

## FORMATION OF DIGITAL COMPETENCE IN UNIVERSITY STUDENTS IN A DIGITAL EDUCATIONAL ENVIRONMENT

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**Annotation:** This article discusses the ways and content of improving students' digital competencies in the digital technology environment, as well as effective tools. How to equip teachers with new digital competencies is described using the example of global pedagogy. Digitalization and the introduction of computerization affects all spheres of life and society. The importance of digital technologies in higher education and the requirements for their rational and effective use are presented.

**Key words:** digital technologies, digital competence, foreign experience, practical significance, economics, pedagogical skills, education, upbringing, development, information and communication technologies, virtual world, development, globalization, motivation, integration, result, experience

## RAQAMLI TA'LIM MUHITIDA OLIY TEXNIK TA'LIM TALABALARIDA RAQAMLI KOMPETENTLIKNI SHAKLLANTIRISH

**Annotatsiya:** Mazkur maqolada raqamli texnologiyalar muhitida talabalarni raqamli kompetentsiyalarini oshirish usullari va mazmuni, samarali vositalar hususida fikr yuritilgan. O'qituvchini yangi raqamli kompetensiyalariga qanday bo'lishi jahon pedagogikasi misolida bayon qilingan. Raqamlashtirish kompyuterlashtirishni joriy qilinishi, hayotni va jamiyatni barcha sohalariga ham o'z ta'sirini ko'rsatmoqda. Oliy ta'limda raqamli texnologiyalar ahamiyati, ulardan oqilona va samarali foydalanish talablari keltirilgan.

**Kalit so'zlar:** raqamli texnologiya, raqamli kompetentsiya, xorijiy tajriba, amaliy ahamiyat, iqtisod, pedagogik mahorat, ta'lim, tarbiya, rivojlanish, axborot kommunikatsion texnologiyalar, virtual dunyo, rivojlanish, globallashuv, motivatsiya, integratsiya, natija, tajriba.

## ФОРМИРОВАНИЕ ЦИФРОВОЙ КОМПЕТЕНТНОСТИ У СТУДЕНТОВ ВУЗОВ В

## ЦИФРОВОЙ ОБРАЗОВАТЕЛЬНОЙ СРЕДЕ

**Аннотация:** В данной статье рассматриваются пути и содержание совершенствования цифровых компетенций студентов в среде цифровых технологий, а также эффективные инструменты. Как вооружить учителя новыми цифровыми компетенциями, рассказано на примере мировой педагогики. Цифровизация, внедрение компьютеризации затрагивает все сферы жизни и общества. Представлено значение цифровых технологий в высшем образовании, требования к их рациональному и эффективному использованию.

**Ключевые слова:** цифровые технологии, цифровая компетентность, зарубежный опыт, практическая значимость, экономика, педагогическое мастерство, образование, воспитание, развитие, информационно-коммуникационные технологии, виртуальный мир, развитие, глобализация, мотивация, интеграция, результат, опыт.

The development of digital technology is changing approaches to education. It should be at the level that it fully meets all the requirements of higher education institutions and the development of new knowledge, skills and digital skills in the use of digital technologies necessary for modern life in a digital society.

The development of digital technologies is one of the main tasks of modern education and is considered the most important step in improving the quality of education and training, changing the education of continuing teachers.

The new technological revolution led to the widespread adoption of digital technologies such as artificial intelligence, robotics and virtual reality. Such rates of digitization increase the development of skills and abilities of most people in the field of application of the means of the digital environment. It is from this that the issues of digital literacy, the development of digital skills of a modern person are becoming especially relevant in a professional environment.

Digital literacy is determined by the set of knowledge and skills necessary for the safe and efficient use of digital technologies and internet resources. It determines the universal ability of a person to confidently use modern digital technologies in his workplace and life, to search and evaluate information from several sources. Such digital literacy has a characteristic of universal universal universal significance in the digital age, which is needed by all members of society and forms an important information culture of the individual. At the bottom of digital literacy lies digital competence-the ability to solve various problems in the field of using digital technologies: creating and using content using digital technologies, including searching and sharing information, answering questions, interacting with other people and computer programs. Digital competence should include digital collaboration, security, and problem-solving capabilities.

Digital skills are the skills of students in the field of using personal computers, the Internet and other types of digital technology, as well as the desire of people to have relevant knowledge and experience. Digital skills allow people to create and share digital content, communicate and learn, and solve problems for effective and creative self-awareness in work and social activities in general.

Digitization is necessary for the formation of competitive specialists in a more flexible, developing "digital world" of the modern higher education process. At the same time, the main

responsibility for the formation and improvement of digital culture and digital skills of the modern younger generation falls on the composition of teachers who, unlike their students, are less adapted to the latest problems of time, do not have enough mobility, mobility.

Therefore, it is important that modern higher education and the teacher know how to increase their digital competence, how to control the process of widespread introduction of digital technologies into the educational process and what these technologies can lead to higher education. More than ever, a modern teacher needs systematic knowledge and skills, new professional competencies that define his digital culture and allow him to reliably use new technologies in his class.

The development and dissemination of Internet technologies in the digital society necessary for modern life, the modernization of infrastructure and the increase in the technological efficiency of the educational process provide an increase in the quality of educational programs and the acquisition of current knowledge, skills and new digital skills. At the same time, teachers who do not know how to work with new digital technologies, those who do not master the new content of education, teaching methods, modern approaches to assessment, cannot ensure the implementation of the proposed innovations.

The new information reality, the lifestyle of a modern person puts forward the requirements of a modern specialist for the development of information culture and information technology competence. At the same time, a low level of information culture in general will be a serious obstacle to the qualitative development, modernization of digital technologies, the improvement of the country as a whole, its competitiveness and national security, the standard of living and quality of the population. Therefore, the formation of new digital competencies, along with basic knowledge, is a strategic task of the educational system of Uzbekistan in the context of a significant increase in the volume and availability of various information, as well as a special culture of using modern digital technologies based on interaction in the network.

Researchers have identified the main conditions for the introduction and development of modern digital technologies in education, the establishment of transformation goals of the educational system in Uzbekistan in the context of the emergence of the digital economy:

- the need to form an effective system of continuous education;
- the general trend of significantly reducing the cost of education.

The process of digitization of higher education is associated with the implementation and development of information and communication technologies. At the same time in research, it notes that modern digital technologies become part of the methods of pedagogy and subject in the era of informatization of society. Educational methodology becomes information, and the subject of pedagogy becomes the information culture of the individual, including aspects of information security, media competence and media culture.

The integration of pedagogical and information technology is considered as a didactic tool and a set of research tools for the implementation of higher educational standards.

First, effective digital technologies and tools that are actively used by children and adults in many other areas of activity are insufficient in educational organizations.

Secondly, educational organizations do not use the capabilities of digital technologies to personalize education (choosing a trajectory, the variety of educational materials, in case of learning difficulties), increase student motivation (interactive educational materials, educational games), facilitate the regular activities of educators and managers (monitoring, reporting, checking work).



New digital technologies make it possible to solve basic educational tasks that are not solved or poorly solved by higher education based on traditional technologies.

According to experts, among these tasks facing higher education institutions are the following:

- intellectual and emotional involvement of students in the educational process;
- a group of “lagging” students of higher education institutions (students with specific characteristics of perception and behavior) to achieve sustainable educational results;
- proportional and timely support of highly capable students;
- eliminating the overload of teachers with everyday tasks, freeing their time for creative and educational work;
- elimination of limited educational resources available in higher education institutions;
- mastering modern digital technologies, first of all, when applying them, the possibility of choosing a wide range of technologies;
- the restructuring of the styles of higher education institutions, in particular, the introduction of game, project, competitive and collective methods based on the use of digital tools. It is possible to actively introduce modern digital technologies into the educational process, provided that the system of additional professional education is qualitatively rebuilt and the professional skills of the teacher, the teacher of the “future”.

Qualitative updating and digitization of higher education in Uzbekistan can be carried out with the following mandatory conditions:

- 1) to create a digital educational environment through the dissemination of new digital technologies in education, while ensuring the use of mobile technologies;
- 2) development of modern digital educational content, new educational and methodological complexes;
- 3) to ensure the quality professional development of the teacher, to increase motivation to master new digital skills, to use digital educational content by transforming the transformation of the system of continuous pedagogical education.

Foreign and domestic researchers emphasize the digitalization of Higher Education, the formation of new digital skills of the growing generation in the general education system, the high importance and priority of the state for further socio-economic development.

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