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THE IMPORTANCE OF IMPLEMENTING DIGITAL TECHNOLOGIES IN THE EDUCATIONAL SYSTEM

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Abstract

The current progress of reforms in the socio-economic and political spheres in our country calls for a fundamental reform of the education system. Because the development of each field is determined by the knowledge, perception, thinking and skills of specialists in that field, teaching methodology. In this article, the implementation of digital technologies in the educational system of the Republic of Uzbekistan is considered as a social necessity, the concept of the "digitization" process is explained, the advantages of digital technologies and the conditions for effective use of digital technologies in education while maintaining the quality of teaching are given.

Key words: digital technologies, digitization, data search and sorting, digital economy, paradigm, electronic government, information and communication, IT-parks, Moodle, Hemis.

Digital technologies are gradually becoming an integral part of every area of our daily life. Today, it is difficult to imagine the activities of all industries without electronic, computer, network and other important automated technologies. Everything from communication and procurement to product development and the independent "work" of a company is going digital. For this reason, in the new paradigm of the development of the world economy, digital technologies are considered as the main source of production that determines the growth of social welfare.

Complex measures are being implemented in our country for the active development of the digital economy, the widespread introduction of modern information and communication technologies in all sectors and fields, first of all, in public administration, education, healthcare and agriculture. In particular, the implementation of more than 220 priority projects aimed at improving the electronic government system, further developing the local market of software products and information technologies, establishing IT parks in all regions of the republic, as well as providing the sector with qualified personnel has begun [1]. These changes lead to positive results such as the development of various fields, professional and personal growth of people. In particular, information, communication and digital technologies are very important in the education system. Introduction of Moodle and Hemis e-learning systems, organization of online courses, implementation of blended courses, operation of open resource courses (MOOC - Massive Open Online Course) in the educational process in higher education institutions are the main means of digital technologies in our country. is a clear example of developing the field of education.

Currently, the term "digitalization" is used in a narrow and broad sense. In a narrow sense, digitalization means the transformation of information into a digital form, which in many cases leads to a decrease in costs and the emergence of new opportunities. In a broad sense, the process of "digitization" usually refers to socio-economic change initiated by the widespread use and assimilation of digital technologies. It includes information creation, processing and transmission technologies. According to A. Murray, "digitalization is a paradigmatic change in our way of thinking, behavior, environment and communication with each other [2]. That is, digitization is a change in the paradigm of communication and interaction. According to E.L. Vartanova, M.I. Makseenko, S.S. Smirnov, digitalization is not only digitalization of information, but also a complex solution of infrastructural, administrative, behavioral, and cultural nature [3]. That is, we can conclude that the development of the Internet and mobile communication are the main technologies of digitization.

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Today, information and knowledge are the basis of the development of the society, and traditional concepts and models are not applied to it. As L.V. Shmelkova pointed out [4], the most important feature of a person who is compatible with the digital economy is the ownership of digital technologies and their use in professional activities. Digital technologies, on the one hand, help to further increase the volume and efficiency of production, on the other hand, they allow an individual approach in various areas. It should be noted that the Decision of the President of the Republic of Uzbekistan dated April 28, 2020 No. PQ-4699[5] was adopted. One of the main tasks of the further development of the digital economy and electronic government is the widespread introduction of digital technologies at all stages of the education system and the improvement of the level of digital knowledge necessary for the modern economy, the educational infrastructure improvement, as well as the opening of training centers based on digital knowledge in all regions of our republic by 2022 within the framework of the implementation of the "Five Initiatives" project. It is necessary to create the national pedagogical technology of Uzbekistan based on the national pedagogical traditions of our people and the current state of the education sector, studying the innovative technologies that are successfully used in enlightened and developed countries. Scientists and practitioners of our republic working in the field of pedagogy are striving to create and implement educational technologies that are scientifically based and adapted to the socio-pedagogical conditions of Uzbekistan.

In the last 15 years, the introduction of the latest generations of mobile devices into our lives, using them to quickly monitor events and events happening in the world through the Internet, and quickly receive all types of materials (video, audio, text, 3D, 5D, 7D graphics), storage and transmission capabilities emerged and led to the emergence of digital technologies. The emergence of digital technologies is replacing traditional teaching methods every day. Due to how quickly audiences are changing, it is appropriate to forget the old methods and introduce new teaching methods based on digital technologies. The organization of distance learning using digital technologies involves the use of simple tablets, sophisticated software and digital equipment instead of paper and notebooks.

International movement of learners, searching and sorting of information, getting knowledge anywhere and at any time and many other advantages indicate that it is convenient to use digital technologies in education.

Digital technologies:

1) technologies facilitate the activity of the teacher and student in learning and teaching;

2) helps make the educational process interesting;

3) serve for certain purposes such as assessment, sorting of information, management, integration of information, communication, development of relations between them and parents, cooperation between teachers, professional development.

The task of this trend in the field of education is not only to improve the computer literacy of teachers and students and to be able to purposefully use information technologies, but also to encourage students to think independently and creatively, to express their opinions, and to develop their communication skills. In this regard, based on the report of UNESCO and NMC Horizon media consortium, digital literacy is becoming an integral part of education as the reason for its ability to form vital skills in the learner, to ensure the student's future employment, independent and continuous education. is recorded. In order to effectively use digital technologies in education while maintaining the quality of teaching, the following tasks must be successfully solved:

First of all, it is necessary to improve the Internet infrastructure in our country, to increase the quality of services provided by mobile operators, and to create conditions and privileges for the most important population, especially students and young people, to master the latest achievements of modern information and communication technologies;

Secondly, to expand the scope of use of digital technologies in the organization of the educational process and to develop information resources, teaching tools and distance learning technologies, to involve creative students in digitization projects of the university, and to make proposals to the competent authorities on

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making changes to the regulatory and legal documents regulating the activities of higher education institutions. , organization of centers equipped with highly efficient digital devices, classrooms, laboratories, media studios, etc., and use of the experience gained in all higher education institutions of Uzbekistan

Thirdly, to ensure the solid integration of modern information and communication technologies and educational technologies, in this regard, to create additional conditions for the continuous development of the professional skills of pedagogues;

Fourth, organizing and conducting courses for teacher training on topics such as the use of interactive presentation systems, the development of interactive and multimedia presentations in connection with the Internet for lectures and seminar classes;

Fifth, to implement the process of distance education at any time using real-time interactive presentation systems, video conference systems, virtual halls, electronic resources.

Sixth, the use of cloud technologies, virtual reality, augmented reality, and the use of 3D printing in the development of didactic materials and experience designs, the use of digital didactics and digital learning models, and scientific discussions for teachers and students to discuss projects, thesis, scientific research, etc. Websites should be developed. Only then will we be able to use digital technologies to provide students and young people with knowledge at the level of today's demand without reducing the quality of education.

In short, the reputation of the teacher and the effectiveness of his activity depend not only on the level of knowledge of the course content and his pedagogical ability, but also on the level of the teacher's use of modern information and communication technologies in the collection, processing and teaching of specific educational material. In other words, education in the digital age must be rethought and the educational paradigm changed, because students no longer want to learn in the traditional way, and teachers do not need to continue teaching in such a conventional way.

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