

IMPROVING PROFESSIONAL SKILLS OF FUTURE TEACHERS ON THE BASIS OF DIGITAL TECHNOLOGIES

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Annotation

This article discusses the impact of digital technologies on the educational process and the possibilities of developing professional skills of future teachers with their help. The enrichment of teachers with modern knowledge and skills through digital pedagogical tools, online platforms, virtual laboratories and distance learning technologies is analyzed on a scientific basis.

Keywords

digital technologies, professional skills, pedagogical skills, information and communication technologies, educational innovations.

INTRODUCTION. Today, the process of introducing digital technologies in the education system is being carried out at a rapid pace. As modern technologies penetrate deeply into all aspects of our lives, they are also leaving a deep mark on the field of education. Especially for future teachers studying in the field of pedagogical education, mastering digital technologies is one of the important components of their professional training.

Digital technologies not only accelerate the exchange of information, but also allow organizing the educational process in interactive, effective and interesting forms. In this regard, not only the content of the lesson, but also its methodology, tools, forms and assessment system are changing. From this point of view, digital technologies are becoming an indispensable tool in the professional activities of a modern teacher.

The formation of digital competencies in the training of future teachers in higher educational institutions ensures that they will keep up with the times in organizing the educational process in the future. Therefore, a teacher who has mastered digital technologies not only conveys educational material, but also can

form skills such as independent thinking, analysis, critical thinking, and a creative approach in the student.

During the pandemic, the entire world education system was forced to transition to a digital environment. This situation once again proved the necessity of digital technologies and their important role in training future teachers. Online lessons, video tutorials, interactive tests, and learning through digital platforms (Zoom, Google Classroom, Moodle) have become more common. Now these tools are becoming an integral part of the educational process.

Digital pedagogical competence means that a teacher can effectively work with digital tools, adapt them to the educational process, and thereby increase students' interest in learning. To form such competence, it is necessary to create wide opportunities for the use of digital technologies at all stages of the pedagogical educational process.

A future teacher must have the skills to select digital tools relevant to his profession, analyze them, adapt them to the teaching process, create interactive presentations and tests, and conduct online assessments. This, in turn, directly affects the quality of education.

A modern teacher must be a comprehensive digital literate person, a critical approach to information, a responsible user of social networks, and a person who adheres to information security rules. Because today's youth are a generation growing up in a digital environment, and in order to work effectively with them, a teacher must also master the digital world. The digital transformation in education requires a review not only of the teacher's technical skills, but also of his methodological and pedagogical approaches. For example, different methodological approaches will be required for online or hybrid lessons compared to traditional lessons. At the same time, digital technologies make it easier to strengthen communication with students, provide them with an individual approach, and facilitate rapid assessment and exchange of ideas. This ensures effective communication between teacher and student.

Today, teachers who master digital technologies are always in demand in the labor market. Their innovative approaches to teaching, the use of interactive methods, and the skills to use digital educational resources are highly valued.

In conclusion, training future teachers based on digital technologies is not only a pressing issue, but also one of the main factors in the development of education. This article analyzes the essence, methods, opportunities and existing problems of forming professional competence based on digital technologies.

Digital technologies facilitate access to educational resources and allow for learning anytime, anywhere. This plays an especially important role in distance

learning and additional forms of education. Lessons, video lectures, tests and virtual laboratories provided through online platforms simplify the work of a modern teacher.

In addition, digital technologies also allow for simulations, modeling and experiments to be carried out in a digital environment during lessons. This helps the student to learn the subject more deeply.

The main digital tools used in education today include Zoom, Google Classroom, Moodle, Microsoft Teams, Kahoot, Quizizz, Padlet, Canva, Genially, and other platforms. With the help of these platforms, the teacher prepares lesson materials, conducts assessments, and monitors student activity.

It is also possible to implement a differentiated approach through digital technologies, that is, to provide each student with materials appropriate to his or her level of knowledge. This is the most effective form of personalized education.

The professional skills necessary for future teachers include lesson planning, preparing methodological materials, using interactive methods, developing assessment criteria, and working with modern technologies.

Digital technologies serve as an effective tool in the formation of these skills. For example, through interactive presentations, online tests, electronic textbooks and digital laboratories, future teachers will apply their theoretical knowledge to practice.

Also, the culture of working with ICT, information security, and compliance with digital etiquette are important aspects that must be formed in future teachers. Developing digital literacy increases their professional competitiveness.

Special modules for future teachers: teaching such subjects as "Digital Pedagogy", "ICT in Education", "Using Multimedia Tools", "Online Education Methodology" serve to form their digital competence.

Their digital culture will be improved through practical training, project work, creating an electronic portfolio, writing video lessons, and tasks for creating content. In this process, teacher educators must also demonstrate exemplary activity.

Problems and ways to overcome them

There are also a number of problems in the process of training future teachers based on digital technologies. First of all, insufficient technical support, low internet speed, and outdated devices hinder the full implementation of this process.

Sometimes students themselves do not have a deep understanding of digital technologies, which negatively affects their active participation in digital education. At the same time, teachers also have difficulty mastering new technologies.

Another pressing problem is the lack of unified methodological guides on the use of ICT in the higher education system and high-quality digital content in the Uzbek language. In addition, the attachment of some professors to traditional approaches is also slowing down changes in this area.

Digital technologies are a set of technical and software tools designed to create, store, process and transmit information. They are also referred to as information and communication technologies (ICT) in education. These include:

- Computers and tablets;
- The Internet;
- Interactive whiteboards;
- Online learning platforms (Zoom, Google Meet, Moodle, Microsoft Teams, etc.);
- Educational systems based on artificial intelligence.

The use of digital technologies in the education system increases the efficiency of the learning process, speeds up communication with students, and allows for the presentation of educational materials in visual, audio and interactive forms. In addition, digital technologies play a significant role in developing students' independent thinking, critical thinking and creative abilities.

The role of digital technologies in the formation of professional skills of future teachers

In the process of preparing future teachers for professional activity at the higher education stage, the skills of using digital tools require special attention. In this process, the following skills are formed:

- Preparation of multimedia materials: development of presentations, video lessons and tests for students.
- Designing virtual lessons: creating courses on platforms such as Google Classroom, Edmodo, Moodle and conducting lessons in an interactive form.
- Using digital assessment tools: automatic assessment of knowledge through tools such as Quizizz, Kahoot, Google Forms.
- Information security and digital culture: mastering the culture of working on the Internet, the basics of copyright and protection of personal data.

These skills play an important role in the effective organization of a modern lesson by a future teacher and working with students in a remote or mixed format.

The following strategic directions are in place in higher education institutions to develop digital competencies:

- Organization of special courses: Modern approaches are taught through courses such as “Digital Pedagogy”, “Online Education Methodology”, “Artificial Intelligence and Education”.
- Practical exercises and project work: creating digital lesson plans, implementing educational projects on interactive platforms.
- Webinars and seminars with the participation of experts: increasing the digital potential of students through training based on international experience.
- Individual educational directions: providing each student with tasks that allow them to maintain a personal portfolio and use digital platforms independently.

Conclusion. Professional training of future teachers based on digital technologies is an integral part of modern education. This is not only a requirement of the time, but also one of the most important factors in improving the quality of education.

Analysis shows that through digital technologies, lessons can be organized on the basis of an effective, interactive, interesting and individual approach. For this, the formation of the necessary digital skills in future teachers is of urgent importance.

At a time when the education system in the 21st century has radically changed and digital technologies have become an integral part of education, the training of future teachers in accordance with modern conditions has become an important issue. Digital literacy, effective use of information and communication technologies, and skills in working in distance and blended learning are required of every teacher.

The analysis conducted in this article has shown that the development of professional skills of future teachers based on digital technologies has a number of advantages. In particular, the quality and efficiency of education increases, students' ability to work independently is formed, openness and speed of access to information are ensured.

With the help of digital technologies, it is possible to organize the educational process in a person-oriented manner, to apply an individual approach to each student. At the same time, it becomes easier to apply innovative aspects of the content, methods and forms of education in practice.

Also, digital tools increase the activity of students, their interest in lessons, and their participation, as a result of which the level of knowledge acquisition also

increases. The introduction of digital technologies in education enhances interactive communication between students and teachers.

The professional competencies necessary for future teachers include the creation of digital educational resources, the development of online assessment systems, the placement of educational materials on digital platforms, and the acquisition of ICT culture.

As discussed in this article, it was noted that some problems - lack of technical equipment, lack of methodological resources, lack of sufficient ICT skills, etc., are slowing down the development of this area.

However, by systematically solving existing problems, it is possible to form a culture of working with digital technologies among future teachers and prepare them for professional activity. In this regard, state policy, higher education institutions, cooperation between teachers and students play an important role.

The process of digital transformation in education requires not only technical changes, but also an update of the teacher's professional thinking, methodological approach and didactic level. Therefore, it is important to include such subjects as "Digital Pedagogy", "Information Culture", "Online Education Methodology" in the curriculum.

For a modern teacher, digital skills should be considered not only as an additional competency, but also as a basic condition for professional activity. Teachers who are self-motivated, open to change, and able to embrace technology can become the leaders of today's education. In short, improving the professional skills of future teachers through digital technologies is not only a way to develop the education system, but also a guarantee of training competitive, creative, and innovative educators.

REFERENCES

1. Axmedov, A. A., & Jo'rayev, M. M. (2021). *Raqamli pedagogika asoslari*. Toshkent: TDPU nashriyoti.
2. Karimova, Z. A. (2022). Bo'lajak o'qituvchilarning raqamli kompetensiyasini shakllantirishning metodik asoslari. // *Ta'lim va rivojlanish ilmiy jurnali*, №2, 43–50.
3. Tuxliyev, N. T., & Kadirova, M. S. (2020). *Axborot-kommunikatsiya texnologiyalari*. Toshkent: Innovatsiya nashriyoti.
4. Saidov, M. M. (2023). Raqamli texnologiyalar orqali pedagogik mahoratni shakllantirish. // *Pedagogik izlanishlar*, №3, 71–76.

5. ЮНЕСКО (2021). *Raqamli pedagogik kompetensiyalar standarti*. UNESCO Institute for Information Technologies in Education (IITE), Moskva.
6. European Commission (2017). *DigCompEdu: The European Framework for the Digital Competence of Educators*. Publications Office of the European Union.
7. Mishra, P., & Koehler, M. J. (2006). Technological Pedagogical Content Knowledge: A Framework for Teacher Knowledge. // *Teachers College Record*, 108(6), 1017-1054.
8. Anderson, T. (2008). *The Theory and Practice of Online Learning*. Edmonton: Athabasca University Press.
9. Selwyn, N. (2016). *Education and Technology: Key Issues and Debates*. London: Bloomsbury Academic.
10. Рамазонова, Феруза Худойназаровна. "Навыки совершенствования педагогической компетентности молодого учителя." *Вопросы науки и образования* 36 (120) (2020): 9-13.
11. Рамазонова, Ф. Х., & Абдуллаев, А. Н. (2019). Важность духовных ценностей в военной деятельности. *Вестник магистратуры*, (4-3), 90.
12. Рамазанова, Феруза Худойназаровна. "Современное состояние развития веры в профессию будущих учителей и направления совершенствования." *Miasto Przyszłości* 35 (2023): 253-260.
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