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FORMATION OF CREATIVE-METHODOLOGICAL COMPETENCE OF FUTURE TEACHERS IN THE CONTEXT OF DIGITAL EDUCATIONAL TRANSFORMATION

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ABSTRACT. This scientific thesis conceptually investigates the issues of forming and developing the creative-methodological competence of future teachers in the context of modern digital transformation and innovative education. The article analyzes the psychological and methodological challenges faced by third-year students of pedagogical fields during their transition into real school practice, their skills in using digital learning platforms, and the integration of Artificial Intelligence (AI) technologies into the educational process. As a result of the research, new scientific and practical recommendations have been developed for improving students' methodological preparation through the STEAM approach, the "Flipped Classroom" model, and the Peer-to-Peer professional support system among students.

Keywords: digital transformation, creative pedagogy, methodological competence, STEAM education, Artificial Intelligence (AI), Flipped Classroom, third-year student, practical integration, Alpha generation, case study.

Today, along with all other spheres, the global education system is undergoing a period of fundamental transformation. The rapid growth of information flows, the integration of artificial intelligence technologies into the educational process, and the increasing popularity of hybrid learning models are creating entirely new and advanced requirements for the image and professional qualities of the modern teacher. The Law of the Republic of Uzbekistan "On Education" and the Concept for the Development of the Higher Education System until 2030 define the training of competitive, independently thinking teaching professionals who have mastered modern technologies as one of the key strategic objectives.

For third-year students studying in pedagogical fields, these requirements are not merely theoretical concepts but direct practical necessities. According to Resolution No. 646 of the Cabinet of Ministers of the Republic of Uzbekistan, granting third-year students the official right to teach in general secondary schools places a significant responsibility on higher pedagogical education institutions. Already at the third stage of university education, students enter real school classrooms and are required to conduct lessons based on the principles of digital pedagogy. However, the practical readiness of future teachers, their ability to design lesson scenarios in digital formats, and their creative-methodological competence in overcoming unexpected pedagogical challenges that arise during the teaching process do not yet fully meet the demands of modern education. Therefore, searching for effective solutions to this scientific problem and proposing a new methodological model is of great relevance and importance.

During the analysis of the adaptation of pedagogical students to the school environment and their teaching practices, a number of significant problems requiring urgent solutions were identified. These challenges can be classified as follows:

Currently, many methodological manuals and textbooks used in higher education institutions are based on fundamental principles developed before the rapid advancement of information technologies. In lectures, students often associate the concept of "preparing visual aids" only with drawings made on poster paper or simple handout materials. However, modern school learners (Generation Z and Generation Alpha) are characterized by "clip-based thinking,"

meaning that their ability to perceive long textual or static information is considerably reduced. Future teachers often lack the skills required to design lessons using dynamic resources, video content, 3D models, and interactive simulations.

Today's students are familiar with using ChatGPT, Midjourney, and other neural network technologies in everyday life or for preparing academic assignments. However, they often do not have a clear understanding of how to integrate these tools methodologically into their own teaching practice. For example, they have limited knowledge of using artificial intelligence to create individualized learning tasks for students, plan lessons based on the STEAM approach (Science, Technology, Engineering, Arts, and Mathematics), and objectively assess students' knowledge through automated digital systems. When third-year students begin teaching at schools, they often encounter a psychological barrier known as "methodological fear." Although they possess theoretical knowledge of their subject, they may lose confidence when standing in front of a classroom consisting of 30–35 diverse learners. In particular, when pupils use smartphones or tablets not for educational purposes but for playing games or accessing social networks, future teachers may experience difficulties in maintaining classroom discipline. The traditional method of simply "taking away the phone" does not correspond to modern pedagogical ethics and may lead to the formation of a negative attitude toward the subject among learners.

In order to overcome the existing challenges and prepare third-year pedagogical students as highly qualified professional specialists, we propose the implementation of the following conceptual innovations into the educational process:

According to this model, students should acquire lectures and theoretical knowledge not through traditional classroom-based instruction at universities, but independently through video lessons and electronic learning platforms. Classroom hours should be focused exclusively on practical activities, including the simulation of school lessons, analysis of lesson plans, and solving pedagogical case studies. By mastering this approach, future teachers will also be able to apply the same method in schools by assigning students short and engaging educational videos to study at home while organizing practical and interactive activities during classroom sessions.

Future teachers should be trained to integrate their subject areas with other disciplines through an interdisciplinary teaching methodology. For instance, a mathematics student conducting a lesson should be able to connect the topic with elements of architecture, programming, or visual arts. Such an approach develops students' creativity and significantly increases learners' interest and engagement in lessons.

It is also necessary to establish peer-to-peer experience-sharing networks among third-year students. Students who successfully conduct lessons at schools and gain their first professional teaching experience should organize short online webinars for their peers and maintain "pedagogical blogs" describing how they overcome challenging classroom situations. This system will naturally contribute to reducing methodological fear among future teachers and strengthening their professional confidence.

In conclusion, the era of digital transformation requires the pedagogical education system to move away from outdated traditional approaches and take bold steps toward innovation. A third-year student in the field of pedagogy should enter the school environment not merely as a "trainee," but as an innovator who brings new perspectives, modern digital methodologies, and a high level of creativity into educational practice.

The formation of students' creative-methodological competence does not simply mean teaching them how to use computer programs. Rather, it involves renewing their pedagogical thinking and developing their ability to effectively integrate artificial intelligence and digital technologies with educational content. Through the systematic implementation of the "Flipped

Classroom" model, STEAM technologies, and practical case studies in higher pedagogical education, it is possible to prepare highly competent teachers capable of educating the creators of the Third Renaissance for the schools of New Uzbekistan. This serves as a fundamental guarantee for raising the quality of education to international standards.

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