



FORMING THE PEDAGOGICAL-PSYCHOLOGICAL READINESS OF FUTURE TEACHERS TO WORK IN THE CONDITIONS OF DIGITALIZATION OF EDUCATION

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Abstract

This article examines the formation of pedagogical and psychological readiness of future teachers to work effectively in the context of digitalization of education. Special attention is paid to the development of professional competencies, innovative thinking, communication skills, and psychological resilience of teachers in a digital learning environment. The study highlights the importance of integrating digital technologies into the educational process, designing individual learning trajectories, and applying interactive teaching methods. The ways of improving teacher training based on systemic, competency-based, and learner-centered approaches are substantiated.

Keywords: digitalization of education, pedagogical and psychological readiness, digital learning environment, competencies, innovative approach, interactive learning, future teacher.

Introduction

KELAJAK O‘QITUVCHILARNING TA‘LIMNI RAQAMLASHTIRISH SHAROITIDA ISHLASHGA PEDOGOGIK – PSIXOLOGIK

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Annotatsiya

Mazkur maqolada kelajak o'qituvchilarning ta'limni raqamlashtirish sharoitida samarali faoliyat yuritishga pedagogik-psixologik tayyorligini shakllantirish masalalari tahlil qilingan. Raqamli ta'lim muhitida o'qituvchining kasbiy kompetensiyalari, innovatsion fikrlashi, kommunikativ qobiliyatlari va psixologik barqarorligi muhim omil sifatida qaraladi. Shuningdek, raqamli texnologiyalarni ta'lim jarayoniga integratsiya qilish, individual ta'lim traektoriyalarini yaratish va interaktiv o'qitish usullaridan foydalanishning ahamiyati yoritilgan. Tadqiqotda tizimli, kompetensiyaviy va shaxsga yo'naltirilgan yondashuvlar asosida kelajak o'qituvchilar tayyorgarligini takomillashtirish yo'llari asoslangan.

Kalit so'zlar: raqamlashtirish, pedagogik-psixologik tayyorgarlik, raqamli ta'lim muhiti, kompetensiya, innovatsion yondashuv, interaktiv ta'lim, kelajak o'qituvchi.

Аннотация

В данной статье рассматриваются вопросы формирования педагогико-психологической готовности будущих учителей к профессиональной деятельности в условиях цифровизации образования. Особое внимание уделяется развитию профессиональных компетенций, инновационного мышления, коммуникативных навыков и психологической устойчивости педагога в цифровой образовательной среде. Освещаются вопросы интеграции цифровых технологий в образовательный процесс, создания индивидуальных образовательных траекторий и применения интерактивных методов обучения. Обоснованы пути совершенствования подготовки будущих учителей на основе системного, компетентностного и личностно-ориентированного подходов.

Ключевые слова: цифровизация образования, педагогико-психологическая готовность, цифровая образовательная среда, компетенции, инновационный подход, интерактивное обучение, будущий учитель.

The rapid and consistent development of innovative education is inextricably linked to the complex socio-economic stage of modern society, namely global changes, economic and political reforms, and the processes of "digital restructuring". These processes are placing completely new demands on the education system, in particular, the preparation of the future teacher for effective



work in a digital environment, the formation of competencies in information and communication technologies is becoming an urgent issue.

The relevance of the study is justified by a number of socio-pedagogical contradictions. In particular, there is a contradiction between the increasing need for a teacher who can think creatively and make independent decisions in non-standard situations by society and the insufficient development of mechanisms for the full formation of such qualities in practice in the education system. There is also a mismatch between the high requirements for the quality of education and the level of readiness of the teacher to carry out professional activities in the conditions of digitalization.

In addition, there are also contradictions between the teacher's readiness to use digital educational resources and a certain level of conservatism of the traditional education system. Another important aspect is the insufficient development of an integrated approach to the goals, content and structure of education, despite the growing knowledge about the impact of the digital educational environment on the quality of education and the personal development of the student.

In modern research, the process of digitalization of education is assessed as a factor fundamentally changing the education system. In particular, Michael Fullan emphasizes that digital technologies are an important tool for increasing the effectiveness of teaching in the process of changes in education. Also, Sugata Mitra scientifically substantiated the possibilities of self-organized learning (the process of independent learning of students) in a digital environment in his research.

The digital educational environment (a system of organizing the educational process on the basis of information technologies) radically changes and modernizes traditional pedagogical practice, increases the effectiveness of the educational process and brings the forms of interaction between the teacher and the student to a new level. This process leads to the renewal of the content, methods and forms of education, as well as the formation of new communication formats. In this regard, the formation of pedagogical and psychological readiness of future teachers to work in the conditions of digitalization of education, that is, the process of developing the necessary knowledge, skills and personal qualities for a teacher to effectively operate in a digital environment, is of particular importance. This preparation includes not only knowledge of information technologies, but also psychological adaptation, as well as the ability to quickly



and effectively adapt to new conditions, accept pedagogical innovations and put them into practice.

Many domestic and foreign researchers, including Neil Selwyn, Andreas Schleicher, have extensively covered the problems of digitalization of education, the activities of teachers in the context of digital transformation, and their professional training. Their research shows that in order to successfully operate in the context of digital education, a teacher must have not only technical knowledge, but also a high level of pedagogical and psychological competencies. The problem of forming the pedagogical and psychological readiness of a future teacher in the context of digitalization of education is one of the most relevant areas of modern educational theory and practice and determines the scientific significance of this study.

Literature Review and Methodology

Most foreign scholars have studied the process of digitalization of education in two main directions: firstly, as an external process, that is, from the point of view of factors external to the education system - state policy, institutional reforms and global trends, and secondly, as an internal process, in which it is analyzed in the context of pedagogical, organizational and psychological changes in educational institutions. These approaches reveal the multifaceted nature of the digital transformation of education.

Andreas Schleicher emphasizes that the process of digitalization in education systems is mainly driven by state policies and institutional strategies. In this process, government initiatives, that is, state programs aimed at modernizing education, are of decisive importance, which serve to increase the quality of education and competitiveness.

A number of researchers define the main goals of digital transformation as follows: enriching the educational experience of students, increasing their competitiveness in the labor market, forming a culture of decision-making based on digital information, and developing digital thinking among participants in the educational process - students, teachers, and administrators. Of particular importance in this regard are the studies of Neil Selwyn and Sugata Mitra, who scientifically substantiated new models of education and opportunities for independent learning in a digital environment.[4,7]

In the works of Russian researchers, the digitalization of education is interpreted, first of all, as a process of reorganizing the activities of an educational organization based on new digital technologies and innovative business models. This process is not limited only to the introduction of technologies, but also includes the transformation of the human factor, organizational culture, and pedagogical approaches.

According to V.I. Kolykhatov, digital transformation forms new skills and models of activity through the deep and strategic use of digital technologies. This, in turn, requires a high level of digital and pedagogical competencies from the future teacher.[1]

B.N. Panshin explains the digitalization of education as the process of converting all types of information into digital format and integrating them into a single information environment.[5]

Yu.N. Petrov and O.N. Filatova note that the digitalization of education requires not only the development of technological infrastructure, but also the improvement of pedagogical approaches. For example, interactive devices, communication platforms (Skype, WhatsApp, Viber) and 3D modeling technologies allow organizing the educational process in a visual and interactive way.[6]

L.M. Manuylova and A.S. Maksimov noted in their research that digital formatting of information in education increases the flexibility of the educational process and allows for the formation of an individual educational trajectory for each student. Augmented reality (AR - technology for enriching the real environment with digital elements) is also considered an effective tool for explaining educational material.[3]

From the point of view of A.A. Maksimenko, O.S. Deineka and L.N. Dukhanina, the digitalization of education is manifested as a discursive process, that is, a constant reshaping of the content and forms of education.[2] This process creates new opportunities for educational participants - teachers and students, making the educational process more interactive, flexible and inclusive. As a result, online education is becoming popular, becoming an affordable, convenient and comprehensive form of education.

The analysis of the above literature shows that in the context of the digitalization of education, the formation of the pedagogical and psychological readiness of the future teacher is of particular scientific importance. This preparation includes not



only technical knowledge, but also such aspects as psychological stability, communicative competence, innovative thinking.

Methodologically, this study is conducted on the basis of a systematic approach, a competency-based approach, and a person-oriented approach. Also, an integrative approach, the combination of various methods and technologies is important for the effective organization of the pedagogical process in a digital educational environment.

The process of digitization of education is fundamentally changing the requirements for the professional activity of the future teacher, which makes the formation of his pedagogical and psychological readiness one of the priority areas of modern educational research.

Discussion

The issue of forming the pedagogical and psychological readiness of future teachers to work in the conditions of digitization of education is one of the priority areas of the modern education system. In today's conditions, when digital technologies are deeply penetrating the educational process, it is not enough for a teacher to know only the subject, but he must also have the ability to effectively operate in a digital environment, establish interactive communication with students, and organize education taking into account their individual characteristics.

The content of pedagogical and psychological training, first of all, involves the formation of digital competence of the future teacher. This includes the skills of the targeted use of information and communication technologies, the selection of digital educational resources and their integration into the teaching process, as well as the combination of online and offline educational formats. At the same time, psychological preparation is determined by the teacher's ability to adapt to new conditions, form a positive attitude towards changes and manage stress situations. One of the specific aspects of the educational process in the context of digitalization is the stimulation of students' cognitive activity and their desire for independent learning. In this regard, the teacher plays the role of not only a teacher, but also a facilitator, consultant and guide. This requires a high level of pedagogical skills and psychological sensitivity from him. For example, it is important to analyze the activity of students in the digital environment, identify



their interests and needs, and develop individual educational trajectories on this basis.

Also, the use of practical exercises, trainings, and simulation educational technologies is effective in forming the pedagogical and psychological preparation of future teachers. Such an approach allows them to apply theoretical knowledge in practice, model various pedagogical situations, and develop independent decision-making skills. In particular, virtual lessons organized through digital platforms serve as an important source of experience for future teachers.

In the context of the digitalization of education, the formation of the pedagogical and psychological preparation of future teachers requires an integrated approach. In this process, it is necessary to ensure the harmony of technological, pedagogical, and psychological components. Only then will it be possible to train competitive pedagogical personnel who meet modern requirements and can effectively operate in a digital educational environment.

Conclusion

The formation of pedagogical and psychological training of future teachers in the context of digitalization of education is one of the important factors in the development of a modern education system. This training includes not only the effective use of information and communication technologies by the teacher, but also the ability to establish effective communication with students in a digital environment, take into account their individual characteristics and adapt the educational process.

At the same time, pedagogical and psychological training ensures the teacher's innovative thinking, ability to quickly adapt to changes and readiness to apply new approaches in his professional activities. This serves to effectively solve various problems arising in the digital educational environment and improve the quality of education.

In the process of training future teachers, the integration of pedagogical, psychological and technological knowledge is of great importance. Through such a comprehensive approach, it is possible to form pedagogical personnel who can effectively operate in digital education, meet the requirements of the time and are competitive.

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