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METHODOLOGICAL JOURNAL**<http://mentaljournal-jspu.uz/index.php/mesmj/index>**TRANSFORMATION OF PEDAGOGICAL HIGHER EDUCATION INSTITUTIONS:
ORGANIZATIONAL PROCESSES AND THEIR SYSTEMATIC IMPLEMENTATION****Kh. Khamzaev**

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ABOUT ARTICLE

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Abstract: This article develops and scientifically substantiates a step-by-step transformation model aimed at the development of pedagogical higher education institutions within the system of pedagogical personnel training. The study provides a comprehensive systemic analysis of institutional diagnostics, updating the content of education based on a competency-based approach, enhancing the potential of pedagogical personnel, digital transformation, and education quality management. The proposed model ensures consistency and sustainability in improving the quality of pedagogical personnel training.

Introduction. In the 21st century, the higher education system is entering a period of profound institutional changes under the influence of economic globalization, the development of digital technologies, and shifts in labor market demands. Economic globalization, the advancement of digital technologies, and new requirements in the labor market impose new tasks on the activities of higher education institutions. This process is particularly evident in the system of pedagogical personnel training, creating the need for educational institutions to reorganize their activities in accordance with modern requirements.

The widespread introduction of digital technologies in the field of education is significantly transforming the forms and methods of organizing the educational process. At the same time, digital transformation is not merely a technical upgrade but a comprehensive

process of change that encompasses the content of education, the management system, and pedagogical activities.

International research extensively covers the issue of developing the system of pedagogical personnel training, where competency-based education models, digital learning environments, and mechanisms for ensuring the quality of education occupy an important place. However, most existing studies are limited to analyzing individual elements of this process, and the mechanisms for comprehensive institutional transformation of pedagogical higher education institutions at the institutional level have not been sufficiently addressed.

The scientific novelty of this study lies in the fact that it proposes a comprehensive institutional transformation model that integrates the content of education, the potential of pedagogical personnel, digital infrastructure, and education quality management into a single systemic whole.

The purpose of this article is to develop a step-by-step institutional transformation model aimed at the development of pedagogical higher education institutions and to scientifically substantiate its theoretical and methodological foundations.

Analysis of Scientific Sources. The modernization of the pedagogical personnel training system is one of the key directions in contemporary educational research. In the international scientific literature, this issue is primarily examined through the lenses of competency-based education, digital transformation, hybrid learning models, and mechanisms for managing the quality of education.

The competency-based education model is regarded as an important theoretical and practical foundation for modernizing the higher education system. According to Weinert (2001), competence is defined as the integration of an individual's knowledge, skills, and personal qualities, representing the ability to effectively perform complex professional tasks [5]. From this perspective, competency-based education serves to develop not only students' theoretical knowledge but also their practical professional readiness.

Researchers emphasize that competency-based curricula enable the alignment of educational content with labor market demands. In studies conducted by Jakoep Ezra Harianto, it is noted that competency-based curricula play a significant role in preparing students to meet the requirements of the global labor market [9].

The implementation of a competency-based education model requires the revision of curricula, the clear definition of learning outcomes, and the improvement of assessment systems.

In contemporary research, the digital transformation of the education system is also considered an important scientific direction. In the studies by Vida Davidaviciene and Anna Limanovskaja, it is emphasized that the integration of digital technologies in higher education institutions enables the modernization of the educational process, the individualization of learning, and the enhancement of education quality monitoring [10].

At the same time, hybrid learning models are regarded as an essential component of the modern pedagogical education system. According to Graham's research, hybrid learning is organized on the basis of integrating traditional classroom activities with online learning technologies and contributes to increasing students' active engagement in the educational process [3].

The issue of digital competencies in the pedagogical personnel training system is also of particular importance. The TPACK model developed by Mishra and Koehler demonstrates the possibility of creating an effective learning environment through the integration of teachers' technological, pedagogical, and content knowledge [6]. This approach provides an important theoretical foundation for the effective integration of digital technologies into the educational process.

Systems for ensuring the quality of education are likewise a key component of higher education transformation. Harvey and Green describe the concept of education quality as a multifaceted category and analyze it in relation to educational outcomes, the educational process, and the effectiveness of institutional management [4].

However, the majority of international studies are limited to analyzing individual elements of the pedagogical personnel training system and have not sufficiently addressed the issues of comprehensive institutional transformation of pedagogical higher education institutions at the institutional level. This situation demonstrates the necessity of developing a comprehensive transformation model that encompasses the content of education, the potential of pedagogical personnel, digital infrastructure, and education quality management as a single systemic whole in the development of pedagogical universities.

At the same time, unlike the analyzed studies, the present work examines the transformation of pedagogical higher education institutions on the basis of a comprehensive institutional approach, with all main components integrated with one another and developed within the framework of a single model.

Methodology. This study is aimed at scientifically substantiating the processes of transformation of pedagogical higher education institutions and developing its institutional model. The study was organized on the basis of a systemic and integrative approach. This

approach makes it possible to view the university education system as a complex socio-pedagogical system and to identify the interrelationships among its constituent elements.

The object of the study is the education system of higher education institutions specialized in pedagogical personnel training. The subject of the study consists of the institutional transformation processes aimed at the development of pedagogical universities and the mechanisms of their impact on the quality of education.

The study employed systemic and comparative analysis, analysis of scientific sources, and modeling methods. Through systemic analysis, the interrelationships among the main elements of the university education system — educational content, pedagogical technologies, digital environment, the potential of professors and teachers, and management mechanisms — were examined, and internal and external factors influencing transformation were identified.

The comparative analysis method was used to study the differences between the traditional education model and education models based on digital transformation. In the analysis process, criteria such as forms of educational organization, educational technologies, educational content, student activity, educational trajectories, and the assessment system were taken as the basis.

Table 1. Comparative Analysis of Traditional and Digital Transformation-Based Education Models

Analysis Criterion	Traditional Education Model	Transformed Digital Education Model
Organization of Education	Classroom-based, traditional lectures and seminars	Hybrid and online learning environment
Educational Content	Based on standard curricula	Flexible and dynamic educational programs
Educational Technologies	Printed materials and classical methods	LMS, Moodle, digital platforms
Educational Management	Paper-based document circulation	Electronic management systems
Student Activity	Passive participation	Interactive and collaborative learning
Educational Trajectory	Uniform for all students	Individual educational trajectory
Assessment System	Traditional examinations	Rating and digital assessment systems
Educational Outcomes	Dominance of theoretical knowledge	Competencies and practical skills

In the study, based on the analysis of scientific sources, international literature and documents from organizations such as OECD and UNESCO were examined, and theoretical approaches related to the development of the pedagogical personnel training system were

generalized. Based on the obtained results, a step-by-step institutional transformation model integrating educational content, the potential of pedagogical personnel, digital environment, and quality management was developed. The research process was carried out in the stages of analysis, comparison, and modeling.

Source: Author's development. The results obtained from the example of JSDPU show that the proposed model for the transformation of pedagogical higher education institutions is an effective institutional mechanism that can be applied in practice. This model has a positive impact on the quality of education by integrating educational content, the potential of pedagogical personnel, and the digital environment.

To ensure the reliability of the research results, data obtained from various sources were compared with one another, and methods of theoretical generalization were applied.

2. Table 2. Results of Implementing the Transformation Model at the Example of JSDPU

Transformation Stage	Measures Implemented (at the Example of JSDPU)	Expected / Observed Results
Institutional Diagnostics	Educational programs were analyzed, the potential of professors and teachers was assessed, and the state of digital infrastructure was studied	The university's strengths and weaknesses were identified, and strategic development directions were defined
Transformation of Educational Content	Competency-based curricula were introduced, and the integration of subjects was strengthened	Practical skills and professional competencies were formed in students
Development of Pedagogical Personnel Potential	Advanced training courses and trainings on digital pedagogy were organized for professors and teachers	Teachers' skills in using modern educational technologies increased
Digital Transformation	LMS platforms, electronic journals, and online courses were introduced	The educational process was digitized, and student activity and participation levels increased
Monitoring of Education Quality	Monitoring of educational outcomes, student competencies, and graduate employment was conducted	The quality of education improved, and the competitiveness of graduates in the labor market increased

Step-by-Step Transformation Model for Pedagogical Higher Education Institutions. The proposed model is based on the phased implementation of the transformation process. It integrates the main components of the education system as a single institutional mechanism and relies on a comprehensive approach that combines the renewal of educational content, the development of pedagogical personnel potential, the improvement of digital infrastructure, and the integration of education quality management.

1. Institutional Diagnostics Stage. The initial stage of the transformation process consists of a comprehensive analysis of the university's current state. Through institutional diagnostics, its development potential, strategic objectives, and priority directions are identified. At this stage, educational programs, the potential of pedagogical personnel, digital infrastructure, and educational outcomes are assessed in a comprehensive manner.

Educational programs are analyzed in terms of their compliance with modern standards and labor market requirements, the level of competency-based approach and subject integration, as well as their orientation toward digital technologies and practical application. This process is carried out through content analysis and sociological surveys.

The potential of pedagogical personnel is assessed on the basis of their scientific degrees, pedagogical competencies, research activity, and skills in using innovative technologies. At the same time, the university's digital infrastructure is analyzed from the perspective of LMS platforms, digital resources, and electronic management systems.

Educational outcomes are evaluated based on students' academic performance, the employment rate of graduates, and employers' feedback, which makes it possible to identify the university's strengths and weaknesses.

2. Stage of Transforming Educational Content. Based on the results of institutional diagnostics, the process of modernizing educational content begins. In modern pedagogical education, this process relies on a competency-based approach, interdisciplinary integration, and digital technologies.

Competency-based education is aimed at forming not only theoretical knowledge but also practical skills in students, with learning outcomes expressed through clearly defined competencies. Critical thinking, problem-solving, and digital literacy occupy an important place among the key competencies. This approach ensures the competitiveness of students in the labor market.

Digital learning technologies are an essential component of the university education system and contribute to increasing the efficiency of the educational process through LMS platforms and online learning tools. They enable the individualization of education, the enhancement of student activity, and the automation of educational monitoring.

3. Stage of Developing the Potential of Pedagogical Personnel. Pedagogical personnel are the main driver of university transformation; therefore, their professional development is organized on the basis of the principle of lifelong learning. Advanced training programs cover modern pedagogical and digital technologies, research methodology, and areas of international

scientific cooperation. In addition, grant schemes, rating systems, and award mechanisms are introduced to stimulate the research activity of teachers.

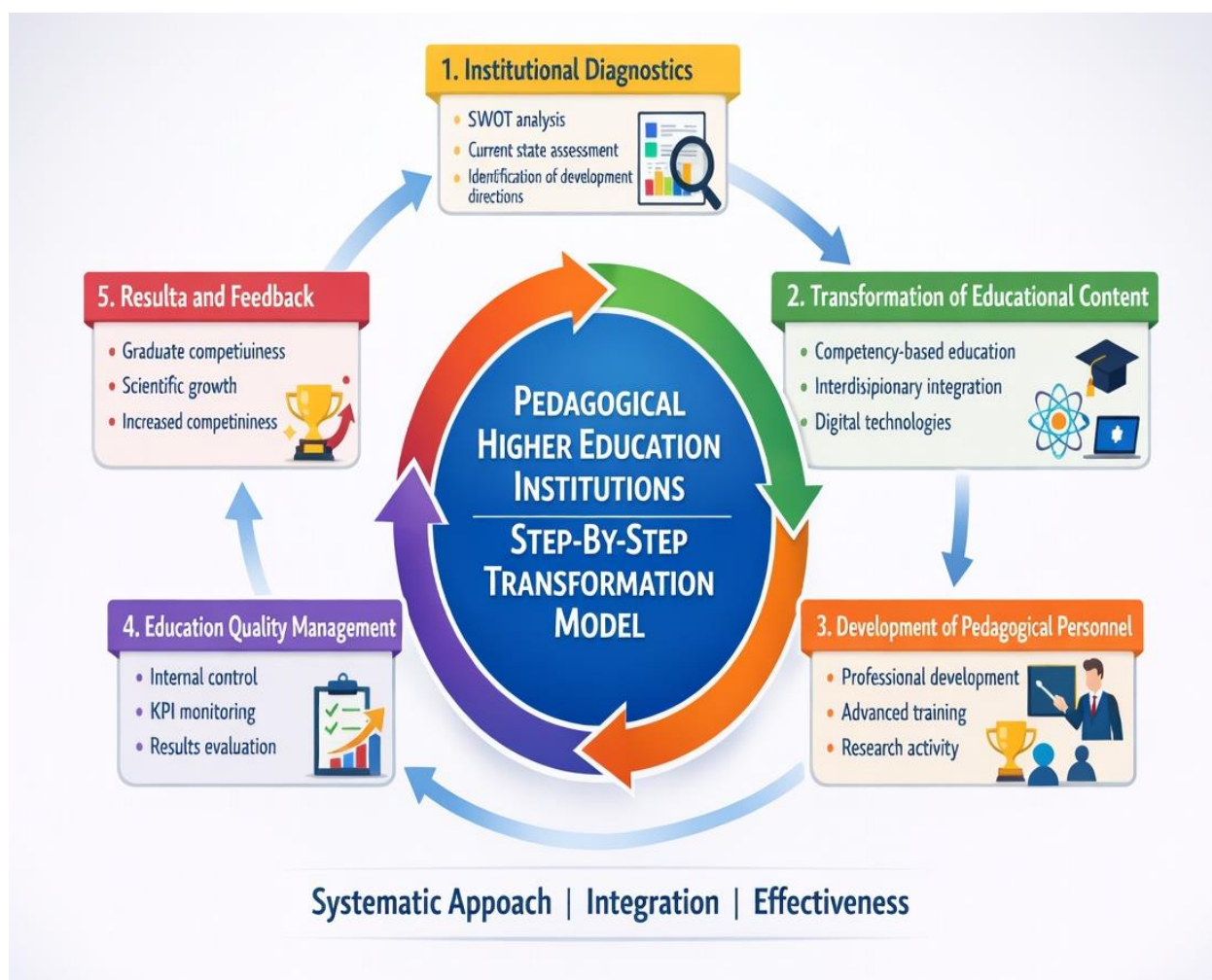
4. Stage of Education Quality Management and Monitoring. During the transformation process, the quality of education is assessed on the basis of continuous monitoring, and an internal quality control system is established in universities. The main indicators taken into account are student competencies, the share of digital education, and the employment rate of graduates. These indicators make it possible to evaluate the effectiveness of the university's activities.

5. Transformation Results. As a result of the step-by-step transformation of pedagogical universities, educational programs are aligned with modern requirements, the potential of pedagogical personnel is enhanced, and a digital learning environment is formed. This strengthens the university's research activity and has a positive impact on the quality of pedagogical personnel training by increasing the competitiveness of graduates.

Results and Discussion. The step-by-step transformation model for pedagogical higher education institutions proposed in this study provides a theoretical foundation for the comprehensive institutional mechanism of modernizing the pedagogical personnel training system. The research results indicate that the effective development of modern higher education institutions is not limited to updating educational content alone. The transformation of universities must be carried out as a multi-component system that encompasses educational programs, the potential of pedagogical personnel, digital infrastructure, and education quality monitoring, which demonstrates the necessity of organizing it on the basis of a comprehensive institutional approach. If implemented in practice, the proposed model will make it possible to improve the quality of education, develop the digital environment, and ensure the adaptability of graduates to the labor market.

International research emphasizes that the modernization of universities is associated with multifaceted institutional changes. The OECD's "Future of Education and Skills 2030" concept identifies competency-based education, the integration of digital technologies, and the monitoring of learning outcomes as priority directions. Similarly, UNESCO reports highlight digital transformation as an important factor in enhancing the quality and individualization of education. The proposed model substantiates mechanisms for the development of pedagogical higher education institutions in harmony with these international trends.

Transformation Model of Pedagogical Higher Education Institutions



At the same time, the study has certain limitations. In particular, the proposed model is primarily based on theoretical analysis and conceptual approaches; therefore, empirical studies are required to test its effectiveness in practice. In future research, analyzing the processes of implementing the transformation model in pedagogical universities and statistically assessing its impact on the quality of education and the professional readiness of graduates will be among the important scientific tasks.

Conclusion. This study was aimed at analyzing contemporary directions for the development of pedagogical higher education institutions and developing an institutional model for their transformation. The research results show that the modernization of the pedagogical personnel training system requires a comprehensive approach that covers all main components of university activities. This process encompasses the renewal of educational content, the enhancement of pedagogical personnel potential, and the improvement of digital infrastructure to ensure the quality of education.

The research findings are of practical importance for developing strategies for the advancement of pedagogical higher education institutions, improving education policy, and managing the institutional modernization processes of universities.

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