E CONF SERIES

International Educators Conference
Hosted online from Toronto, Canada
Website: econfseries.com   7ᵗʰ December, 2025

THE ADVANTAGES OF DIGITAL TECHNOLOGY IN EDUCATION.

Muratova Dinora Timurovna
2ⁿᵈ year student of UzSWLU, group 2407
muratovadinora2006@gmail.com

Abstract
This article examines the role of digital technologies in modern education and their impact on the transformation of the learning process. It analyses the key advantages of using information and communication technologies, artificial intelligence, and electronic educational resources. Particular attention is paid to aspects such as interactivity, flexibility, accessibility, automation, and personalisation of learning.

Keywords: digital technologies, education, online learning, distance learning technologies, artificial intelligence, personalisation of learning, interactivity, smart education, adaptive learning, digital transformation.

In the current century, digital technologies have become an integral part of the educational programme. The development of information and communication technologies, artificial intelligence, and electronic educational resources has formed a new paradigm of learning. Traditional methods of teacher-student interaction are complemented by virtual tools that make learning more accessible, interactive, and personalised. The purpose of this article is to examine the key advantages of education in the age of digital technology.

Digital transformation in education requires teachers to be able to integrate innovative tools and platforms and understand how they can improve the learning process and interaction with students. The introduction of online learning, interactive platforms and artificial intelligence opens up new opportunities for students and teachers.

The advantages of using digital technologies are determined by their main characteristics:

➢ Interactivity: Active involvement of students in the process through digital means.

E CONF SERIES

International Educators Conference
Hosted online from Toronto, Canada
Website: econfseries.com   7th December, 2025

➢ Flexibility: The ability to adapt teaching materials to the individual needs of students.

➢ Accessibility: Learning can take place anywhere and at any time.

➢ Automation: Reduction of routine work for teachers and automatic analysis of student performance.

➢ Personalisation: Technology allows educational programmes to be tailored to the level of knowledge and interests of learners.

One of the most important advantages of digital technology is that it overcomes geographical and time barriers.

For example: distance learning technologies (DLT) and online courses. Distance learning technologies have become an integral part of modern education, as they allow students to gain knowledge regardless of their location and teachers to reach a larger audience. Massive open online courses such as Coursera and Udemy provide the opportunity to study at a convenient time and access lectures by leading experts. There is also the concept of 'smart education,' which involves the systematic use of digital tools in an interactive environment that provides distance and mobile learning. Within this concept, teaching materials can be supplemented with new information in real time, and the learning environment is distributed and not limited to the territory of the educational institution. [1]

Sofia Matvienko and Elena Vasilyeva argue that the digital education system has revolutionised the old process and made learning mobile, engaging and interactive, encouraging students to take an interest in digital learning and support its development in every way possible. Most schools and educational institutions are adopting this technology as a solution, which has become relevant due to the emergence and invasion of the new COVID-19 coronavirus pandemic in our lives, and it has permanently contributed to the transition to digital learning. [2]

Digital technologies allow us to move from a universal approach to individualised learning. Artificial intelligence and adaptive learning are used to analyse data and automate knowledge testing. Automated assessment systems and chatbots (e.g. ChatGPT) help students get answers to their questions around the clock. It also helps teachers focus on working with students individually, freeing them from routine tasks. Personalised learning promotes the development of not only professional

skills, but also emotional intelligence, communication skills, initiative and leadership potential.

According to Khabibova Malokhat Nuriddinovna, interactive elements of the digital environment make the learning process more exciting and engaging. The use of game elements in the learning process significantly increases student motivation and engagement. She uses a reward system (points, badges), competitions and educational games (e.g. Kahoot!, Quizizz), which helps students memorise material in a playful way. This is particularly effective in language learning, programming and the exact sciences. [3]

Digital technologies can also contribute to the development of skills that are necessary in today's world. These include:

❖ Critical thinking: Technologies stimulate critical thinking by allowing students to analyse, compare and interpret information from various sources.

❖ Creativity: Developed through the use of technology to create projects, solve non-standard problems and work with multimedia materials.

❖ Independence: Digital tools support independence by allowing students to manage their own learning, choosing the resources and formats that best suit their interests.

The digital age opens up new horizons for education, making it more accessible, interactive, and personalised. Modern technologies allow students to acquire knowledge at a time and in a form that is convenient for them, overcoming geographical and time barriers. Teachers, in turn, can use digital tools to create flexible, adaptive educational trajectories that promote deeper and more successful learning. Ultimately, technology helps tailor the learning process to the individual needs of students and promotes the development of skills necessary for success in school and later life in a digital society.

References:

1. " Образовательные модели и технологии в эпоху цифровой трансляции" Т.Л. Салова. Сочинский государственный университет, г. Сочи, Российская федерация.

2. "Образование XXI веке: Плюсы и минусы цифрового образования" Матвиенко Софья Васильевна-старший преподаватель и Васильева Елена Владимировна-преподаватель, Северо-западный филиал ФГБОУВО " Росийский государственный университет правосудия", Санкт- Петербург.

3. "Педагогические технологии в цифровую эпоху" Хабибова Малохат Нуриддиновна- преподаватель русского языка и литературы, Азиатский Международный Университет Бухара, Узбекистан.