



## ELEMENTARY MATHEMATICS AND LITERACY EDUCATION AS PSYCHOLOGICAL AND PEDAGOGICAL FACTORS IN ENSURING COGNITIVE DEVELOPMENT OF PRESCHOOL CHILDREN

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### Abstract

This article analyzes the relevance and current issues of ensuring the continuity and integration between preschool and primary education in Uzbekistan. Emphasis is placed on how continuity and consistency in the educational process contribute to effective engagement of children in education, their adaptation to new learning environments, and the formation of a unified educational space. The article identifies existing shortcomings, including repetition of topics across levels, excessive time allocated to certain subjects, an overreliance on theoretical content, and the insufficient integration of international research findings. Particularly, the lack of continuity between preschool and school programs negatively affects children's adaptation and learning outcomes. From a psychological and developmental perspective, ensuring continuity between kindergarten and school plays a crucial role in a child's successful social integration.

**Keywords:** preschool education, primary education, continuous education, integration, improving educational quality, unified educational space, child development, learning environment, subject curriculum, educational process.

In our country, ensuring the continuity between preschool and primary education has become one of the pressing challenges. In particular, the rapid development of preschool education as the first stage of continuous education has made it necessary to further enhance the quality of education. To create a unified educational space, it is essential to involve all stakeholders of the educational process in the system.

Ensuring consistency and continuity supports the alignment of conditions for educating and teaching children, helps organize interrelated educational processes, and facilitates effective teaching. Continuity between kindergartens and schools implies the creation of a special, holistic system. The primary goal of educational institutions in creating such a unified environment is to rationally develop a consistent approach to teaching and learning.

The lack of coherence in subject curricula within the system of continuous education negatively affects both the quality and efficiency of education. There are issues such as topic repetition across educational levels, the excessive allocation of hours to certain subjects, the prevalence of mostly theoretical content, and the absence of integration with international studies. Analysis of curricula content has shown that about 10–15% of topics are repeated, while 50–60% lack logical progression. This lack of continuity causes discrepancies in subject and content selection based on inter-level subject characteristics. Adapting first-grade students to new learning conditions remains a particularly pressing issue. Psychologists, educators, medical professionals, and researchers are devoting significant attention to this

challenge. Specialists have concluded that one of the major factors affecting a child's successful integration into society is the continuity between preschool and school education.

Starting school marks a crucial period in a child's life, related to changes in daily routines and the surrounding system of relationships. For the first time, educational activity—which holds social significance—becomes central in the child's life. Unlike play activities, learning becomes mandatory, and first-grade students are expected to demonstrate four serious attitudes. "Play has a special meaning in a child's life. It must be regarded as a 'life companion'. For preschool-aged children, play is the leading activity, forming the core of their daily life and closely connected with work and study."

One of the key strengths of the Finnish education system is that teachers make full, efficient, and purposeful use of curricula and manuals. They treat these materials as valuable resources. Relying on them makes lesson planning easier and faster, eliminating the need to create lesson topics from scratch. These materials provide students with essential knowledge and develop practical skills. In his book "Teach Like Finland", Timothy Walker writes: "I had the opportunity to meet preschool teachers at Niirala Preparatory School. They said their main task is to establish a connection between children's interests and the curriculum." In Finnish preschools, great attention is given to the curriculum development process. Teachers identify children's interests and integrate them into the curriculum, creating engaging learning opportunities and improving lesson quality and participation.

According to M.I. Bakhtiyorova, it is important to distinguish between general and specific readiness for school. Specific readiness primarily refers to the knowledge and skills needed for subjects such as native language and mathematics, while general readiness is associated with physical and mental development. According to D.B. Elkonin, preschool and early school age fall within the period of "childhood" in human development. However, the transition from preschool childhood to early schooling is considered the most difficult and vulnerable phase.

Research by S.N. Najieva in preschool education emphasizes the importance of different types of lessons, which she categorizes as follows:

- Integrated comprehensive lessons;
- Lessons providing new knowledge;
- Lessons for assessing knowledge;
- Lessons to consolidate acquired knowledge and experience.

M.M. Nigmatova notes that "To solve the problem of continuity between kindergartens and schools, it is necessary for the administration of both educational institutions to sign a cooperation agreement, which will serve as the basis for the entire process." L.A. Abdullayeva emphasizes that the connection between preschool institutions and schools operates in two directions: bringing preschool children and first-graders closer together, and fostering communication between the teaching staff of both institutions.

The main goal of establishing effective cooperation between preschool and school teachers is to ensure that children are prepared for school in accordance with modern educational demands. This involves forming strong ties between kindergartens and schools in terms of educational activities, thoroughly analyzing current practices, and achieving high-quality results.

The successful organization of continuity between preschool and primary education depends on several pedagogical conditions. These include organizational, methodological,



psychological, and material-technical foundations. Such conditions help improve the quality of teaching and learning, ensure that teaching requirements are fully met, and support the provision of education tailored to the abilities and needs of students.

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