

SPECIFIC ASPECTS OF TEACHING THE SCIENCE OF INFORMATION TECHNOLOGIES

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Abstract:

The article discusses the specific aspects of teaching information technology, the types of pedagogical technologies, and the role of their use.

Keywords: information technology, effectiveness of science teaching, microprocessor, intellectual potential, pedagogical technologies, information culture.

Enter

The development of society, like all fields, puts before educational institutions the main task of high-quality education of every pupil, student based on the system-activity approach, in turn, the active participation of learners in the educational process, giving them means the need to allow them to independently acquire new knowledge and deepen it during the learning process. As a result of the implementation of this approach, the student learns to navigate in the flow of information, the transition from passive acquisition to active search for information is made, emphasis is placed on its critical understanding and practical use, and creative solutions to emerging problems.

Because information technology is used to solve professional problems in every field, it is very important to have a thorough knowledge of information technology (IT). Therefore, information technologies (IT) are mastered not only in the bachelor's period of education, but also in the residency and postgraduate stages. In addition, in the era of rapid development and informatization problems, a student who has not thoroughly and thoroughly mastered information technology (IT) cannot be considered a mature employee.



Usually, such specialists study on the basis of special programs and learn cybernetics, informatics, physiological cybernetics, clinical cybernetics, and the theoretical foundations of systematic analysis in healthcare, in addition to special medical sciences. They defend their graduation qualification in a relevant subject in their field of specialization. Within the framework of the diploma work, as a rule, they participate in the development, for example, they create parts of a medical-technological signal processing system, a monitoring system, or as a cognitive scientist (engineer of the field), they develop a demonstration prototype of an expert system.

The Main Part

Cybernetics doctors are working in higher educational institutions and research institutes, institutions, management structures, insurance companies, and now the demand for them is increasing in other fields as well. It is necessary to achieve in-depth mastering of the science of information technologies in order to train personnel in the field of "cybernetics" in the higher educational institutions of our republic. In modern fields, the duties of a doctor include very relevant activities.

The pace of life has accelerated, students are forced to adapt to the speed of time, the number of directions in fields is increasing - students should quickly clarify their direction and start acquiring the necessary knowledge. The right choice ensures that the future specialist will be able to work effectively in his field, and in turn, some useful methods of treating patients will be introduced. . The good news is that, especially among young people, there are "advanced" users who can assemble the computer themselves, install the necessary programs and work with the system independently. Unfortunately, they are very few. There are those who don't have any computers and vice versa.

However, having IT knowledge determines its role:

In addition to operating on the basis of the principles of mutual support of systems, it remains an urgent issue to ensure the maximum protection of system data. Threats to the integrity of systems from negative external attacks are leading to further improvements in modern IT, and developers' efforts are focused on eliminating the possibility of outside access. Ability and preparation for the formation of systematic



analysis of medical data based on the multi-problem principles of evidence-based medicine based on statistical indicators using theoretical and practical methods for the purpose of improving technological activity.

Information technology teaching includes lectures, group work, presentations, assistance, interactive case-studies, practical application of theoretical knowledge, work with automated teaching and control systems, etc.

At the same time, students must fulfill the requirements to receive credits as a criterion for mastering the subject. These requirements include performance of tasks and tasks of practical and laboratory exercises given in the form of current control, active participation in the discussion of theoretical material and interactive methods of education, acquisition of practical knowledge and skills, successful passing of intermediate and final controls in the form of tests.

One of the unique aspects of learning and mastering the science of information technology is that every profession owner enriches and deepens the acquired knowledge and skills. Increasing computer literacy is not only a demand of the time, but also a reflection of the rapid application of the digital economy to life. It is necessary to teach students to think creatively in order to ensure that the future doctor continuously learns digital technologies along with his professional activity. Creative thinking occurs as a result of active engagement in independent activities and leads to the emergence of new forms in the educational process.

Pedagogical innovation is an innovation in pedagogical activity, it is the introduction of innovation into educational content and technology in order to increase the effectiveness of the educational process.

In the process of teaching information technology, methods focused not only on logical thinking, but also on solving non-standard problems are necessary. Mastering specific ways of thinking leads to a decrease in the consumption of brain energy, and an increase in the efficiency of thinking.

Although currently not used in the process of mastering science, these pedagogical methods exist, and they are based on the following general principles:

- the solution of the problem without carefully studying the essence of the problem do not start to find;
- teaching how to find solutions to non-standard situations;



- asking questions that help to identify the problem;
- looking for different ways to achieve the goal and then choosing the most appropriate one;
- creating an approximate plan for finding a solution to the problem;
- convince that it is important not to be discouraged by failures and to persevere;
- determining the creativity of ideas based on their results;
- attention to mental satisfaction from the result of creative activity to give.

In conclusion, it can be said that the best option for using pedagogical technologies in the teaching of computer science is the use of a mixture of technologies, and the educational process is mainly a classroom-lesson system. Traditional and innovative teaching methods should be in constant contact and complement each other. We should remember the saying "Any new thing is a forgotten old thing".

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