



DIGITALIZATION OF EDUCATION AT THE PRESENT STAGE OF DEVELOPMENT

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Article history:	Abstract:
Received: April 6 th 2023 Accepted: May 6 th 2023 Published: June 11 th 2023	Report talks about the informatization of education, a new stage in the development of society, "digitalization", the construction-(structure) of digital education, the digital generation and the digitalization of education at the present stage of the development of the information society.

Keywords: communication, technology, information technologies, informatization, e-education, digital technologies, digitization, virtual, virtualization, virtual education, SMART, digital education, digital generation, artificial intelligence

In today's society, the demand and needs of the economy for qualified specialists who have professional mobility and are able to work in changing economic conditions are increasing. According to the program "Digital economy in the Republic of Uzbekistan" of the government of the Republic of Uzbekistan, education is considered one of the most important institutions that create conditions for the development of the digital economy. The task of improving the quality of training of modern specialists determined by the requirements of the labor market, employers, and the entire digital economy in general, is acute.

Today, many scientists are expressing opinions about the end of the stage of informatization of education [1]. "Educational institutions at all levels are provided with computer equipment, pedagogues have undergone training and retraining on the use of ICT in the educational process" [2]. Today is world has moved to a new level of technology development. The new stage of society's development is called "digitalization" and it is called, among other things, the priority direction of modernization of the educational system of Uzbekistan replacing the modern trend and informatization. The process of digitization shows a deep convergence of digital technologies with material and socio-humanitarian, including educational technologies and practices [1]. T.V. Nikulina and Ye.B. According to Starichenko, digitization in education includes life long learning, as well as big data, virtualization, virtual and augmented reality. (VR, AR), mobile technologies, cloud computing and other advanced technologies (advanced learning technologies) are aimed at ensuring its individualization. Productive use of digital technologies in education, involvement of learners in independent research, selection of information, participation in design activities will form 21st century competencies, including ICT competencies, in future specialists.

- In the project of the didactic concept of digital vocational education and training, the factors that cause the need to create a digital educational process in vocational education and training are highlighted. These factors lead to the emergence of three components of the digital society:

- the digital generation (a new generation of learners with unique socio-psychological characteristics; "Generation Z", "processor children", "tablet children", "chip children");

- new digital technologies ("advanced", "smart", "SMART"), which shape the digital environment and develop in it (for example, telecommunication technologies; big data; artificial intelligence; distributed registry technologies (including block- chain); internet of things; digital footprint technology; virtual and augmented reality);

- digital economy and the new requirements for personnel that it creates [1].

These trends are especially relevant for training future pedagogues who will have to prepare the young generation for life and work in the modern digital society.

The construction of digital education is considered as one of the most important priorities in the state policy of the Republic of Uzbekistan, which is the decision of the Government of the Republic of Uzbekistan dated 28.07.2018 No. 1632-r "On Approving the Digital Economy of the Republic of Uzbekistan" Program. order; Priority project "Modern digital educational environment in the Republic of Uzbekistan" approved within the implementation of the state program "Development of Education" for 2013-2020; Order of the President of the Republic of Uzbekistan dated 09.05.2017 No. 203 "On the Strategy for the Development of the Information Society in the Republic of Uzbekistan in 2017-2030"; It is reflected in regulatory documents such as the federal law "On Education in the Republic of Uzbekistan".



The future pedagogue should be ready to use a whole set of computer tools and digital technologies in a motivated manner in the implementation of his professional activities in modern conditions and this is a number of new projects within the framework of the modernization of education. Accordingly, within the framework of the national program "Education" the task of future specialists, including by 2024, "modern and safe digital education that ensures the high quality and popularity of education of all types and levels" "Digital learning environment" which refers to the training of future pedagogues which is considered to be "creating a learning environment", such as "including the introduction of adaptive, practical and flexible educational programs" in secondary professional The federal project "Young Professionals (Increasing the Competitiveness of Vocational Education)" which will receive the modernization of education, is described. Government of the Republic of Uzbekistan dated 28.07.2017 No. 1632-r "Digital economy of the Republic of Uzbekistan" (Section 2 - "Personnel and education") regulates the training of digital economy personnel. Respectively, the training of the future pedagogue in the pedagogical college is currently practical with the use of information, communication and digital technologies that determine the formation of the future pedagogue's ICT competence, that is, in-depth knowledge in the field of informatics and ICT as the foundation of innovative development. should be carried out on the basis of directed preparation.

It is necessary to build a digital educational process in an educational organization based on a new branch of pedagogy - digital didactics which is a scientific science of organizing the teaching process in a digital educational environment. The subject of digital didactics is not the functioning of digital educational tools, but the activity of a person. As noted by V.I. Blinov, "digital didactics is considered as a trans-integrative field of scientific knowledge characterized by the transfer of certain scientific ideas and approaches from one field to another and their integration." is possible" [1]. The subject of digital didactics in professional education and training is "taking the entire educational process as a system of organizing the educational process in a digital educational environment", which includes educational goals (digital economy and digital in accordance with the requirements of society), teaching content and requirements for its formation, methods of organizing the teaching process (based on the use of the possibilities of digital technologies), organizational forms, teaching technology and methods (maximum use of the didactic possibilities of digital technologies),

learning means (including digital - network and software-hardware integrated into a single intellectual complex), the impact of the digital educational process in professional education and training on the development of society and economy.

Currently, the participants of the educational process are those who belong to the "digital generation" (those born in the late 1990s - early 2000s). Scientists emphasize that this generation grew up in a digital environment, which is conditioned by the development of digital technologies. A.A. Verbisky shows that the concept of "digital generation" arose within the framework of the theory of generations developed by N. Howe and V. Strauss. "According to this theory, the values of generations are formed under the influence of the conditions of life and upbringing of a child up to the age of 12-14, they determine the formation of a person and affect people's lifelong life, activities and behavior" . The scientist singled out a number of characteristics of the representatives of the digital generation: "communication using mobile phones and computers; superiority of virtual communication over face-to-face communication; the speed of understanding and receiving information increases, however, it becomes difficult to keep one's attention on one thing; the way of thinking is distinguished by fragmentariness, and reasoning by superficiality; the existence of "clip thinking" ("to clip" in English - cutting, dividing into pieces) that appears in the "digital environment" of the life of children and teenagers" [3].

Also, scientists emphasize that the strategy of working with representatives of the digital generation should be based on the fact that "it is practically impossible to integrate them into the traditional educational process. Therefore, it is necessary to significantly transform the educational process based on the capabilities of the digital generation, as a result of which a new, digital educational process will be created."

The introduction and use of digital technologies is considered to be the peculiarity of creating a digital educational process, and many of them have the following didactic properties: freedom to search for various information on the global network; personalization (unlimited possibilities for personal adjustment according to the needs and characteristics of learners); interactivity (providing multi-subjectivity in the course of mutual learning activities); multimedia (combined activation of various channels of receiving and understanding information); hypertextuality (free movement of the text, use of cross-references, reference nature of information, etc.); subculturality



(adherence to the image of the world typical for the digital generation) [4].

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