



THE IMPORTANCE OF AGE-SPECIFIC CHARACTERISTICS IN THE PROCESS OF GUIDING THINKING IN LITERARY EDUCATION

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ABSTRACT

This article is devoted to studying the influence of age-related psychological characteristics on the process of developing logical thinking in children. The work examines the most optimal age period for beginning the targeted development of logical thinking, analyzes the role of literary education in this process, and proposes specific methods of using fiction to form logical analysis and critical thinking skills in children. Special attention is paid to the influence of plot lines, characters, and compositional elements in literary works on the formation of logical thinking.

Introduction:

The development of logical thinking is a key factor in a child's ability to successfully adapt to their environment, analyze, make decisions, and effectively solve problems. In modern society with rapidly changing and intense information flows, logical thinking skills are of particular importance, ensuring competitiveness and a critical perception of reality. Therefore, the most effective methods for purposefully developing logical thinking in children and the optimal age for starting this process are relevant issues that require in-depth study.

One of the important means of developing logical thinking is literary education. Due to its multifaceted nature, imagery, and reflection of complex life situations, fiction creates unique opportunities for developing analytical skills, critical thinking, and the logical construction of cause-and-effect relationships. When fostering logical thinking in children, it is important to consider their age-related psychological characteristics. In the early stages, from approximately 3-4 years of age, children learn about the world through curiosity and observation. At this age, they can be introduced to simple games related to logical thinking and exercises that develop perception through colors and shapes.

Abstract thinking begins to form in children aged 7-10 years, which lays the foundation for the development of the ability to draw logical conclusions. During this period, it is effective to develop their thinking skills through simple mathematical problems, interesting puzzles, and exercises that explain cause and effect relationships.

Main part: The issue of developing logical thinking in childhood has been the subject of numerous studies in psychology and pedagogy. Jean Piaget's theory of cognitive development describes the stages of a child's mental development and distinguishes the following phases:



the sensorimotor stage (0-2 years), the preoperational stage (2-7 years), the concrete operational stage (7-11 years), and the formal operational stage (11 years and older). According to this theory, logical thinking is fully formed at the formal operational stage, in which the child acquires the ability for abstract and hypothetical thinking. However, the works of other scientists, such as L.S. Vygotsky, emphasize the importance of education and social interactions in the development of cognitive functions, including logical thinking. Vygotsky emphasized that development follows learning and that a child's mental growth can be stimulated at any age through appropriate tools and support.

Research in the field of neuropsychology also confirms the plasticity of the brain in childhood and its propensity for learning. The formation of new neural connections and the strengthening of existing ones depends on experience and provided stimuli. Thus, the targeted development of logical thinking at an early age can contribute to the formation of stable cognitive skills.

The role of literature in developing children's thinking, speech, and imagination is extensively documented in scientific literature. Studies show that reading books stimulates vocabulary growth, improves text comprehension, contributes to the formation of moral values, and develops empathy. Additionally, analyzing plot lines, character traits, and motivations for characters' actions fosters the development of analytical and critical thinking.

Determining the optimal age to begin targeted development of logical thinking requires consideration of children's age-related psychological characteristics. Although Piaget's formal operations stage begins at age 11, the formation of foundations necessary for logical thinking starts much earlier.

- 2-4 years (young preschool age): At this age, children are in the preoperational stage, characterized by egocentrism and inability to perform reversible operations. However, even at this age, it is possible to start developing basic logical thinking skills using simple games and tasks aimed at classifying objects by color, shape, and size. Reading short stories with simple plots and clear ideas also helps form an understanding of cause-effect relationships.

- 4-7 years (older preschool age): This period is characterized by the development of symbolic thinking and the ability to decentralize. Children begin to understand that objects can have various properties and that different perspectives exist. At this age, games, puzzles, and construction toys aimed at solving logical problems can be used. Reading fairy tales with complex plots and discussing characters' actions allows for the formation of analytical and evaluative skills.

- 7-11 years (early school age): At this stage, children transition to the concrete operational stage, where they can perform logical operations with specific objects and situations. At this age, more complex logical games, mathematical problems, and scientific experiments can be employed. Reading adventure books helps broaden worldviews, develop analytical thinking, and form skills for critically evaluating information.

- 11 years and older (adolescence): At the formal operations stage, adolescents develop the ability to think abstractly and hypothetically, solve complex logical problems, and critically evaluate information. At this age, it is crucial to encourage participation in discussions, debates, and scientific projects, as these activities foster critical thinking and the ability to justify one's point of view.



The role of literary education in the development of logical thinking:

Literary education plays a vital role in developing logical thinking in children, providing them with rich material for analysis, interpretation, and critical evaluation. Fiction offers the following advantages: Forming cause-and-effect relationships: Reading and discussing plot lines and the consequences of characters' actions helps develop the ability to understand cause-and-effect relationships and anticipate outcomes. Development of analytical thinking: Analyzing images, symbols, and metaphors in literary works requires analytical thinking and the ability to discern hidden meanings. Formation of critical thinking: Evaluating characters' actions, their motivations, and consequences develops the ability to think critically and form personal opinions. Vocabulary enrichment and speech development: Reading enriches vocabulary, improves the grammatical structure of speech, and contributes to the development of skills for expressing thoughts clearly and logically. Developing empathy and understanding of human relationships: Reading allows children to empathize with characters and understand their feelings, which fosters the development of empathy and a deeper understanding of human relationships.

To develop logical thinking, it is necessary to employ various methods and techniques for the effective use of fiction. Methods of using fiction to foster logical thinking:

- Reading with pauses and discussions: during reading, one should pause and ask questions aimed at understanding the plot and examining cause-effect relationships.
- Analyzing characters and their actions: it is essential to analyze the characters' personalities, the causes and consequences of their actions, while encouraging children to express their opinions and justify their viewpoints.
- Searching for hidden meanings and symbols: children should be taught to discern hidden meanings in literary works and to analyze symbols and metaphors.
- Comparing and contrasting different works: by comparing and contrasting various works, it is necessary to analyze the similarities and differences in plots, characters, and themes.
- Staging and role-playing: These activities allow children to better understand the motivations of characters, immerse themselves in their roles, and develop skills in empathy and understanding human relationships.
- Creating original literary works: writing one's own stories, fairy tales, and poems helps develop imagination, logical thinking, and the ability to express thoughts clearly and coherently.

Let's consider how to use the fairy tale "Little Red Riding Hood" in developing children's logical thinking.

Cause-and-effect relationships: 1. Why did Little Red Riding Hood go through the forest? (Answer: To bring pies to her grandmother).

2. Why does the wolf deceive Little Red Riding Hood? (Answer: To eat her and her grandmother).

3. Why did Little Red Riding Hood trust the wolf and take a different path? (Answer: Because she was naive and trusting, she didn't know about the wolf's evil nature).

4. What would have happened if the hunters hadn't come to the rescue? (Answer: The wolf would have eaten Grandmother and Little Red Riding Hood).



Character Analysis:

What kind of girl is Little Red Riding Hood? (Answer: kind, trusting, obedient).

What about the wolf? (Answer: evil, cunning, deceitful).

How are the hunters? (Answer: brave, kind, just).

Critical thinking:

Did Little Red Riding Hood do the right thing by talking to the wolf? (Answer: No, she shouldn't have talked to strangers).

What could be done to avoid danger? (Answer: Taking another path, not talking to strangers).

What lesson can be learned from this fairy tale? (Answer: not trusting strangers and being cautious).

Literary education, which involves reading and analyzing literary works, expands children's thinking abilities. Through well-chosen works, children naturally encounter unfamiliar life issues and themes, attempting to understand them. This, in turn, helps develop the skill of drawing logical conclusions. Within the framework of literary education, children should be offered engaging and age-appropriate literary works. From the age of 6-7, their knowledge can be reinforced by discussing stories or fairy tales they have read and asking questions about the content. Analyzing literary works fosters critical thinking in children and strengthens their analytical approach.

There are several practical methods to develop logical thinking through literary works:

1. Question-and-answer analysis: stimulating the child's thinking process by asking questions about the content of the work they have read.

2. Titling: Through the task of choosing an alternative title for a story or chapter, the child conducts a logical analysis and considers the underlying themes.

3. Drawing conclusions: developing the thinking process by identifying the main issue raised in the work and arranging events in the correct sequence.

4. Imitation: creating short plays based on the events of a literary work helps the child gain a deeper understanding of the topic.

In the 21st century, the introduction of modern technologies into children's literary education has created extensive opportunities for developing logical thinking. The following technological tools are effective in this regard. Listening to audiobooks or podcasts helps children develop their auditory perception and analytical thinking. E-books and specialized programs facilitate children's reading comprehension and ability to draw logical conclusions. Some interactive stories, using VR technology, immerse children into the narrative, allowing them to experience the events directly.

Gamification, or the use of game technologies, makes the process of studying literary works even more engaging and effective.

Conclusion

Developing logical thinking is a crucial task facing education. Taking into account children's age-related psychological characteristics allows us to determine the most suitable age to begin targeted development of logical thinking and to select the most effective educational methods and techniques. Literary education plays a vital role in this process, as it provides children with rich material for analysis, interpretation, and critical evaluation. The



use of fiction, in combination with various educational methods and approaches, contributes to the formation of analytical abilities, critical thinking, and the logical construction of cause-effect relationships. Further research in this field should focus on developing new methods and techniques for using fiction to enhance logical thinking in children, taking into account their individual characteristics and needs.

References:

1. Mahfuza Umarkulovna Tuychieva, . (2023). PEDAGOGICAL, METHODOLOGICAL AND PSYCHOLOGICAL ASPECTS OF ATTRACTING TEENAGERS TO FICTION. *European International Journal of Multidisciplinary Research and Management Studies*, 3(11), 28–39. Retrieved from <https://inlibrary.uz/index.php/eijmrms/article/view/26891>
2. Mahfuza Umarkulovna Tuychiyeva. (2024). FOUNDATION OF EDUCATION AND UPBRINGING. *European Journal of Humanities and Educational Advancements*, 5(5), 20-23. Retrieved from <https://scholarzest.com/index.php/ejhea/article/view/4540>
3. Tuychieva, M. U. (2025). RESEARCH ON LOGICAL THINKING IN LITERARY EDUCATION. *Eurasian Journal of Social Sciences, Philosophy and Culture*, 5(3), 27-33.
4. Tuychieva, M. U. (2022). Taking Into Account the Specific Characteristics of the Adolescent in Literary Education.
5. Tuychieva, M. . (2025). THE ISSUE OF DIRECTING STUDENTS TOWARDS LOGICAL THINKING IN EDUCATION. *Центральноазиатский журнал академических исследований*, 3(3 Part 2), 69–73. извлечено от <https://in-academy.uz/index.php/cajar/article/view/47890>
6. Tuychieva, M. (2025). RESEARCH ON LOGICAL THINKING IN LITERARY EDUCATION. *Евразийский журнал социальных наук, философии и культуры*, 5(3), 27–33. извлечено от <https://in-academy.uz/index.php/ejsspc/article/view/47064>