have a tendency to think independently. In the course of the study, students become interested in the presented knowledge, and specific questions are asked to them to visualize the situation. In the second stage, students begin to understand the essence of their acquired knowledge. In this process, students are rewarded for their achievements. As a result, their search qualities begin to unravel. In the third stage, students learn to generalize, compare, evaluate events, apply the knowledge they have acquired in new situations, observe the information obtained, participate in discussions and defend their opinions. Skills begin to form. The first stage is important for the creative observation of elementary school students. During this period, the desire of students to acquire new knowledge and achieve their goals is strong.

Several types of logical thinking activities are performed at this stage. Pupils of junior school age take an active part in recalling what they know about a certain subject. This encourages them to analyze their knowledge and think about the studied topic.

New information presented to students in the course of learning is connected with the knowledge they have acquired and forms a source of logical thinking. As a result, students' imaginations of knowledge reserve will expand. [4]

The second goal of the stage of creating a tendency for logical thinking is to increase students' interest in quickly understanding the presented information. Because the process of forming students' logical thinking skills requires a unique pedagogical activity.

The formation of logical thinking skills gives the student the following opportunities:

- students' thinking process is accelerated;
- students begin to set specific goals and look for ways to achieve them;
- students begin to have the ability to actively communicate with each other;
- to increase students' interest in learning and mastering new information;

- students' activity in the educational process;

- the enthusiasm of the students to listen and observe the different ideas that appear among them increases;

-students should express their opinions boldly;

- students can process the acquired knowledge and concepts and use it to express their opinion.

It is possible to achieve the expected result from working in a group with students in the formation of logical thinking. It increases their ability to communicate, think, express independent opinion and support each other. As a result, they become more active and positive. In order to form logical thinking in students, it is necessary to establish a joint, lively and business-like dialogue between them and teachers. In order to develop students' ability to think logically, they need to develop creative thinking.

In this place, we can quote the thoughts of the German scientist M. Mauermann: Creative thinking is the basis of thinking for a person, a natural way to interact with ideas and information, it is used in classroom and extracurricular processes. He showed that it is an activity that happens all at once, and it allows the student to strictly control the information. In this process, the student may exaggerate the information, revise it, adapt it to himself or not accept it at all. When students have questions such as, "How do I use this knowledge?", "What is the balance between this knowledge and my skills?", "Is this information useful for me?", "My attitude to information" how?" "Is this information necessary for me, what is its importance?" only when they find answers to such questions, logical thinking skills are effectively formed in them" [3]

CONCLUSION

It is clear from the above points that the factors affecting the formation of logical thinking have a holistic view. Knowing the factors that affect the formation of logical thinking in mathematics classes and being able to evaluate the level of their influence requires the teacher to be creative and have special competencies. The criteria for developing logical thinking in mathematics lessons are as follows:

- independence of thinking;

- the speed and consistency of learning materials and manuals;

- quick thinking of non-standard assignments;

-critical thinking;

To summarize: the development of logical thinking and the improvement and formation of this process is considered an important factor for today. If this ability is developed and formed in every student, it will be proven that our students will be more talented and knowledgeable.

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