



## METHODS OF DIGITAL COMPETENCE DEVELOPMENT OF STUDENTS OF VOCATIONAL EDUCATION IN A DIGITAL EDUCATIONAL ENVIRONMENT

**Zakirova Feruza Maxmudovna,**

Tashkent University of Information Technology named after  
Muhammal al-Khwarizmi.

**Hamraeva Gulnoz Rustamovna,**

Tashkent University of Information Technology named after  
Muhammal al-Khwarizmi.



### **Annotation.**

The article describes innovative ways to develop the digital competence of students studying in the field of vocational education in a digital learning environment.

### **Keywords:**

Ability, competence, expert, design, digital economy, education, technology.

The modern era of science and technology development is leading to a sharp increase in the need for a digital economy and digital society.

Today, all the changes and realities in the life of society are rapidly changing and renewing due to digital technologies that cover all areas of human activity. The modern education system must be constantly updated and improved with scientific knowledge, because the future of our country depends on the activities of experienced professionals trained in the digital world.

Experts and social scientists call modern society the information age. The new generation is significantly different from the previous ones with their deep thinking. Society receives and processes a large amount of new information and information flow every day. The new information we receive adapts to changing circumstances, as one has to adapt to the news of this world. The new era requires a change in the way people think. Numerous discoveries and scientific researches made in the field have already laid a solid foundation in the field of education. Today, changes in the modern educational process require the use of digital technologies [1].

When we analyze the stages of development of an economic society from five years to ten years ago, we see the surrounding economic reality (rapid pace of technological change, scale and global information flows), we have a different idea, in which digital competencies are created to succeed. We can see that these changes have led to economic growth, created new jobs and eliminated a lot of manual labor, automation [2].

Thus, economic changes in society, the development of information technology have led to the addition of the term “digitization” to our work.

Digitization is the introduction of modern digital technologies in various areas of life and production.

Director of ICT of UNESCO International Alexander Khoroshilov “ICT and digital competence in education. Key Challenges, UNESCO Approaches and Experiences” analyzed the impact and challenges of ICT in education. He spoke about the positive results of the application of UNESCO's

mandate for students in the field of information and communication technologies for the future of education, as well as the combination of pedagogical technologies [3].

In Global Education Futures and WorldSkills Russia, experts in Future Skills emphasize digital literacy, which is part of ICT competence, as one of the key skills that a person will need in the future. The Education Foresight 2035 (RANEPa) program, which sets out strategic guidelines for education until 2035, emphasizes a competency-based approach between the individualization of education and future educational trends, as well as digitization [4]. Therefore, “digital competence”, which is one of the leading competencies today, is understood as the ability to use ICT in various fields to improve human performance.

Higher education plays an important role in the digitalization of modern society. The rapid development of any country in society, the undeniable intellectual potential is achieved through the digitization of the education system.

The digitization of the higher education system, the training of future personnel for the economy of our country, their information and communication technologies require the development of digital competence in the field.

The concept of digital competencies is defined as a specific feature of the ability of a person (citizen, worker, student) to use information and communication technologies in different conditions (work, leisure, training) in order to increase efficiency [5].

In other foreign sources, digital competence is defined as the reliable, critical and creative use of ICT to achieve goals related to work, education, leisure, and participation in society [6].

Today, the formation of professionals with digital competence is one of the main tasks of the education system of modern society. This task can be achieved only through targeted teaching methods based on multimedia design of ICT competence, which should allow the student to understand new knowledge, create innovations in their design and effectively implement their new projects.

In a digital economy, people need to look beyond hierarchical or narrow functional approaches to identify, reconsider, and creatively solve problems. To do this, you need to think outside the box and gather ideas from a variety of sources. In this context, creative thinking is even more important. Society and the digital economy of the future need professionals who are not only in their field but also very well trained, well-thought-out, critical and creative. Many interesting technologies have been created to develop interactive methods of teaching this skill in higher education.

The use of project-based or request-based learning as a means of increasing students' interest is the key to developing all competencies. Project-based learning is truly a key part of learning new digital skills. Traditional learning models are too passive to create such skills. The program should include practice in creating memorable mental models over time [7].

According to scientists E.E.Shcherbik, A.A. Kondakova, three levels can be identified in the assessment of the formation of digital competencies:

- high. It is characterized by the ability to make full use of digital and information and communication technologies (including the creation of digital products);
- medium. It is to know that all digital competencies exist, but can only be described as a partial application of them;
- past. Unlike the existence of knowledge about digital components, the components of knowledge cannot be interrelated with professional tasks.

Therefore, the development of digital competencies should include not only the use of interdisciplinary links, but also the introduction of design work using individual interactive methods in the studied disciplines [8].

In conclusion, we need to take into account the following points in the development of digital competence of students studying in the play of vocational education.

1. In-depth study of all the new requirements for the digital economy and its professionals, which are part of the three components of the digital society in the modern educational environment.
2. Analyze and compare the classification of modern changes in education and innovation development.
3. To motivate students to develop digital competence in the information learning environment by improving the ability of project work.
4. Introduce the use of innovative teaching methods in the organization of multimedia project work of students.
5. Analysis of the results achieved by students using innovative teaching methods in the organization of multimedia project work.

## References

1. I.A. Volkova, V.S. Petrova. Formation of digital competencies in vocational education. № 1 Russia Vestnik NVG. 1 UDK 378 Nizhnevartovsk, 2019 .-- 18 p.
2. Volkova I.A., Galynchik T.A. 2018. The concept of development of human and scientific and educational potential of the region in the digital economy // Bulletin of Belgorod University of Cooperation, Economics and Law 6 (73), 71–81.
3. UNESCO IITE took part in the information seminar "Digital competencies of educational organizations", which was held on May 24, 2016.
4. Skills of the future. What you need to know and be able to do in a new complex world: report by experts from Global Education Futures and WorldSkills Russia / E. Loshkareva, P. Luksha, I. Ninenko [and others]. - 2017. - URL: [https://futuref.org/futureskills\\_ru](https://futuref.org/futureskills_ru) (date accessed: 15.04.2018). - Text: electronic.
5. [ogbus.ru](http://ogbus.ru).
6. Digital globalization: The new era of global flows. Official site of McKinsey&Company [Электронный ресурс]. URL: <http://www.mckinsey.com/business-functions/digital-mckinsey/our-insights/digital-globalization-the-new-era-of-global-flows> (дата обращения 16.10.2020).
7. I.A. Volkova, V.S. Petrova. Formation of digital competencies in vocational education. UDC 378. Theory and methodology of vocational education. NVGU Bulletin. 2019. No. 1. 19 - p.
8. Shcherbik E.E., Kondakova A.A. 2016. Assessment of the level of financial literacy of students of Nizhnevartovsk State University // XVIII All-Russian student scientific and practical conference. Nizhnevartovsk: Publishing House of NVGU, 811–816.