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ВИХОВАТЕЛЯ ЗАКЛАДУ ДОШКІЛЬНОЇ ОСВІТИ

**INFORMATION TECHNOLOGIES AND FUNDAMENTALIZATION OF
LEARNING IN THE TRAINING OF EDUCATORS AT THE M.I. PIROGOV
VINNYTSIA NATIONAL MEDICAL UNIVERSITY**

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Abstract: In their work, the authors emphasize the need for in-depth study of informatics and computer technologies, since they help to communicate widely with the world, to gain global experience in clinical disciplines, in particular, in military medicine. At present, according to the authors, informatization of education and scientific work has not yet reached a sufficiently high level in Ukraine, therefore in-depth study of computer technologies is an extremely necessary component of the training of future doctors and military doctors.

Keywords: Information technologies, practical training, fundamental sciences, pedagogy

The modernization of education, in particular, the study of military field surgery, is associated with the introduction of various types of network systems that enable the integration of information resources, the creation of an educational space

that facilitates the visualization of learning. The use of modern information technologies makes it possible to create a high-quality new informational educational environment without borders by building an electronic learning system. The computer is a universal means of learning and allows students to form knowledge, skills and abilities, develop personality, and satisfy the cognitive interests of the individual. The use of information technologies in departments of medical education institutions changes the role of the teacher and his relationship with students. Each applicant has an individual learning trajectory, with the level of help he needs, the pace of work, and the appropriate amount of material. In the case of effective use of information technologies, changes occur in the motivation system of education seekers, which opens up wide opportunities for lifelong learning.

The modern level of development of society requires highly educated specialists, creative people, capable of free thinking. In recent decades, this task has been successfully solved with the help of the development and implementation of various pedagogical technologies in the educational process [1]. The rational application of information technologies provides a unique chance to solve the problem of ensuring high-quality training of specialists with higher education in a relatively short period of time [3, 4]. The new realities of the existence of our state require the formation of new key personal competencies - professional, social and informational. The strategic task and priority direction of the state policy in the field of education is to create conditions for the implementation of individual educational routes for the purpose of professional development based on the use of innovative forms and methods. The term "pedagogical technology" means the focus of pedagogical research on the radical improvement of activity, increasing its effectiveness (in the sense of guaranteed achievement of the goal), intensity, instrumentality, technical armament, systematicity, conceptuality, scientificity, integrability, guaranteed result, reproducibility and the possibility of replication and transfer in new conditions, efficiency and quality of training, algorithmicity, optimality, legal expediency, which is the basis of the development of the work program for the study of the discipline "Military field surgery" in the preparation of

masters in the field of knowledge 22 "Health care" specialty 222 "Medicine".

Under the fundamentalization of the content of education, modern scientists understand the unification of program material around fundamental ideas, laws, and concepts of a specific science. Fundamental concepts are concepts that determine the structure of the model of real reality and at the same time are universal means of cognition. Characteristic features of fundamental concepts include: First of all, - systematicity.

The increase in the volume of information, the integration of higher education of Ukraine into the pan-European educational space, the introduction of standards of medical care, including military training at various levels, lead to a revision of the model of training specialists capable of competing on the labor market. The emergence of new standards of higher education based on competency-based, student-centered approaches creates conditions for bringing basic education closer to the needs and requirements of the labor market, further development of educational technologies and the education system in general. Today, every teacher is looking for the most effective ways to improve the educational process, increase the interest of education seekers due to the formation of the level of professional competence and increase in success. In modern conditions, one of the strategic tasks of the modernization of higher education is the formation of a new paradigm, which is based on the development and use in the educational process of future teachers of information technologies, which are now directly related to the use of computers in the process of learning, statistical data processing, modeling crisis situations. Despite the urgency of informatization of education, its current state is only satisfactory. In recent years, this paradigm has changed. The appearance of personal computers, and then the growth of their use, the appearance of the user interface and the Internet revived the interest of both developers and teachers and students in working with information educational systems. The fundamentalization of education acts primarily as a tool for stabilizing the content of education by means adequate to the subject field of education in the conditions of the rapid pace of its development. By the term "fundamentalization" we understand a significant increase in the quality of education

and the educational level of people through a corresponding change in the content of By the term "fundamentalization" we mean a significant increase in the quality of education and the educational level of people by a corresponding change in the content of the disciplines studied and the methodology of the educational process, visualization and approximation to specific real conditions of reality. disciplines studied and methodologies of the educational process, visualization and approximation to specific real conditions of reality. Ensuring the priority of information components in the prospective system of education of specialists who will live and work in an information society, where the most important role is played by fundamental knowledge about information processes in nature and society, the latest information technologies, which are now widely implemented in all spheres of professional activity, for example, remote training, which involves the formation of an intra-environment, electronic libraries, development of author's websites, electronic courses, textbooks, educational and methodological guides, telemedicine, tutor support, etc. The modernization of education today is connected precisely with the introduction of various types of network systems, which make it possible to combine information resources and create a common educational space. A special place in the context of the fundamentalization of education is occupied by information and communication technologies of education, which also include computer educational technologies. These technologies ensure the formalization of knowledge, the productive application of mathematical modeling methods, the systematicity of the process of educational and research activities during the study of various clinical situations, in particular - in emergency conditions, interaction between technology and pedagogical disciplines.

On the basis of new information and computer technologies, means of supporting the educational process are created - reference, text, graphic materials, information and reference systems, simulators. The main directions of the fundamentalization of informatics education are:

- 1) mathematization of the content of education and the development of the algorithmic component of medical activity, the central concepts of which are the

algorithm and the computer;

2) information modeling, the central concepts of which are information and data, information processes and models, which ensures the implementation of the functions of fundamentalization of education:

- acquisition of methodologically important and invariant knowledge with a long life span, necessary for professional activity, close connection of information technology education with professional practical activity (professional guidance function);

- development of cognitive activity and independence of education seekers (developmental function);

- development of methodical systems for teaching informative disciplines (prognostic function);

- systematic learning of disciplines based on a deep understanding of modern problems (integrative function).

The use of information technologies in educational institutions changes the role of the teacher and the students of education and their relationship. The teacher ceases to be a source of primary information for students. The question of where to get this or that information is replaced by the question of how and how much data the acquirers can perceive and assimilate. ICT resources provide unlimited opportunities for independent and joint creative activities of students and teachers. Now his main task is to direct the development of the personality of the students of education, support creative search, create a situation of success and organize their collective work [2]. The use of effective technologies for training students in higher education institutions is a requirement of the time and a social order [6]. The creative application of educational technologies will undoubtedly allow to significantly improve the quality of the pedagogical process.

In the technological approach to the educational process, the following are distinguished:

- 1) goal setting and maximum clarification with a focus on achieving results;

- 2) content profile;

- 3) organization of the course of the educational process in accordance with educational goals;
- 4) assessment of current results;
- 5) correction of the components of the educational process aimed at achieving the goal;
- 6) evaluation of results and new goal setting.

During the use of information technologies in the educational process, the skills of rational organization of educational work are formed, the independence of students of education develops, the preparation of students of education for creative activities, the formation of the ability to use the acquired knowledge and expand these skills due to independent processing [3]. The use of information technologies in educational activities determined an important principle of learning – the principle of individualization. The expediency of using information technologies in the educational process is also determined by the fact that such principles as scientificity, accessibility, transparency, awareness, activity of education seekers, individual approach to learning are implemented most effectively. The most effective use of information technologies in the educational process in the course of military field surgery for students of the field of knowledge 22 "Health care" is achieved when using information and demonstration programs, modeling programs, high-tech simulators. which provide interactive interaction between the work of education seekers and the computer [3]. The key components of the professional competence of teachers, which is the basis of his creative self-realization and self-development within the framework of the fundamentalization of education in institutions of higher medical education, are the possession of a system of fundamental subject and methodological knowledge; the ability to theoretically and methodologically understand modern concepts of higher education, to develop one's own professional position on the implementation of training of education seekers; valuable orientation on creative self-realization and self-development in the context of training of education seekers; mastery of general scientific and professional and pedagogical methods of cognition; communicative ability to interact with students [5].

So, modern technologies, in which traditional learning gives way to interactive interaction, where the student of education has learned to think, to choose the right way to solve professional tasks, contribute to the formation of students of competences, which are very necessary in the modern world. In crisis situations. In extraordinary conditions of martial law: to think, understand the essence of things, quickly comprehend ideas and actions and be able to find the necessary information, interpret it, apply it under specific conditions.

So, information technologies occupy a leading position in the classification of learning technologies, because informatization creates additional opportunities for stimulating creative, clinical, quick thinking among students, and increases the significance of their independent work.

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