# Development Of Mechanisms For Applying Digital Technologies In The Professional Activities Of Future Teachers

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*Abstract. The article is devoted to topical problems of preparing future teachers for the use of digital technologies at a high level. There is a need to review existing curricula and subjects to develop future teachers' digital skills in the educational process. A special place in the training of future teachers is occupied by organizations based on the digitalization of methods of teaching school subjects.*

*Keywords: digital technologies, education, online learning, interactivity, personalization, artificial intelligence, education of the future.*

# Разработка Механизмов Применения Цифровых Технологий В Профессиональной Деятельности Будущих Учителей

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*Аннотация. Статья посвящена актуальным проблемам подготовки будущих учителей к использованию цифровых технологий на высоком уровне. Существует необходимость пересмотра существующих учебных программ и учебных предметов для развития у будущих учителей навыков применения цифровых технологий в образовательном процессе. Особое место в подготовке будущих учителей занимают организации, основанные на цифровизации методов преподавания школьных предметов.*

*Ключевые слова: цифровые технологии, образование, онлайн-обучение, интерактивность, персонализация, искусственный интеллект, будущее образования.*

Developing mechanisms for using digital technologies in the professional activities of future teachers is an important step towards modernizing the educational process and training qualified specialists. It requires a comprehensive approach that includes theoretical training, practical training and continuous professional development. The mechanisms should ensure not just familiarization with technologies, but also the formation of pedagogical competence in their use.

1. **Integration of digital technologies into the educational process.**

The integration of digital technologies into the educational process is a global trend that is radically changing traditional teaching methods. Modern educational technologies offer new opportunities for more effective and interesting learning.

−	Creating digitally sensitized curricula: Incorporating courses on the use of digital tools into pre-service teacher education programs.

−	Modular courses in digital technologies: Developing specialized modules dedicated to various aspects of digital technologies, such as content creation, use of educational platforms and tools for distance learning.

**Why are digital technologies so important in education?**

Digital technologies play an increasingly important role in education for many reasons. In their article, E.A. Dyakova and G.G. Sechkareva associate the emergence of digital technologies with the ability of the teacher of the future to use their knowledge not only for self-education, preparation for lessons and their conduct, but also for organizing elements of similar activities for students, forming in them the skills and abilities necessary for life in the digital world [1].

•	**Personalization of learning:**Every student is unique. Digital tools allow you to tailor learning materials to the individual needs and pace of each student.

•	**Interactivity:**Interactive tasks, simulations and games make learning more fun and memorable.

•	**Accessibility of education:**Online courses and mobile apps allow you to study anytime, anywhere.

- **Developing 21st Century Skills:**Digital technologies help develop important skills such as critical thinking, creativity, collaboration and the ability to work with information.

- **Preparation for a future profession:**Knowledge of digital tools is becoming increasingly in demand in today's labor market.

**How are digital technologies used in education?**

Digital technologies are being applied in education at all levels and in a variety of forms, transforming both the learning process and its environment.

- **Online platforms:**MOOCs, LMS and other online platforms provide access to a huge number of educational materials and courses.

- **Mobile applications:**Educational apps for smartphones and tablets allow you to study anytime, anywhere.

- **Interactive whiteboards:**Interactive whiteboards make lessons more dynamic and allow for group assignments.

- **Virtual and augmented reality:**Virtual and augmented reality open up new possibilities for visualizing complex concepts and conducting practical exercises.

- **Artificial intelligence:**Artificial intelligence can be used to create personalized learning programs and assess students' knowledge.

**Benefits and challenges of digital integration.**

**Advantages:**

- improving the effectiveness of training;
- improving student motivation;
- expanding access to education;
- development of new skills.

As scientists note, the rapid development of digital technologies in the field of education is dictated by the relevance of a number of issues being considered - here are some of them:

- digital divide;
- the need for professional retraining of teachers;
- protection of personal data;
- lack of uniform standards.

**2. Practical training and internships.**

- Internships in educational institutions: organizing internships in schools where digital technologies are actively used to gain practical experience.

- Project activities: creating projects in which students can apply digital technologies to solve real-world educational problems, such as developing interactive lessons or educational applications.

**3.        Use of online resources and platforms.**

- Access to online courses and resources: Provide students with access to platforms such as Coursera, edX, and others to learn new technologies and techniques on their own.

- Building a resource database: Build a database of useful online resources, tools and apps for future teachers.

**4.        Teaching digital literacy skills.**

- Digital Literacy Courses: Introducing courses that teach future teachers the basics of digital literacy, including working with various programs and platforms.

- Developing critical thinking: teaching students the skills to analyze and critically evaluate information obtained from digital sources.

**5.        Support and mentoring**

- Create a mentoring system: Connect students with experienced teachers who can share their experience in using digital technologies in teaching.

- Feedback and reflection: Providing regular feedback on the use of digital technologies in the learning process will help students adapt their approaches.

**6.        Development and use of digital teaching materials.**

- Create digital textbooks and resources: Students can develop their own digital learning materials, which will help them gain skills in using various tools.

- Interactive learning platforms: using platforms such as Google Classroom, Moodle and others to organize the learning process and interact with students.

**7.        Evaluation and monitoring.**

- Using digital tools for assessment: Training future teachers in assessment methods using digital tools such as online tests and surveys.

- Analyzing Student Progress Data: Train students in methods for analyzing student performance and engagement data to help them adapt their teaching methods.

It is impossible to consider all aspects of the problem arising in the professional training of future teachers in connection with digitalization in one article. However, already today, looking into the near future, we can ask a number of questions: will the teacher be only a consultant? What will the education of students be like? etc. And, finally, how will the professional training of a subject teacher be transformed?

**Conclusion**

The introduction of digital technologies into the professional activities of future teachers requires a systematic approach and integration of various mechanisms. This will allow training qualified specialists who are able to effectively use modern technologies in the educational process, which in turn will improve the quality of education.

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