

## ACTUAL PROBLEMS OF IMPROVING THE SCHOOL EDUCATIONAL PROCESS WITH THE HELP OF INNOVATIVE DIGITAL TECHNOLOGIES

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*This article highlights the issues of developing the preschool education system through modern innovative digital technologies. It analyzes the importance of digital resources in improving the educational process, identifies current challenges, and proposes solutions. The prospects of enhancing education effectiveness through innovative approaches are also discussed..*

**INTRODUCTION.** The modern education system is undergoing fundamental changes in the context of globalization and digital transformation. In particular, the introduction of digital technologies at the preschool level is gaining importance in supporting and promoting the all-round development of children. Interactive learning platforms, multimedia tools, virtual environments, and mobile application-based teaching methods are shaping new pedagogical approaches. However, there are a number of problems in using digital technologies in preschool education: content that is not appropriate for the age characteristics of students, insufficient technical infrastructure, low digital literacy of teaching staff, as well as insufficient development of modern methodologies. Therefore, improving the preschool educational process through innovative digital technologies remains one of the pressing issues of today.

One of the important conditions for the effective introduction of artificial intelligence (AI) technologies in the preschool education system is the availability of modern digital infrastructure. Unfortunately, most pre-school educational institutions in Uzbekistan lack adequate infrastructure. This situation serves as an obstacle to the widespread and high-quality introduction of educational technologies based on AI.

*RTypes of digital content and existing gaps:*

Content type	Availability	Problems
Interactive fairy tales and stories	Very little	Language, imagery and dramatization are inappropriate
Gamified learning apps	Limited	Not integrated into the local curriculum
Artificial intelligence learning bots	Almost no	Not enough native language platforms
Video lessons and animations	Few	Methodologically weak, low technical quality

The following problems arise in this regard:

Low level of digital literacy: most educators have difficulty using even simple computer programs. The use of interactive tools based on SI requires more complex technical and methodological training

- lack of methodological knowledge: educators do not know enough about the didactic purposes and methods of using SI technologies. This limits their integration of technologies into the pedagogical process.

- Weakness of the professional development system: there are not enough specialized courses, trainings and seminars on digital technologies in pre-school education. The existing courses are rather general and superficial, and do not provide practical skills.

In the above cases, special IS-based methodological manuals, video tutorials, interactive trainings for educators will be developed, "mobile groups of digital education mentors" will be organized in each region; the introduction of the subject "Digital Pedagogy and IS Technologies" as a separate direction in pedagogical universities and colleges; Focusing on the development of digital leadership skills among both school leaders and methodologists will help achieve the desired results. Teachers perceive digital tools only as visual or gaming tools, and their educational significance is lost. Develop didactic design standards for digital media intended for preschool children, create a set of methodological recommendations, applications and video tutorials for each digital media, develop a set of sample lesson plans for the preschool education system (with the participation of digital media), and establish a content creation system in cooperation with digital media

developers, educators and psychologists. plays an important role in solving the problem.

Children spend more time in artificial environments, i.e. with characters on screens, which is why their lively communication, emotional expression, and social skills are weakening. Preschool children are not yet independent in managing their attention. Excessive use of digital media can lead them to digital dependency. As the trend toward using AI and digital technologies as primary teaching tools rather than didactic tools increases, the overuse of technology crowd out play, physical activity, and creativity. As a result, the child's natural developmental balance is disrupted—he becomes more of an observer and less of an active participant.

Sometimes, AI tools that are supposedly designed for children contain violence, stereotypes, or excessively digitized dialogue. Although AI tools “react” to a child’s speech, they cannot provide a real emotional connection. This has a negative impact on the child’s psychological development — it can misinterpret empathy. Weakening of pedagogical control: Through excessive use of AI tools, some teachers shift their direct moral and educational responsibility to an artificial system, which negatively affects the effectiveness of the educational process.

Based on the above considerations, we would like to make the following recommendations:

Introduce a certificate of ethical and psychological expertise for any digital technology used with children;

- Develop a transparent and open legal policy on all child-related information used in digital media;
- Develop a “Digital Ethics” code and implement it in pre-school educational institutions;
- Establish training and professional development programs for educators and parents on “Ethical Use of Digital Technologies”
- It is important for developers of SI tools to introduce ethical filtering algorithms that are appropriate for the age, culture, and social conditions of children.

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