

OPPORTUNITIES FOR THE USE OF DIGITAL TECHNOLOGIES IN PRIMARY EDUCATION

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Annotation: This scientific work analyzes the possibilities of using digital technologies in the primary education system, their impact and effectiveness on the educational process. Also, the advantages of digital technologies, problems in their implementation and suggestions and recommendations for their elimination are given. The study analyzes digital educational approaches appropriate to the age characteristics of primary school students.

Keywords: Primary education, digital technologies, interactive lessons, multimedia, educational applications, digital tools, educational process, technological literacy, innovative education.

Аннотация: В данной научной работе анализируются возможности использования цифровых технологий в системе начального образования, их влияние и эффективность на образовательный процесс. Также рассматриваются преимущества цифровых технологий, проблемы их внедрения, а также даются предложения и рекомендации по их устранению. В исследовании анализируются подходы к цифровому образованию, соответствующие возрастным особенностям учащихся начальной школы.

Ключевые слова: Начальное образование, цифровые технологии, интерактивные уроки, мультимедиа, образовательные приложения, цифровые инструменты, образовательный процесс, технологическая грамотность, инновационное образование.

Anotatsiya: Mazkur ilmiy ishda boshlang'ich ta'lim tizimida raqamli texnologiyalardan foydalanish imkoniyatlari, ularning o'quv jarayoniga ta'siri va samaradorligi tahlil qilingan. Shuningdek, raqamli texnologiyalarning afzalliklari, ularni joriy etishdagi muammolar va ularni

bartaraf etish bo'yicha taklif va tavsiyalar berilgan. Tadqiqotda boshlang'ich sinf o'quvchilarining yosh xususiyatlariga mos raqamli ta'lim yondashuvlari tahlil etilgan.

Kalit so'zlar: Boshlang'ich ta'lim, raqamli texnologiyalar, interaktiv dars, multimedia, ta'limiy ilovalar, raqamli vositalar, o'quv jarayoni, texnologik savodxonlik, innovatsion ta'lim.

In the 21st century, the educational system is developing in close connection with digital technologies. In particular, gradual digitization processes are also causing significant changes in primary education. Elementary students, through the use of ICT tools, not only better understand the course process, but also develop skills such as independent thinking, a critical approach, technological literacy.

The decision of the president of the Republic of Uzbekistan "on approval of the strategy for the development of artificial intelligence technologies by 2030" sets out priority goals and objectives for the development of artificial intelligence technologies.

- ✓ the formation of a regulatory framework aimed at the development of artificial intelligence technologies, improving standards in the field and strengthening international cooperation;

- ✓ creation of technical infrastructure for data processing and the launch of projects based on artificial intelligence, implementation of priority projects in the social sphere and economy sectors;

- ✓ to improve the knowledge and skills of the population, develop human resources in the use of artificial intelligence technologies.

Chapter 1 of the strategy" development of artificial intelligence technologies by 2030 " also sets out several priorities for the development of artificial intelligence in the education of our republic.

The strategy sets out the goals, objectives and priorities for the widespread use, rapid development of artificial intelligence in our country, taking into account the current state of development of artificial intelligence technologies and the advanced experience of foreign countries.

The strategy also sets out tasks in the field of implementation of projects in strategic priorities, medium and long-term, including scientific and technical development, taking into account national interests with the help of artificial intelligence technologies. The basic concepts given in this law serve to further illuminate the content of our article. The strategy uses the following basic concepts:

○ artificial intelligence is a set of technological solutions that allow imitation of human knowledge and skills (including independent learning and search for solutions), as well as obtaining results comparable to the results of human mental activity in the performance of specific tasks;

○ neural network is one of the methods of machine learning, a mathematical model based on the principle of Organization of neural connections of a biological organism and their functioning, hardware-software;

○ machine learning is an area that studies inference algorithms using sample learning and analysis, identifying correlations in data, and using process research (neural networks and statistics) and other methods in learning;

❖ deep learning platform-a set of software and hardware tools designed for deep learning of artificial neural networks;

❖ artificial intelligence technology-technologies based on the use of artificial intelligence, including intellectual Video Communication, Speech Recognition and synthesis, promising methods of intellectual support for decisions made learning platform-a set of software and hardware tools designed for deep learning of artificial neural networks;

❖ artificial intelligence technology-technologies based on the use of artificial intelligence, including intellectual Video Communication, Speech Recognition and synthesis, promising methods of intellectual support for decisions made;

❖ "big data" is an extensive set of data, characterized by size, variety, speed, and (or) variability, required for efficient storage, management, and analysis.

The digital data platform, which provides the ability to obtain data and other data sets of public bodies for the use of artificial intelligence-based software as part of the activities of the open data portal of the Republic of Uzbekistan (data.egov.uz) was launched.

As part of the resolution, pilot projects have been implemented to introduce artificial intelligence in agriculture, banking, finance, transportation, health, pharmaceuticals, energy, taxation and other priority sectors and sectors.

Digital technologies include tools such as computers, tablets, smartphones, interactive whiteboards, the internet, multimedia applications, artificial intelligence-based platforms. Their main task in primary education is to involve students in the course process as active participants, to make learning interesting and effective. Digital technologies also provide an opportunity for the teacher to take classes on an individual approach, to give assignments appropriate to the students ' ability and level of preparation. For example, through interactive programs, students ' literacy,

calculus, logical reasoning, and problem-solving skills can be developed in stages. In addition, with the help of digital resources, there is an opportunity to visually explain the subjects of the lesson, strengthen them through real-life examples, conduct virtual experiments and organize distance learning. This leads to an increased interest in classes in students, encouraging them to learn independently, and teaching them the conscious use of modern technology.

The problems of the e-learning system can be divided into two classes: current (transitional) and immanent. Today, the rapid penetration of the educational system into digital technologies sets the stage for a serious analysis and pedagogical justification of many things that are presented in the information space. The purpose of this article is to identify the priorities of the digital development of the educational process, based on their advantages and threats, to analyze digital technologies based on the hypothesis of the need for scientifically based implementation in the primary education system. Based on the principles of Human Resource Management, the article discusses the urgent problems of the theory and methodology of the application of Information Communication Technologies and digital technologies as a means of modern educational process, which increases the cognitive activity, worldview and motivation of children of primary education age, which is considered an important need of the current globalization period. The use of digital technologies in the process of education and upbringing was discussed about the guarantees of the achievements of children of primary education age and the guarantees of successful schooling. The use of digital technologies in the process of education and upbringing was discussed about the guarantees of the achievements of children of primary education age and the guarantees of successful schooling. Digitization of the educational environment can be carried;

-the formation of an interactive electronic environment for interaction between the teacher and the child-student, including the creation of electronic classes for teachers, hosting webseminars, discussion forums, etc.; -the creation of new types of educational tools: electronic textbooks, e-problem books, video lectures, electronic assignment database, computer games; -to create fundamentally new forms of education using the capabilities of the electronic environment -to expand the spectrum of imaginary transmission of information, to model various situations in the process of role-playing games to imitate competitive games, etc.; - to introduce the capabilities of artificial intelligence into the educational process. Today, in most educational organizations, an early form of the process of digitization of education is being implemented. This makes it possible to ease the access of students to educational materials, reduce the educational load that does not have social significance, facilitate control over academic discipline and the content of the educational process. In addition, this process makes it possible to significantly expand the remote

control. Johann Wissem's thesis that e-learning is "inefficient education, a disruptive innovation that inevitably screens its institutions, after which relatively few of the winning educational institutions benefit from this new technology" cannot be avoided. This is a type of innovation that applies to e-learning. Currently, it is significantly inferior to the offline educational features that are important to consumers. However, only educational organizations that can take their place in the online education market and offer the market a constantly improving quality of the relevant services have the opportunity to remain in the educational space in the future.¹The problems of socialization and latent knowledge transfer it is not advisable to completely replace traditional education with an e-learning environment. However, it is clear that the field of offline education is constantly shrinking.

Based on the above, it is worth noting that the introduction of digital technologies is very important for the development of the preschool and primary education system, but at the same time it is necessary to form a scientifically based approach to their implementation. Currently, several projects are being implemented in our country for the development of this field.¹So, the use of a digitized education system serves as a support for primary education students to become members of the target audience so that they can enter a digitized society in the future. This, of course, will lead to an increase in the competitiveness of primary education and the school in the educational sphere, to create an additional advantage and attract children. It helps to raise children's consciousness and mental exaltation, easily lose weight with lesson processes. This increases competitiveness in the first place; in the second, it adapts the educational process to the world standard. Integration of digital technologies into primary education is a complex and continuous process. However, it is a process that has the potential to significantly increase the quality of education that students receive. Digital technologies provide a wide range of opportunities to improve primary education. By carefully integrating digital technology into the classroom, teachers can create a personalized educational experience that increases student engagement and enables the use of a wide range of resources. With appropriate education and support, teachers can use the power of digital technology to help all students achieve their academic goals.

In conclusion, digital technologies are becoming an integral part of the primary education process today. These technologies are an important tool for increasing student activity, strengthening knowledge, providing an individual approach, and shaping modern competencies. Through the use of digital tools such as computers, tablets, interactive whiteboards, multimedia applications, students increase their interest in knowledge, while making the educational process lively and efficient. Also, digital technologies allow the teacher to organize the lesson in a flexible,

interactive and contemporary form. Therefore, the widespread introduction of digital technologies in primary education — not only increases the level of student assimilation, but also is the main guarantee of their preparation in accordance with the future digital society.

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