

MODERNIZATION OF EDUCATION THROUGH DIGITAL TECHNOLOGIES

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Abstract. *The article outlines the role of digital technologies in today's education system.*

The concept of "digital classroom" is revealed. The article discusses the advantages and disadvantages of digitalization in the education system.

Key words: *education, digital technologies, new methods, digital classroom.*

Introduction. Currently, in modern society there is a global process of computerization and informatization of almost all aspects of life, as society is rapidly developing towards the transition to an information society, in which information resources, technologies for their storage and transmission play a key role.

As the President of the Republic of Uzbekistan Sh. M. Mirziyoyev noted: "For the purpose of sustainable development, we must deeply master digital knowledge and information technologies, which will give us the opportunity to follow the shortest path to achieving comprehensive progress.

In today's world, digital technologies play a decisive role in all areas." [1] The history of information technology dates back long before the emergence of the modern discipline of computer science, which appeared in the 20th century. Information technologies are associated with the study of methods and means of collecting, processing and transmitting data in order to obtain new quality information about the state of an object, process or phenomenon.

Meanwhile, Uzbekistan has recognized the power of digitalization in transforming society, while the global pandemic has made this transformation necessary.

Main part. Uzbekistan began to prioritize the development of information and communication technologies (ICT) and digitalization in the early 2000s. For example, the country initiated the "Comprehensive Program for the Development of the National Information and Communication System of the Republic of Uzbekistan for the period 2013 – 2020", the National Action Strategy for five priority areas of development of the Republic of Uzbekistan in 2017 – 2021, the Strategy "Digital Uzbekistan - 2030" and "Development Strategy of New Uzbekistan for 2022-2026", aimed at implementing digital transformation in the national economy, industry and society as a whole.

In 2022, large-scale work was carried out in our country to bring ongoing reforms for the further development of digital technologies to a new level.

In particular, comprehensive measures have been developed for the widespread introduction of digital technologies in the sphere of public administration and economics, as well as improving the standard of living of the population with their help. Uzbekistan has risen significantly in international rankings of world digitalization in 2022. [2]

Sustainable development includes social well-being, which depends on education.

Information technology has emerged to disseminate general knowledge and is the main driving force behind educational reforms. The introduction of new learning tools using technology such as mobile devices, smart boards, MOOCs, tablets, laptops, simulations, dynamic visualization and virtual laboratories has changed education in schools and institutions.

The Internet of Things (IoT) has been proven to be one of the most cost-effective methods for educating young minds. It is also a robust mechanism for integrating world-class learning experiences for all.

Education technology companies are constantly trying to create new solutions to expand access to education for people who cannot access adequate educational opportunities. Social media has come a long way as a learning tool. A large number of teachers and students use social media as an important element of the overall e-learning process.

Traditional classroom instruction does not provide an immediate learning environment, faster assessment, and greater engagement. On the contrary, digital learning tools and technology are filling this gap. Some of the performance indicators that such technologies provide are simply unmatched by traditional learning methodologies. As smartphones and other wireless technology devices become popular among the general public, it makes sense for schools and educational institutions to make good use of them when integrating technology into the classroom. Indeed, the adaptability and unobtrusive nature of modern technology makes learning more attractive to the next generation [3]

The COVID-19 pandemic, isolation and quarantine are three concepts that have recently entered our vocabulary. People all over the world are aware of the catastrophe caused by the coronavirus epidemic. In the current crisis, digital technology is at least keeping the education system afloat. Students study from the comfort of their own home.[4]

Integrating technology into education provides students with an engaging learning experience, allowing them to remain more interested in the subject without getting distracted. The use of projectors, computers and other modern technological equipment in the classroom can make learning fun and interesting for students. Student learning can be more dynamic and engaging when classroom challenges include technological resources, oral presentations, and group participation.

Participation may extend beyond verbal communication.

The globalization of education has already created the need for the use of digital technologies.

Online platforms were available for conducting classes, sharing resources, conducting assessments, and managing the day-to-day activities of academic institutions. However, the use of these platforms was active. The COVID-19 pandemic has forced institutes to switch to online teaching mode to maintain the education system. Developed countries were well prepared to cope with this crisis. However, developing countries have made great efforts to meet this requirement.

Digital technology has emerged as the savior of education at this critical time. This global crisis highlights the need for international integration in the education system.

Digital technologies help develop skills that students will need to perform professionally, such as problem solving, structured thinking, and process understanding. They are also preparing for a more unpredictable and changing future, in which technology will play a critical role.

The acquired qualities and abilities of students will be important for their professional success. Educational resources and digital tools help improve the classroom environment and make learning more effective. irresistible. They also give each institution greater flexibility and the ability to customize the curriculum to suit each student's needs.

Digital classrooms are defined by the use of electronic devices or platforms such as social media, multimedia and mobile phones for student learning. Thanks to digital technology in education, today's educational environment has changed for the better or improved. Digital learning is a learning strategy that uses technology to deliver the entire curriculum and allows students to learn quickly and quickly.

The digital classroom is all about technology-enabled learning. Students use technological or internet-connected gadgets such as laptops, tablets, Chromebooks, etc.[5]

Various features of a digital classroom are shown in [Fig. 1](#).

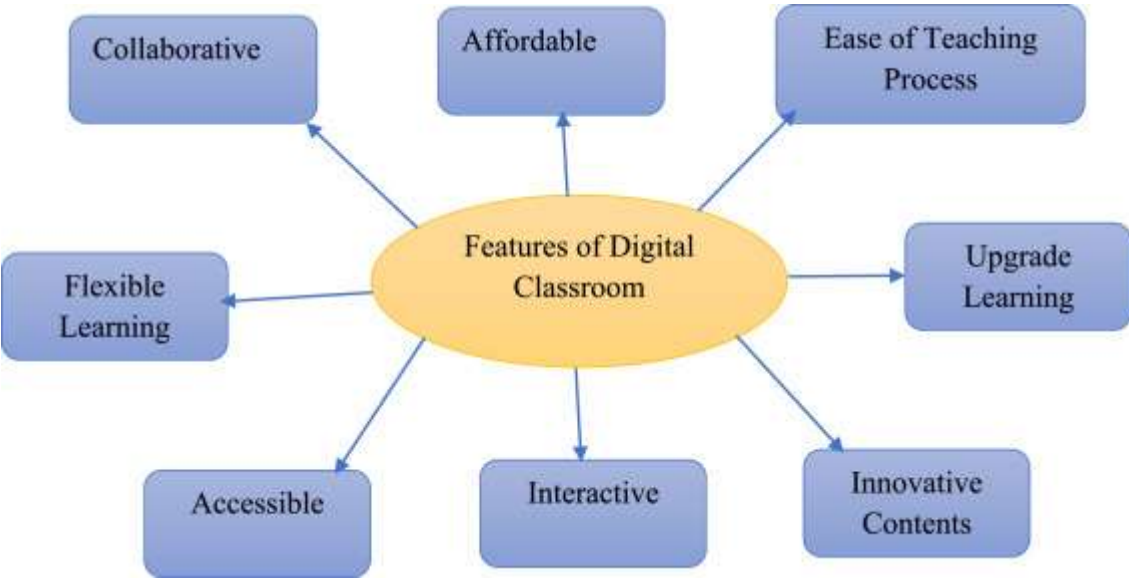


Fig. 1. Features of Digital Classroom.

Educational applications and websites are used in digital classrooms to assist students in improving their learning experience. Feedback loops and technology are two critical components of a digital classroom. Feedback loops are essential for students to obtain real-time feedback from their teachers. Teachers can use feedback loops to provide feedback depending on many factors such as student, lesson, group, etc. PPTs, video presentations, e-learning methods, online training, and other digital approaches are increasingly used in the teaching-learning process. As a result, classroom instruction is becoming more participatory.

Conclusion. Let's consider the advantages and disadvantages of using information technologies in the educational system: [6]

Advantages:

1. Temporary efficiency of the educational process. This fact could not but affect the effectiveness of the teacher's work. The possibility of an unprecedented return to old lecture material and prompt preparation of new ones through electronic technologies, rather than manual

labor, provides additional time for pedagogical creativity and pedagogical self-education. Also of great importance is such a psychological component as rest.

2. Increasing the efficiency of quality control of the learning process. By measuring the achievement levels of students and their subsequent comparison with the requirements of educational standards, it became possible to determine the potential capabilities of students, as well as the qualification coefficient of the teacher. As a result, it gives a complete picture of the effectiveness or ineffectiveness of the educational process.

3. Formation of partnerships between teachers and students. An important factor in the success of the educational process is how the relationship between teacher and student will develop. The establishment of trusting relationships is facilitated by the use of new methods in teaching, such as heuristic and problem-based. The work activity of the teacher and student in both cases is aimed at cooperation, work in a group, and a joint search for a solution to the problem.

Flaws:

1. Negative impact on the human body and psyche. Excessive computer work provokes the development of diseases such as: hypertension, musculoskeletal system disease, persistent myopia, coronary heart disease, kidney disease and genitourinary system, as well as impotence and frigidity.

Mental illnesses include depression.

2. Masking of the personal factor associated with the internal potential of the teacher. The technical component begins to prevail over the personal component in the educational process.

The teacher's internal potential cannot be maximally utilized in the educational space due to the inability to compete with an all-knowing machine, in whose "memory" the entire experience of human civilization is stored.

3. Additional access to information not related to the educational process. The overwhelming majority of students who have not reached the age of majority give their clear preference to the entertainment, but not the educational component of information technology.

Thus, the development and transition to the use of information technologies in the educational process constitute the essence of dynamic processes in education. The mission of educational institutions at all levels of vocational education is to be centers for teaching advanced knowledge, based on information and technical innovations and the introduction of this knowledge into professional activities.

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