



## ACTIVATION OF COGNITIVE ACTIVITY IN SENIOR PRESCHOOLERS DURING THE FORMATION OF BASIC MATHEMATICAL CONCEPTS

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**DOI:** <https://doi.org/10.5281/zenodo.15078752>

**Abstract.** *The article examines pedagogical conditions and methods that contribute to the activation of cognitive activity in senior preschoolers during the formation of basic mathematical concepts. Special attention is paid to the regulatory and legal framework of the Republic of Uzbekistan aimed at the development of preschool education, as well as an analysis of modern approaches and practices in this field.*

**Keywords:** *cognitive activity, preschool education, mathematical concepts, pedagogical conditions, Republic of Uzbekistan.*

Modern preschool education aims at the comprehensive development of a child's personality, including the formation of basic mathematical concepts. The activation of cognitive activity in this process plays a key role, fostering the development of logical thinking, abstraction, and analytical skills in children. In the Republic of Uzbekistan, significant attention is devoted to preschool education, as reflected in various regulatory documents defining the priority areas and tasks for the development of this field.

According to the Law of the Republic of Uzbekistan "On Education" dated September 23, 2020, No. ZRU-637, every citizen is guaranteed equal rights to receive education regardless of gender, race, nationality, language, religion, beliefs, or social origin. As part of implementing this law, the Concept for the Development of the Preschool Education System of the Republic of Uzbekistan until 2030 was approved, aimed at creating conditions for the comprehensive development of preschool-aged children and introducing innovative pedagogical technologies [Government of Uzbekistan, 2020].

Research in preschool education highlights the importance of creating optimal pedagogical conditions to realize the child's potential. A.V. Beloshistaya [Beloshistaya, 2003] notes that harmonious development is achieved through the enrichment of children's forms of play, practical, and artistic activities, as well as communication between children and adults. Z.A. Mikhaylova and co-authors



[Mikhaylova et al., 2008] emphasize the need for new forms of developmental activities that encourage children to solve tasks collaboratively and provide them with the freedom to act.

The activation of cognitive activity in senior preschoolers during the formation of basic mathematical concepts requires a comprehensive approach, including the following components:

1. *Creating a developmental educational environment:* Enhancing the physical and educational space with materials and tools that stimulate interest in mathematics. This aligns with the provisions of the Concept for the Development of the Preschool Education System, aimed at introducing new approaches to the educational process [Government of Uzbekistan, 2019].

2. *Using play-based learning methods:* Incorporating didactic games and engaging tasks helps foster interest in mathematics and stimulates cognitive activity. Z.A. Mikhaylova [Mikhaylova et al., 2008] emphasizes the importance of playful and engaging tasks for preschoolers.

3. *Individual approach:* Taking into account each child's individual characteristics and allowing freedom in choosing activities and ways of performing tasks. This aligns with the requirements of state educational standards, which aim to create conditions for the comprehensive development of children [Government of Uzbekistan, 2019].

4. *Professional competence of educators:* Continuously improving the qualifications of teachers in modern methods of teaching mathematics and psycho-pedagogical approaches. The Concept for the Development of the Preschool Education System until 2030 provides for the introduction of new approaches to the training and development of preschool education personnel [Government of Uzbekistan, 2019].

Activating the cognitive activity of senior preschoolers in the process of forming basic mathematical concepts is a crucial area of preschool education. The implementation of a set of pedagogical conditions based on the regulatory framework of the Republic of Uzbekistan and modern scientific approaches contributes to the comprehensive development of children and their successful preparation for school education. Future research can focus on the development and testing of innovative methods and technologies that promote effective mathematical development in preschoolers.

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