

PEDAGOGICAL MECHANISMS OF DIGITAL MANAGEMENT TRANSFORMATION IN THE PRESCHOOL EDUCATION SYSTEM

Saydullayeva Nargis

Acting Associate Professor of Theory and Methodology of Preschool

Education, Jizzakh State Pedagogical University

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Abstract: This article analyzes the pedagogical mechanisms of digital management transformation in the preschool education system. It highlights issues related to improving management efficiency, enhancing the quality of education, and modernizing pedagogical activities in the process of digitalization. Furthermore, the article examines priority directions, existing challenges, and possible solutions for organizing the educational process based on digital technologies.

Keywords: digital transformation, preschool education, pedagogical mechanisms, management, innovation, information technologies.

Introduction

In the modern education system, digital transformation processes are causing profound changes at all levels, including preschool education. The introduction of digital management contributes to automating the educational process, optimizing pedagogical activities, and increasing management efficiency. From this perspective, scientifically substantiating the pedagogical mechanisms of digital management transformation in the preschool education system is considered an urgent task.

Digital management transformation in the preschool education system is not only a technological renewal but also an important factor that ensures the transition of the entire educational system to a qualitatively new stage. By making management more efficient, transparent, and innovative, it serves to improve the quality of education.

System of Pedagogical Mechanisms of Digital Management Transformation

Digital management transformation is the process of modernizing the education system based on information and communication technologies. This process involves implementing management decision-making, resource allocation, monitoring pedagogical processes, and evaluating educational quality through digital platforms.

Theoretically, digital transformation is based on the following approaches:

- systematic approach (viewing the education system as an integrated system);
- competency-based approach (developing digital skills);
- innovative approach (introducing new technologies);
- data-driven management.



Improving teachers' digital literacy is considered one of the key conditions for digital management transformation. Through this mechanism, educators acquire skills in using electronic resources, working on digital platforms, and creating interactive materials.

The system of pedagogical mechanisms of digital management transformation includes several main directions. First, it implies the use of electronic platforms, digital databases, and automated systems in managing the educational process. Through this, the management process becomes faster, more accurate, and more transparent.

Second, the system of pedagogical mechanisms includes methods of using digital tools in teaching and upbringing processes. For example, interactive programs, multimedia materials, digital games, and online resources support children's development and make education more engaging.

Third, this system also includes the development of teachers' digital competencies. Educators learn how to plan, monitor, and evaluate the educational process using modern technologies.

Fourth, the system serves to strengthen digital cooperation with parents. Through electronic platforms, regular exchange of information about children's development is established. Research shows that digital management ensures a number of pedagogical efficiencies that positively affect the activities of all subjects within the educational system. The individualization of the educational process is one of the most important outcomes of digital management. Through digital platforms, each child's developmental level, interests, and learning pace are continuously monitored. This allows educators to develop individualized approaches for every child. As a result, instead of a "one-size-fits-all" approach, a learner-centered educational model is formed. This process helps children fully demonstrate their abilities.

The accuracy of pedagogical monitoring significantly increases. While traditional observation systems may involve a high level of subjectivity, digital systems record all information electronically. Children's attendance, developmental dynamics, and mastery of knowledge and skills are represented through accurate statistical indicators. This elevates the analysis and evaluation of the pedagogical process to a scientific level.

The promptness of management decisions is another important advantage of digital transformation. Through electronic databases and automated systems, managers gain access to accurate information in real time. This makes it possible to quickly identify problems, redistribute resources, and make effective decisions. As a result, the management process is carried out without bureaucratic delays.

The improvement of educational quality is a direct result of digital management. Interactive educational materials, multimedia tools, and digital educational platforms increase children's interest and facilitate the learning process. Educators organize lessons more effectively using modern teaching methods. Consequently, the overall quality indicators of the educational process improve.

Efficient use of resources is also ensured. Digital management systems help optimize time, financial, and human resources. Electronic documents replace paper documentation, while



automated processes reduce unnecessary workload. In addition, statistical analyses create opportunities for the proper allocation of resources.

To improve digital management transformation in the preschool education system, the following directions are important:

- development of digital infrastructure;
- establishment of continuous teacher training systems;
- creation of national digital platforms;
- expansion of cooperation between the public and private sectors;
- strengthening information security systems.

Conclusion

The pedagogical mechanisms of digital management transformation in the preschool education system play an important role in improving educational quality, optimizing management, and modernizing pedagogical processes. Through the effective implementation of these mechanisms, it is possible to bring the preschool education system to a qualitatively new stage.

The pedagogical effectiveness of digital management plays a crucial role in ensuring quality education, modernizing management, and making pedagogical processes more transparent and productive in the preschool education system. Therefore, the widespread introduction of digital technologies is considered one of the main strategic directions of the modern education system.

References

1. Decision of the President of the Republic of Uzbekistan No. PQ-4312 dated May 8, 2019, "On Approval of the Concept for the Development of the Preschool Education System until 2030."
2. Decree of the President of the Republic of Uzbekistan No. PF-6079 dated October 5, 2020, "Digital Uzbekistan – 2030 Strategy."
3. Nuriddinova, U. (2025). *Digital Transformation and Innovative Approaches in Preschool Education*. Scientific Journal of Preschool Education, 1(2), 45–52.
4. Aliyeva, B. E. (2025). *Innovative Pedagogical Technologies and Digital Transformation in Preschool Education*. Conference Proceedings Journal, 1(2), 241–247.
5. Sattorova, N. I. (2025). *Innovative Pedagogical Technologies and Digital Transformations in Preschool Education*. Conference Proceedings Journal, 1(1), 139–142

