

**PEDAGOGICAL BASIS FOR DEVELOPING LOGICAL THINKING IN  
NATIVE LANGUAGE LESSONS OF PRIMARY GRADE STUDENTS**

**O‘ralova Muxlisa Ilhom qizi**

*Termez State Pedagogical Institute,*

*Master's student in the field of Theory and Methodology of Education*

*(primary education)*

**ARTICLE  
INFORMATION**

**ANNOTATION:**

**ARTICLE HISTORY:**

*Received: 11.06.2026*

*Revised: 12.06.2026*

*Accepted: 13.06.2026*

**KEYWORDS:**

*Logical thinking, primary school, native language, pedagogical methods, psychological foundations, game technologies, interactive methods, assessment criteria, discussion, problem-based learning.*

*This article examines the pedagogical and psychological foundations of developing logical thinking in primary school students in native language lessons. At the same time, it is emphasized that teachers, based on the age characteristics of students, should definitely use them in the process of educational activities to further teach them logical thinking. In particular, permission, game technologies, methods of working in groups and pairs, logical diversity. Special attention is also paid to the use of interactive methods to involve students in independent thinking. The article also provides detailed information about the problem type. The student will get acquainted with the methodology for assessing the development of logical thinking, its pedagogical and psychological aspects, and the tasks of the teacher in developing students' thinking.*

**INTRODUCTION.** Primary school is the most important period of study. In this process, students not only gain knowledge, but also develop skills such as critical thinking and reasoning. Teaching natural language is one of the best ways to develop children's thinking skills. Because it teaches students how to express their thoughts clearly and effectively in their own language, understand the relationship between ideas, and critically analyze them. According to Professor G. Ernazarov, the development of logical thinking is formed in accordance with the age characteristics and psychological states of students. Primary school students tend to form their thoughts mainly through descriptive and concrete examples. Therefore, in directing them to logical thinking, the teacher should explain abstract concepts in simple, easy-to-understand ways. Ernazarov noted that didactic games, interactive methods, and the creation of problem situations are effective tools in developing logical thinking. Each topic taught to students is interconnected, which serves to activate their thinking processes such as analysis, comparison, and generalization. At the same time,

Ernazarov emphasizes the importance of assessing children's thinking ability when they express their thoughts coherently and logically, correctly identify cause-and-effect relationships, and provide clear justifications in their explanations. In his opinion, the process of forming logical thinking in primary school students should be carried out in stages, and methods appropriate to each of their age stages should be selected.

In this process, it is important to apply and study pedagogical and psychological foundations. Pedagogical foundations include:

- Problem setting: The teacher poses problems or questions to students during the lesson, stimulating their thinking.
- Encouraging students to think independently: students are taught ways to explain and justify their answers.
- Group and pair work methods: allow students to express their own thoughts and evaluate the opinions of others.
- Use interactive methods: games, practical projects, and puzzles make learning interesting and engaging.

**METHODOLOGY.** In psychological foundations, age-related characteristics should be taken into account when developing students' critical thinking skills. Since it is difficult for elementary school students to understand abstract concepts, teachers should provide explanations using concrete examples and diagrams. According to Vygotsky's theory, a student's knowledge and experience are closely related to his level of development. Therefore, the teacher should know the student's level of development and give him appropriate tasks. Psychological foundations include:

- Strategies for improving critical thinking. Strategy and puzzle games: games such as chess, sudoku, trivia questions and problems.
- Categorization: Teaching students to group information.
- Compare and contrast: Finding similarities and differences.
- Interpreting cause-and-effect relationships: Identifying relationships between events.
- Abstraction and generalization: Showing students the correct solutions.

There are several pedagogical methods for developing logical thinking in primary school students in native language lessons, and in the book “Pedagogy for Primary School Students” by Professor M.M. Abdullayeva, she considers such methods as using the question-and-answer method in lessons, proportionally increasing the complexity of tasks, giving students the opportunity to work independently, and encouraging them to create projects and presentations. In this regard, we can see that Akbarova.D. in her book “Methods for Developing Logical Thinking in Native Language Lessons” highlights 4 different types of methods for developing logical thinking in primary school students. She puts forward the following methods:

1. Problem-based learning method. Problem-based learning is a teaching method that encourages students to discover new knowledge and solve problems independently. In

language lessons, students solve problems by analyzing the text, finding relationships between words, and answering questions based on a story or text.

2. Discussion and debate method. During the lesson, students develop critical thinking skills by expressing their opinions, listening to others, and participating in discussions. This approach improves communication and develops thinking skills.

3. Learning through games. Interactive games and puzzles increase students' interest in learning a language and encourage them to think. For example, word games, finding synonyms and antonyms, and constructing sentences.

4. Use available resources. Diagrams, tables, and graphs help students understand complex concepts more easily and help them organize their thoughts logically. The teacher's role in developing logical thinking in native language lessons is very important. The teacher is the main person in organizing the logical process. He or she is involved in guiding students to think, motivate themselves, and choose appropriate strategies. The teacher's main tasks are to clearly define the goals and objectives of the overall lesson plan, stimulate students' thinking through logical exercises and problem questions, listen to the ideas of primary school students, analyze them, and guide them when necessary, organize discussions and group work, take into account the individual characteristics of each student, and use appropriate strategies.

RESULTS. The effectiveness of the teacher in developing logical thinking depends on his or her pedagogical skills and intellectual knowledge. Therefore, teachers need to constantly improve their skills and master new teaching methods. The success of the process of developing logical thinking is determined by assessing the knowledge and skills of primary school students in the lessons. By summarizing the above methods for the early formation of the logical thinking process, it can be realized that the use of these methods will give high results:

1.Oral question and answer: students are tested for understanding the text and their ability to logically express their thoughts.

2.Written assignments: Written assignments requiring an essay, story, or logical analysis are given.

3.Projects: Students can conduct independent research on a specific topic, working in groups or independently.

4.Tests and puzzles: Tests and puzzles are specially designed to test abstract thinking skills.

5.Text analysis and discussion: The teacher gives students a short story or text. Then, the book teaches critical analysis by asking questions about its content, main idea, and sequence of events. For example, finding cause-and-effect relationships between events and justifying the characters' actions.

=====

a) Word collection and classification: Tasks to group words or phrases based on certain characteristics develop abstract thinking. For example, grouping by synonyms, antonyms, or related words.

b) Logical puzzles: Puzzles or logical games are used during the lesson. For example, sorting sentences, finding misspelled words, or continuing a conversation.

DISCUSSION. According to G. Ernazarov, the development of logical thinking is formed in accordance with the age characteristics and psychological state of students. Primary school students tend to form their thoughts mainly through illustrative and concrete examples. Therefore, in directing them to logical thinking, the teacher should explain abstract concepts in simple, easily understandable ways. Ernazarov notes that didactic games, interactive methods, and the creation of problem situations are effective tools in developing logical thinking. Each topic taught to students is interconnected, which serves to activate their thinking processes such as analysis, comparison, and generalization. At the same time, Ernazarov emphasizes that when assessing children's thinking ability, it is important for them to express their thoughts consistently and logically, correctly identify the connections between cause and effect, and provide clear justifications in their explanations. In his opinion, the process of forming logical thinking in primary school students should be carried out gradually, and methods appropriate to each age stage should be selected.

CONCLUSION. In conclusion, we can say that the development of logical thinking of primary school students in native language lessons requires a deep study of pedagogical and cognitive foundations and the use of effective strategies. Developing students' thinking skills through native language lessons not only expands their knowledge base, but also helps them grow as independent and critical thinkers. In the process of developing critical thinking, teachers' pedagogical skills, intellectual knowledge and innovations are of great importance. At the same time, logical games, problem situations, discussions and other interactive methods make the lesson process effective and interesting.

Thus, primary school students who have formed the ability to think abstractly in their native language will achieve success in the subsequent stages of education and become well-rounded individuals.

## REFERENCES

1. Abdullayeva, M. M. (2018). Pedagogy for primary school teachers. Tashkent: Teacher.
2. Karimov, T. S. (2020). Native language and logical thinking. Tashkent: Fan.
3. Vygotsky, L. S. (1978). Theory of development of psychology. Moscow: Pedagogika.
4. Muminov, A. (2019). Methods for developing the thinking of primary school students. Samarkand: University Publishing House.
5. Kholmurodov, S. (2021). Fundamentals of pedagogical psychology. Tashkent: Ilm.
6. Islamova, N. (2017). Interactive methods in education. Tashkent: O'kutty.
7. Akbarova, D. „Methods for developing logical thinking in native language lessons”