METHODOLOGICAL SUPPORT OF TRAINING STUDENTS IN A DIGITAL EDUCATIONAL ENVIRONMENT IN PEDAGOGICAL PROCESSES ON THE BASIS OF A HIERARCHICAL APPROACH

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A B S T R A C T	K E Y W O R D S
This article presents the methodological support for the training of students in pedagogical processes on the basis of a hierarchical approach in a digital educational environment. It is also said that digitization of education is an important factor in teaching, increasing students ' interest in teaching and access to information, and the introduction of educational digitization systems is considered the main stage in the introduction of modern educational environments in higher education. In addition, it is theoretically justified that the introduction of automation and digitization systems in an informed society is a prerequisite for the implementation of effective and high-quality work in various sectors of the economy, and such a need is a prerequisite for the introduction of digital technologies into the higher education system.	Pedagogical process, digital technology, technical systems, hierarchical approach, teaching, scientific and methodological system, model, etc.

INTRODUCTION

The introduction of digital technologies into the educational process requires a complete improvement of not only higher education, but the entire educational system. It is important to understand that the introduction of digital technologies should affect not only the digitization of the educational process, but also the introduction of innovations in basic educational programs, as well as scientific and scientific research activities. Digitization of the educational process develops much more actively, primarily due to the fact that the introduction of digital technologies in the organization of the educational process (not only in higher education) is supported on a public and state scale. The introduction of digital technologies in education serves to quickly assimilate information from students, serves as an important tool in the development of curricula, base education programs, study schedules and other materials to ensure the educational process.

The digital education environment is a system for organizing and managing educational processes based on modern information and communication technologies. It has the following main aspects:

Distance learning opportunity-students can receive education regardless of geographical location;

Personalized teaching is an educational process adapted to the educational needs of each student;

Using interactive techniques-learning using multimedia tools, virtual laboratories and simulations;

Constant updating and development – constant improvement of educational materials through modern technologies.

Also, in the context of digital technology, digitization of education is an important factor in teaching and serves to increase students ' interest in teaching and information retrieval methods. The implementation of educational digitization systems is the main stage in the introduction of the modern educational environment in higher education institutions [1].

Analysis of thematic literature.

The classical concept of the methodological system, introduced by A.M. Pishkalo, is based on the understanding of it as a five-component structure, which includes the following: goals, content, methods, organizational forms and teaching aids. At the same time, the necessary condition is the interrelation of all components with the leading position of educational goals. These functional approaches have been studied to a certain extent in the research works of such outstanding scientists as N.V. Kuzmina, A.I. Arkhangelsky, Y.S. Branovsky, M.V. Shvetsky, N.I. Rizhova, I.M. Dudina and others. At the same time, when developing the concept of organizing a methodological educational system, for example, N.L. Stefanova expands its five-component structure and also offers an additional component - planned educational results.

I.M.Dudina, in her research, proposes a methodological system as an effective set of targeted, meaningful, promptly active, control, regulating, and evaluating. The operational and operational component includes: in control and regulation - such methods, forms, and means as control over the fulfillment of educational goals and objectives and self-management of students, assessment and self-assessment of effective learning outcomes, reflection and correction of learning objectives.

In this research work, a number of researchers note that, taking into account the results of education within the methodological system, there are different points of view that bring educational goals beyond its scope. For example, T.A. Boronenko, defining the methodological system, follows the interpretation of V.V. Kraevsky, who presents it as an integral model of educational activity, believing that it is necessary to include in its structure a technological block, including technologies for choosing the content, methods, forms, and teaching aids of training, i.e., technologies for determining interaction are interactive connections between all elements of the system.

Similarly, I.B. Gotskaya, in her research work, focuses on orienting the methodological system towards socially specific, corporate, individual, or individual needs for learning outcomes based on academic subjects. For example, I.B.Gotskaya believes that the development of the concept of the methodological system, in terms of clarifying its direction, satisfies the needs of the paradigm of knowledge and the methodological system of education for modern quality specialists of the information society at the present stage of evolutionary development as an open dynamic education system, in terms of the composition of its elements and the interrelationships between them in terms of change.

In the future, this idea was developed in the research work of L.V.Shelekhova, who identifies the interconnected components of the methodological system and introduces structural, procedural, methodological, technological, and criteria components. In the context of the orientation of education towards the development of the student's personality, G.I.Saransev emphasizes the importance of a comprehensive consideration of the content of training, along with the age characteristics and personal goals of students.

Research Metadology

In the context of the development of e-learning and distance learning technologies, modern approaches to improvement are developed in accordance with the requirements of the period in the organization of hierarchical training of methodological educational systems, including the course of technical systems in specialties of various directions. For example, digital technology is the use of electronic computing tools and software to transfer, process and store data more quickly and more conveniently. Especially since the beginning of the XXI century, digital technologies have become widely used in practice in everyday life. This is due to the emergence of a huge number of electronic devices (gadgets), the development of the Internet and the software market. Digitization of education is carried out in several directions:

The flow of the document is transferred from paper to electronic. Equipping educational institutions with digital equipment-increasing the number of computer audiences and improving them, placing interactive whiteboards, connecting to the high-speed Internet.

It is recommended to use information communication technologies in the auditorium and in educational activities. For example, presentations, electronic tests, virtual tours, and games can be used during classes.

Educational portals and communication networks are created. Part or part of the transition to distance education.

In higher education, sufficient attention is paid to the use of digital technologies and traditional pedagogical technologies in the process of teaching students in pedagogical psychological research. Thus, N. P. Goncharuk and YE.I.In his article "models for the integration of digital and pedagogical technologies in the process of training future engineers", khromova identified possible methods for integrating pedagogical technologies with modern digital technologies in the conditions of an informed society and developed methodological aspects of combining traditional technologies and online educational methods in considering the advantages of mixed training[4].

Analysis and Results

In the modern conditions of digitization of education, when the teaching system is updated in terms of the transition of hierarchical teaching of the course with the technical system to an effective system in different areas of specialization, which ensures the comprehensive personal development of each student, along with the theoretical foundations of the organization of the methodological training system, the following:

- creating conditions for the student's personal development by realizing his personal goals, needs and capabilities;

-scientifically based determination of the logically consistent sequence of Organization of the educational process and the formation of a variable content of educational content in a didactic way;

- relevance of the educational content and structural structure of Science in the context of interdisciplinary relations and future professional activity;

- realization of the subjective position of students by activating their personal capabilities, actively engaging in the educational process and increasing their cognitive motivation;

- to independently receive education in the process of solving science and professional tasks develop opportunities for self-education, self-organization and self-reflection;

- Organization of a personal educational trajectory;

- ensure personal and collective project activities;
- the introduction of modern pedagogical and digital technologies should include rules.

In the modern conditions of digitization of education, the theoretical foundations of the organization of the modern methodological educational system in Ravish in accordance with the requirements of the period in terms of the transition to an effective system, which ensures the comprehensive development of each student, therefore. with the result of the above analyzes and the grounds, the following model is proposed and supported(Figure 1):

- creating conditions for its comprehensive development through the implementation of personal goals, needs and opportunities of students of different specialties;
- to determine the didactically expediency of the logically linked sequence of the organization of the educational process and scientifically substantiate the alternative content of the educational content;
- the relevance of the content of the educational content of Science in the context of interdisciplinary interaction and future professional activity;
- realization of its subjective position by activating the personal capabilities of students, actively engaging in the educational process and increasing the cognitive motivation of students;
- to develop the possibility of independently obtaining t'lim in the process of solving science and professional problems, self-organization and self-regulation;
- Organization of an individual educational environment;
- introduction of separate and collective project activities;
- includes such cases as the introduction of modern pedagogical and digital technologies.

Advantages of the methodological system: The quality of education increases - efficiency increases due to the clear definition of each stage; Flexibility - the educational process can be adapted to individual learning needs; Innovative approaches - the opportunity to use modern technologies is created; Continuous monitoring - the educational process is continuously monitored and improved.

As a result of considering this issue, in our research work, it can be noted that the interpretation of the concept of a methodological system is different, but there is a common opinion among researchers about the importance of designing it as a holistic, open, dynamically developing, accessible system in accordance with the requirements of the times in higher education and operational modification in the context of the digital transformation of modern education.

Conclusions and Recommendations

Digital transformation of all aspects of the information society, development of the digital economy, development and improvement of the efficiency of organizations and enterprises, training of personnel in the field of information technologies, training of specialists in the field of information technologies are of great importance for the economic stability of the country. It is estimated that the number of specialists needed in the field of information technologies will increase several times in the coming years. The need to introduce innovative developments in the field of digital technologies, expand the sectors for the provision of digital services and software development reflects the growing need for highly qualified graduates in the field of information technologies who can solve design problems.

In such conditions, the requirements of employers for graduates of higher education institutions are constantly increasing. Therefore, higher education institutions need to monitor industry development trends in order to train highly qualified competitive specialists, and to promptly identify and take into account the requirements of all industry sectors for qualifications and personnel training of leading

employers and industry employers' associations in the context of the introduction of digital technologies. At the same time, professional activity in the standards is defined through generalized labor functions, labor functions, labor actions, necessary skills, and necessary knowledge.

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