



## The Concept Of A Digital Educational Environment And Its Role In The Modern Educational Process

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### ABSTRACT

The article discusses the content of the concept of a digital educational environment and its role and significance in the modern educational process.

В статье рассматривается содержание понятия цифровой образовательной среды, ее роль и значение в современном образовательном процессе.

Maqolada raqamli ta'lim muhiti tushunchasi mazmuni va uning zamonaviy ta'lim jarayonidagi o'rni va ahamiyati haqida so'z yuritilgan.

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цифровое, цифровое образование, цифровая образовательная среда, современное образование.

Raqamli, raqamli ta'lim, raqamli ta'lim muhiti, zamonaviy ta'lim

Today's globalization is considered important to improve the quality and effectiveness of education and the formation of students' knowledge. Digital educational tools, such as e-learning platforms, play an important role in explaining education more effectively. Special attention is paid to the concept of digital education, both in the educational reforms of our republic and in the decisions of our President. In particular, the number "PF-6079" of the president of the Republic of Uzbekistan dated 05.10.2020. — Part 2.5 of the decree" on the approval of the strategy and measures for its effective implementation " 2030 spoke about creating conditions for teaching programming to students of a comprehensive school in order to form a generation of highly qualified personnel in the field of digital technologies, as well as making permanent changes to the main educational programs of secondary schools in order to increase the

It is from these decisions and decrees that it is necessary to organize classes in the school education system with the greater use of digital technologies. The acquisition of skills and literacy in the rational and reflex use of global data from the mechanisms of the use of digital technologies in the management of educational institutions makes it possible to achieve competence and skill.

Currently, digital technologies are required to be used to realize the development, educational process and quality of the state and society. In such a thoughtful way, digital technologies serve to reduce time, costs and improve the effectiveness of Educational Management and, as a clear result, to improve the

quality of the educational process and management personnel. It should be noted that digitization of Management in general secondary institutions, saving working time, is especially relevant.

To fully cover our topic in the article, we need to understand the essence of each basic concept. We will give the definition of these basic concepts below.

The concept of "digital" refers to an approach based on the representation, processing and transmission of information through numbers (numbers). That is, any information is transferred to a digital form in the form of 0 and 1, which computers understand, and processed in this way.

Digital education is a form of Education based on the use of digital technologies, computers, the internet, mobile devices and electronic resources in the teaching process. The concept of "digital" refers to an approach based on the representation, processing and transmission of information through numbers (numbers). That is, any information is transferred to a digital form in the form of 0 and 1, which computers understand, and processed in this way.

Digital education is a form of Education based on the use of digital technologies, computers, the internet, mobile devices and electronic resources in the teaching process.

The digital education environment (DSE) is a digital space consisting of a set of open - access systems that connect all participants in the educational process.

The digital learning environment is a set of digital tools, platforms and technologies created to organize, manage and support the learning process.

Modern education is a teaching process based on the requirements of the current era, focused on innovative technologies, advanced methods and competence.

Digital technologies are technologies based on displaying signals in discrete analog-level bands rather than in the immediate vicinity of the spectrum. Digital technology () is a technology based on displaying signals in discrete bands at the analog level, rather than in the form of a continuous spectrum, that has been reflected and covered on social media. Digital technologies are technologies based on displaying signals in discrete analog-level bands rather than in the immediate vicinity of the spectrum. Digital technology () is a technology based on displaying signals in discrete bands at the analog level, rather than in the form of a continuous spectrum, that has been reflected and covered on social media. There will be no exaggeration to say that giving a definition to digital technologies will be the basis for simplifying several objectives in Simple Ways and digitizing the educational process. Digital technologies serve to save humanity time, make the work scale qualitative and meaningful.

We have already considered the definitions of the basic framework concepts related to our work above. Below we will talk about their content and application.

A digital learning environment is an environment based on the extensive use of digital technologies, electronic resources, and virtual tools in the process of organizing, managing, and developing an educational process. In this environment, the teacher, the student and all participants in the educational process exchange information, gain knowledge, complete assignments, evaluate and communicate. The digital educational environment is not described as a complement to traditional education, but as a socio-pedagogical phenomenon that pushes it to a new level.

The digital learning environment has a technological basis that primarily serves to organize the learning process comfortably, quickly, accurately and efficiently. It features tools such as computers, tablets and smartphones, an internet network, interactive whiteboards, electronic libraries, virtual laboratories, online learning platforms, mobile applications, and AI-based learning systems in an integrated manner. At the same time, electronic textbooks, video cards, tests, simulations and multimedia materials created in a digital educational environment make the learning process interesting and understandable.

The digital educational environment not only consists of technical tools, but also includes new methodological, didactic and pedagogical approaches to education. For example, methods such as personality-oriented education, competency approach, interactive methods, mixed learning (blended learning), distance learning (distance learning), and mobile learning (m-learning) are used effectively in exactly the digital environment. The digital educational environment not only consists of technical tools, but also includes new methodological, didactic and pedagogical approaches to education. For example, methods

such as personality-oriented education, competency approach, interactive methods, mixed learning (blended learning), distance learning (distance learning), and mobile learning (m-learning) are used effectively in exactly the digital environment. This develops the skills of learners such as independent work, research, information work, creative thinking, problem solving.

One important advantage of the digital learning environment is the flexibility of the educational process. The reader can gain knowledge in a convenient time and place, Re-view video lessons, send assignments electronically, and receive immediate feedback. The teacher can also monitor, evaluate, statistically analyze the activities of each student through digital platforms, orient the learning process in an individual way.

Today, the digital educational environment is becoming an integral part of the educational system. Because in modern society, digital literacy, the use of Information Technology, the acquisition of online reading and working skills are becoming an important requirement for every individual. Therefore, educational institutions are working step by step to integrate digital technologies into the educational process, create new digital resources, increase the digital pedagogical competence of teachers.

At the same time, it should be noted that the digital educational environment serves to improve the quality of education, create new opportunities for obtaining knowledge, connect to the global information space and facilitate the interaction of the student and the teacher. It not only modernizes the educational process, but also raises it to a new level — innovative, digitized and intellectual.

The main importance of the digital education environment is its focus on modernizing the educational process. In particular, in historical science, with the help of this environment, it is achieved to teach complex historical processes, analyze cause-and-effect connections and improve the efficiency of understanding intertemporal interdependence.

One of the world's leading researchers in the field of digital education and social technology, the English scientist Neil Selwyn, highlighted the advantages of the digital education environment and singled out the following features:

1. Ease of information: teachers and students will be able to receive and teach from anywhere. 2. Flexibility: each student or teacher adapts the educational process to their own pace. 3. Visual and interactive learning process: digital tools help you understand complex topics easily.

The role of digital educational resources in improving educational efficiency is great. Ease of information: teachers and students will be able to receive and teach from anyw

On the basis of this environment lies the following:

- ❖ educational platforms □ LMS;
  - ❖ e-textbooks;
  - ❖ educational tools based on artificial intelligence;
  - ❖ virtual laboratories;
  - ❖ multimedia materials;
  - ❖ cloud technologies;
  - ❖ distance learning systems.
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As components of the digital education environment, we will cite:

1. Technical components:

Computers, tablets, smartphones

Interactive whiteboards

Internet network

Audio-video techniques

2. Digital platforms and software:

Moodle, Google Classroom, Canvas

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1. Technical components:

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- Interactive whiteboards
- Internet network
- Audio-video techniques
- 2. Digital platforms and software:
  - Moodle, Google Classroom, Canvas
  - Electronic diaries
  - Test creation programs
  - Virtual class platforms (Zoom, Microsoft Teams)
- 3. E-learning resources:
  - Electronic textbooks (e-book)
  - Videodars
  - Simulators
  - Interactive exercises
  - Digital libraries
- 4. Pedagogical and methodological elements:
  - Digital didactics techniques
  - Online assessment systems
  - Adaptive learning
  - Distance learning methods
  - Personality-oriented digital learning pathways.

The main tasks of the digital education environment are as follows:

- Automation of the educational process
- submission, collection, evaluation of assignments / Digital didactics techniques
- Online assessment systems
- Adaptive learning
- Distance learning methods
- Personality-oriented digital learning pathways.

The main tasks of the digital education environment are as follows:

- Automation of the educational process
- submission, collection, evaluation of assignments /
- statistical analysis
- Provision of continuous education
- opportunity to read regardless of time and place
- Create flexible learning paths
- each student learns at his own pace
- Increase interactivity
- multimedia, simulators, game technologies
  - Monitoring student performance
  - Real-time assessment, analysis

Therefore, digital education is an integral part of the modern educational system and serves to organize the educational process in a more efficient, flexible and personality-oriented form. Digital technologies increase the quality of education, develop student competencies, optimize teacher activities and ensure that education is accessible to everyone. Therefore, digital education has an important place as the main innovative direction in today's educational process.

However, there are also risks of digital education. Digital inequality-not all students have equal access to modern technologies. The second risk is cybersecurity problems: personal data protection, cybercrime, online assault cases. Thirdly, social isolation-the loss of direct human communication can lead to psychological problems. However, there are also risks of digital education. Digital inequality-not all students have equal access to modern technologies. The second risk is cybersecurity problems: personal data protection, cybercrime, online assault cases. Thirdly, social isolation-the loss of direct human

communication can lead to psychological problems. Fourth, the lack of digital literacy of teachers is the problem of technological skills and method training of educators. Fifth, the complication of quality control of education is the difficulty of objectively assessing the level of assimilation in an online environment.

The role of the digital environment in modern education is very important. U:

helps to effectively manage and control the educational process;

students are offered individual reading and distance learning opportunities;

promotes knowledge acquisition through interactive and fun teaching; fifth, the complication of quality control of education is the difficulty of objectively assessing the level of assimilation in an online environment.

The role of the digital environment in modern education is very important. U:

helps to effectively manage and control the educational process;

students are offered individual reading and distance learning opportunities;

promotes knowledge acquisition through interactive and fun teaching;

enhances communication and cooperation between teacher and student;

it makes education innovative and up to modern standards.

With this, the digital education environment is an integral component of modern education and plays an important role in improving the quality of education and developing digital literacy of students.

The importance of improving quality and efficiency in higher education through the digital education environment is beyond doubt today. In the context of globalization processes, the strengthening of raqabat, the rapid development of information technology, it is impossible to provide high-quality education without a modern digital educational environment.

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