

THE IMPORTANT ROLE OF USING DIGITAL TECHNOLOGY IN EDUCATION

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Abstract. The article analyzes the role of digital technologies in the development of the educational environment of Uzbekistan. It also shows the priorities for the development of the educational process based on the use of digital technologies in the country's higher education system and an analysis of their capabilities.

Key words: Internet, digital technologies, information and communications, transformation, higher education system, modern education, digital knowledge.

ВАЖНАЯ РОЛЬ ИСПОЛЬЗОВАНИЯ ЦИФРОВЫХ ТЕХНОЛОГИЙ
ТЕХНОЛОГИИ В ОБРАЗОВАНИИ

Аннотация. В статье анализируется роль цифровых технологий в развитии образовательной среды Узбекистана. Показаны приоритеты развития образовательного процесса на основе использования цифровых технологий в системе высшего образования страны и проведен анализ их возможностей.

Ключевые слова: Интернет, цифровые технологии, информация и коммуникации, трансформация, система высшего образования, современное образование, цифровые знания.

Creating a digital industry of the future - ensuring long-term sustainability, launching the digital transformation of the country through the enhancement of human capital development requires a rapidly advancing digital transformation of education. Today's audience is significantly different from those of 10 years ago, as classrooms and lecture halls now contain computers, iPads, smart boards, and other forms of educational technology.

In Uzbekistan, as in the rest of the world, a digital generation has emerged, a generation of seven screens – television, computer, tablet, phablet, smartphone, and smartwatches. As a result of having such a dense digital environment and constant interaction with it, the thinking patterns of today's students and their information processing procedures fundamentally differ from the thinking methods and information processes of their predecessors.

The digital generation cannot and should not be taught in the same way that their parents were educated. Teaching this generation by writing with white chalk on a blackboard is insufficient. Simply replacing the blackboard with a whiteboard and chalk with a marker does not

bring about any real change; it does not serve as a method to motivate modern students to acquire knowledge and develop skills for successful integration into the labor market.

It is essential to adapt the education system to the digital generation through the mass and effective application of ICT-based innovative educational technologies and didactic models.

Alongside this, it is necessary to adopt a more research-oriented approach to education that aims to develop learners' abilities and skills in scientific inquiry, as well as to foster creative thinking and creative abilities based on IT competencies.

Information and communication technologies are not a panacea for all the problems in the education system; rather, they are tools that alone cannot make lectures and seminars more informative and interactive for the digital generation. However, we must emphasize that educators play a crucial role in the interactive learning process, which should be oriented toward the needs of learners.

It should also be noted that the reputation of instructors and the effectiveness of their work will increasingly depend not only on their mastery of the course content and pedagogical skills but also on the extent to which they utilize modern information and communication technologies for gathering, processing, and teaching specific educational material.

In other words, education in the digital age must be redefined, and the educational paradigm must be changed, as students no longer wish to learn in traditional ways, and educators should not continue teaching through conventional methods.

Pedagogical methods have evolved. Classes that actively utilize electronic textbooks and platforms are significantly different from traditional ones. In this new format, students spend much of the lesson gathering information independently, with the teacher merely guiding them.

By using digital educational tools, students learn to acquire knowledge on their own.

They search for information, analyze it, filter out the unnecessary, and highlight the essential. In other words, digital learning provides a fishing rod rather than fish: students learn how to learn. This approach not only helps in acquiring knowledge but also develops cognitive abilities, critical thinking, independence, and information management skills. Moreover, it fosters a positive attitude toward education.

Digital education in Uzbekistan has been developing at an increasingly rapid pace over the years. This advancement helps students grasp complex concepts and theories more easily through visual effects, graphics, 3D models, and more. For instance, electronic boards allow for the easy display of animated presentations, capturing students' attention, while also providing internet connectivity to find relevant videos on the current topic. Additionally, online tests can be conducted immediately, showing the results of students' assessments right away.

The use of gaming technologies on electronic boards further enhances the quality of lessons and, consequently, the knowledge level of students. It is also important to note the ease it brings to educators, saving them time in reinforcing new material, which positively impacts students' retention of knowledge.

Digital learning encourages greater student participation, as the current generation of learners is well-versed in using gadgets.

One of the main advantages of digitalization is its positive impact on individualized education. Digital technologies in education allow for the adaptation of curricula to the abilities and pace of each student. For example, if there is a platform that records lessons, students can revisit complex topics at any time and study them again.

Students who utilize modern learning tools are more engaged in the educational process.

This engagement is attributable to the presentation of material in a more interesting and accessible format, which is often easier to grasp than with traditional methods. For instance, a student is more likely to engage with a presentation that includes graphs, illustrations, and concise explanations than to read a paragraph from a textbook.

Digital technologies in education open up new opportunities for learning. Assessing students becomes very straightforward: there are specialized platforms where assignments can be completed with automatic grading. This means that teachers no longer need to manually tally results; as soon as a student finishes the work, a report automatically appears in the teacher's dashboard.

For courses, it is also possible to create various formats for knowledge assessment, ranging from tests to detailed written responses. Automatic grading can be activated, saving valuable time on reviewing tests.

Moreover, the use of digital technologies reduces the need to purchase textbooks, notebooks, supplementary materials, and stationery. All educational materials are available on a single platform, where students can also complete their homework. This not only simplifies the learning process but also makes it more efficient and accessible for both teachers and students.

Information should be visual and engaging. For this purpose, for example, electronic platforms are used instead of paper books, virtual tests with automatic grading are conducted instead of solving problems in workbooks, and visual video materials are shown instead of verbal explanations. Each year, new interactive formats increasingly replace traditional methods.

One of the advantages of a digital environment is the ability to freely interact with others, even at a distance. Students, educators, and parents can exchange information with one another easily.

Digital transformation in education implies that information must be high-quality and accessible from anywhere in the world. For instance, one can learn a new language using an electronic textbook that can be accessed from a smartphone. The internet offers billions of information sources: portals, libraries, expert webinars, and online courses, making diverse educational resources widely available.

On online courses, students can work on assignments as a team. The internet offers numerous tools, applications, and platforms for collaborative work. In classes, educators strive to organize students into small groups. This reflects another principle of digital learning—communication and teamwork with other students, along with continuous interaction.

Digitalization makes education more effective, high-quality, and accessible. Let's highlight the results it helps to achieve:

Expanded Access to Education: Digital technologies increase access to education, particularly for those in remote areas or those unable to attend in-person classes for various reasons. Online courses, webinars, electronic textbooks, and other digital resources enable learners to acquire knowledge anytime and anywhere.

Enhanced Communication: Digital tools simplify communication between students and educators. Email, online forums, videoconferences, and other communication methods allow for quick and easy information sharing, asking questions, and promptly resolving issues.

By fostering collaboration and improving communication channels, digital learning enriches the educational experience and supports a more inclusive approach to knowledge acquisition.

Thanks to digitalization, students learn to work with information and new technologies, developing analytical and critical thinking skills. These are essential competencies for a successful life in modern society, where digital technologies play a significant role.

Digital technologies allow for the automation of routine tasks such as tracking academic performance, planning lessons, and assessing students. This automation helps alleviate some of the organizational burdens on teachers or coordinators, freeing up their time for more important work, such as engaging with students and developing innovative teaching methods.

In conclusion, the introduction of e-learning will undoubtedly represent a positive breakthrough for Uzbekistan in the field of education. By embracing digital education, the country can enhance accessibility, improve the quality of learning, and equip students with the necessary skills to thrive in a rapidly changing world.

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