

## THEORETICAL FOUNDATIONS FOR IMPROVING THE DIGITAL COMPETENCE OF FUTURE TEACHERS

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**Tillabayeva Maxfuza Muxamedovna**

*Independent researcher at Kokand State University*

### **Annotation**

Developing digital pedagogical competencies of future teachers is an important task in the modern educational process. This model aims to develop teachers' skills in the effective use of digital tools, making the learning process interactive and modern.

### **Keywords**

Competence, pedagogical process, pedagogue, pedagogical skills, education, support, speech competence.

### **Абстракт**

Развитие цифровых педагогических компетенций будущих учителей является важной задачей в современном образовательном процессе. Данная модель направлена на развитие у учителей навыков эффективного использования цифровых инструментов, что делает процесс обучения интерактивным и современным.

### **Ключевые слова**

Компетентность, педагогический процесс, педагог, педагогическое мастерство, образование, поддержка, компетентность, речевая компетентность.

The concept of digital competence is of particular importance in theoretical approaches to improving the digital competence of future teachers.

Digital competence is a person's ability to effectively use information and communication technologies (ICT), which includes the skills of searching, analyzing, creating and sharing information. For teachers, this is an opportunity to improve the quality of education through the use of digital tools in the educational process.

In the competency approach, digital competence includes not only technical knowledge and skills, but also the pedagogical and methodological skills of the teacher. Digital competence is a complex set of competencies: technological,

communicative, creative. In the transformational approach to digital competence, it is emphasized that digital technologies will fundamentally change the educational process. Future teachers are seen not only as users of digital tools, but also as implementers of pedagogical transformations. The concept of "Digital Pedagogy" is important in this approach.

The methodological approach to digital competence studies the integration of teaching methods (interactive, distance, cooperative learning) with digital tools in the process of improving teachers' digital competence. This approach emphasizes the inextricable link between information technologies and pedagogy. According to the approach to digital transformation and lifelong learning, teachers must constantly develop their skills, master modern technologies and pedagogical innovations. The concept of Lifelong Learning plays a central role in this process. In theoretical approaches to improving the digital competence of future teachers, we can take the TPACK model (Technological Pedagogical Content Knowledge) as the main theoretical model. This model recommends integrating the teacher's three areas of knowledge - technological, pedagogical and scientific. Digital competence is manifested in the resulting intersections.

Another model is the DigCompEdu model, which was developed by the European Commission and measures teachers' digital competence in five key areas (information management, communication, use of technology in the educational process, social and ethical standards, and service delivery).

Elements of digital competence formation:

- Technical knowledge and skills - working with computers, mobile devices, programs.
- Pedagogical approaches - methods of effective use of ICT in the classroom.
- Information security and ethics - safe use of information on the Internet and ethical norms.
- Creation and creativity - creating new educational content in digital media.
- Communication and collaboration - interaction with students and colleagues in an online environment.

Improving the digital competence of future teachers is a complex process that requires multifaceted theoretical approaches. In this process, not only technical knowledge, but also pedagogical education, ethical social context and the concept of lifelong learning are important. In modern education, digital competence is becoming an important factor in improving the professional skills of teachers and improving the quality of education.

The uniqueness and importance of digital competence in education is not only knowledge of technologies, but also the ability to use them effectively, purposefully

and creatively in the educational process. This skill allows future teachers to adapt to the new digital environment, communicate effectively with students, and convey knowledge and skills in an interactive manner.

As an in-depth description of theoretical approaches:

1. Systematic approach - this approach systematically organizes the improvement of digital competence in the educational process and takes into account the level of knowledge, experience, personal motivation of future teachers and the digitalization of the educational environment. When digital competence is systematically increased, they not only learn the technique, but also integrate it into the teaching process.

2. Constructivist approach - in this approach, future teachers use digital tools as a way to create new knowledge and skills in their pedagogical activities. In this approach, the teacher is considered not as an active participant, a teacher, but as an expander of learning circles.

3. Social-constructive approach - in this approach, digital competence is based on interactions with society, the professional community. In this, future teachers improve their skills by exchanging ideas and sharing experiences in online communities. The formation of digital competence in this process occurs on the basis of social learning.

4. Critical thinking and ethical approach Digital competence includes not only technical knowledge, but also information security, compliance with digital ethics and critical thinking. Future teachers are formed with the skills to critically analyze information sources and combat misinformation.

Future teachers analyze the experience of using digital technologies to evaluate and improve their educational processes, and in this regard, they should pay special attention to the following as factors that stimulate the development of digital competence:

- Technological base and infrastructure of educational institutions
- Support and motivation from leaders
- Introduction of innovative pedagogical approaches
- Adaptability of educational content and tools to students
- A favorable psychological environment, a culture that encourages the acquisition of new skills.

Conclusion. The development of digital competence serves to increase the level of adaptation of teachers to changing technological and pedagogical needs. Theoretically, this skill is seen as a multidisciplinary process, that is, it includes social and individual growth. At the same time, it serves to increase the

effectiveness of education and adapt students to the requirements of modern society.

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