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USING DIGITAL TECHNOLOGIES IN DEVELOPING FUTURE TEACHERS METACOMPETENCE

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ABSTRACT

This scientific article comprehensively analyzes the problem of developing metacompetence of future teachers from the perspective of the modern education system. The theoretical foundations of the concept of metacompetence, its structural components and its role in pedagogical activity are revealed. The new didactic opportunities arising as a result of the introduction of digital technologies into the educational process and their importance in the formation of metacompetences are scientifically highlighted. The article also recommends a methodology for the effective use of digital tools in the development of reflexive thinking, critical approach, creativity and independent learning skills in future teachers. The results of the study show that the pedagogical process organized in a digital educational environment has a significant positive impact on the formation of metacompetence.

Keywords: Metacompetence, digital technologies, pedagogical competence, reflection, critical thinking, creativity, digital learning environment, innovative approach, professional training.

INTRODUCTION

The education system in the 21st century is undergoing fundamental changes. The processes of globalization, the rapid development of information and communication technologies, and the formation of the digital economy are placing completely new demands on education. Now society requires not only a knowledgeable specialist, but also a person who can independently update his knowledge, make the right decisions in problem situations, think critically and creatively.

From this point of view, the question of formation of meta-competence in the process of training of pedagogic personnel is particularly relevant. Because a modern teacher needs to be not only a provider of knowledge, but also a leader who teaches the student to learn and develops his intellectual and creative potential. This requires the teacher to have a high level of meta-competence.

And digital technologies create ample opportunities for effective organization of this process. Online platforms, virtual learning environments, artificial intelligence-based tools and multimedia resources allow for individualization, interaction, and efficiency of the teaching

process. Therefore, in-depth study of the use of digital technologies in the development of meta-competence of future teachers is of significant scientific and practical importance.

The concept of metacompetence has been widely studied in pedagogy and psychology. It is often interpreted in an inextricable link with the concepts of metacognition, reflection, and self-management. In scientific sources, metacompetence is interpreted as a person's ability to understand, control, and manage their own cognitive activity.

Modern research shows that the development of metacompetence directly affects a person's ability to learn independently, solve problems, and acquire new knowledge. This concept is especially important in the training of pedagogical personnel.

The issue of integrating digital technologies into education is also at the center of many scientific works. Researchers emphasize the advantages of teaching in a digital environment as its flexibility, interactivity, wide access to resources, and individual approach.

Metacompetence is the ability of a person to consciously manage his or her own cognitive activity, plan the learning process, and evaluate the results. It consists of the following main components:

The metacognitive component is an important component related to a person's conscious understanding, planning, and management of their own learning process. Through this component, a person can determine how they think, by what methods they acquire knowledge, and which strategies are effective or ineffective. Metacognitive activity includes the stages of planning, monitoring, and evaluation. For example, a future teacher, when preparing for a lesson, assesses his level of knowledge, determines which resources to use, and monitors himself during the learning process. This serves his self-development.

The reflective component represents a person's ability to critically look at their own activities, deeply analyze the work done, and evaluate their results. Through this component, the future teacher reviews their pedagogical activities, identifies mistakes made, and develops ways to eliminate them in the future. The process of reflection helps not only to identify shortcomings, but also to understand achievements. This serves the professional growth of the individual. Especially in the modern educational process, reflection is an important factor that ensures the teacher's continuous work on himself.

The motivational component reflects a person's internal need, interest, and desire for self-development. This component determines the future teacher's positive attitude to learning, commitment to his profession and the need for continuous growth. Motivation is formed based on internal and external factors. Internal motivation is a person's interest in knowledge and self-development, while external motivation is related to encouragement, assessment or social recognition. A highly motivated future teacher actively tries to acquire new knowledge and constantly improves his professional skills.

The communicative component includes the ability of a person to communicate effectively with others, exchange ideas and work in a team. This component is especially important for a future teacher, since his professional activity requires constant communication with students, colleagues and parents. Communicative competence includes not only oral and written speech, but also the skills of listening, understanding and expressing one's thoughts clearly. In addition, cooperation in teamwork, joint problem solving and social adaptability are also important aspects of this component.

The creative component represents a person's ability to think in new ways, apply unusual approaches, and generate innovative ideas. This component plays an important role in the future teacher's organization of the teaching process in an interesting, interactive, and effective way. Through creativity, the teacher uses new pedagogical technologies in addition to traditional methods, encourages students to think creatively, and increases their interest. A creative approach helps to find new solutions to problem situations and increases the effectiveness of the educational process. These components are inextricably linked and, in a complex way, ensure the overall development of the individual.

Pedagogical opportunities of digital technologies

Digital technologies play an important role in the modernization of the educational process. They create the following opportunities:

1. Individualization of education

The opportunity to teach in accordance with the needs and abilities of each student is created. This is an important factor for the development of meta-competence.

2. Support for independent learning

Students acquire independent knowledge through online courses, video lessons and electronic libraries.

3. Development of reflective activity

The opportunity to analyze their own activities through electronic portfolios, blogs and diaries expands.

4. Formation of critical thinking

Students learn to critically evaluate information by analyzing various information sources.

5. Development of cooperation

Teamwork skills are formed through online platforms.

Methodology for using digital tools in developing metacompetence

The following methodological approaches are effective for developing metacompetence of future teachers:

Project-based learning - students gain knowledge by solving real problems;

Problem-based learning - develops critical thinking;

Interactive methods - ensure active participation;

Digital platforms - support independent learning;

Reflective tasks - teach self-evaluation.

Research shows that in the educational process organized on the basis of digital technologies: students learn to think independently; reflexive skills develop; the level of creativity increases; the ability to analyze information is formed.

This directly affects the development of metacompetence.

The effectiveness of using digital technologies in the development of metacompetence depends on many factors. In particular: the digital literacy of the teacher; technical support of the

educational environment; the correct choice of methodological approaches. Therefore, it is necessary to organize this process systematically.

In conclusion, the development of meta-competence of future teachers is one of the priority areas of the modern education system. The effective use of digital technologies in this process serves to raise pedagogical activity to a qualitatively new level. The educational environment organized through digital tools allows for the comprehensive development of not only the knowledge and skills of teachers, but also their meta-cognitive, reflexive, communicative, motivational and creative competencies.

At the same time, digital technologies, by ensuring the individualization, interactivity and flexibility of the educational process, form the abilities of future teachers to learn independently, think critically and solve problems. As a result, they are formed as highly qualified specialists who can effectively operate in a modern information environment and constantly improve their professional activities.

The results of the study show that high efficiency can be achieved only if the use of digital technologies in the development of meta-competence is organized systematically and purposefully. This creates the need for the widespread introduction of innovative approaches in the pedagogical education process, the rational use of modern didactic tools and the improvement of teachers' digital literacy.

In the future, it will be important to further deepen scientific research in this area, develop effective pedagogical technologies aimed at developing meta-competence, and widely apply them in practice. Also, one of the urgent tasks will be to improve the digital educational environment, support the innovative activities of teachers, and develop the national education system based on the study of international experience. In general, the effective use of digital technologies in developing the meta-competence of future teachers will not only improve the quality of education, but also prepare competitive, modern-thinking and innovative pedagogical personnel.

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