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ИНФОРМАЦИОННО-ОБРАЗОВАТЕЛЬНЫЕ ТЕХНОЛОГИИ В ПОВЫШЕНИИ КАЧЕСТВА ПОДГОТОВКИ СТУДЕНТОВ МЕДИЦИНСКИХ ВУЗОВ

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ИНФОРМАЦИОННО-ОБРАЗОВАТЕЛЬНЫЕ ТЕХНОЛОГИИ В ПОВЫШЕНИИ КАЧЕСТВА ПОДГОТОВКИ СТУДЕНТОВ МЕДИЦИНСКИХ ВУЗОВ. ЖКМП.-2025.-Т.1.-№1.-С

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Аннотация: Это исследование разъясняет важность информационных технологий в укреплении образовательных и методологических инициатив университетских факультетов и других организационных подразделений. Особое внимание в нем уделяется развитию методологической поддержки, опирающейся на информационно-коммуникационные технологии (ИКТ), и ее интеграции в образовательный процесс.

Ключевые слова: *учебный процесс, информационные технологии, электронно-компьютерные методы, онлайн-технологии, профессиональная компетентность.*

TIBBIYOT INSTITUTI TALABALARINI TAYYORLASH SIFATINI OSHIRISHDA AXBOROT VA TA’LIM TEXNOLOGIYALARINI O‘RNI

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Annotatsiya: Ishda axborot texnologiyalarining ahamiyati, oliy ta’lim muassasasi kafedralari va boshqa tashkiliy tuzilmalarining (AKT) asosida metodik ta’minot tayyorlash va uni o‘quv jarayoniga joriy etish bo‘yicha o‘quv-metodik faoliyatining faollashuvi haqida ma’lumot taqdim etilgan.

Kalit so‘zlar: *o‘quv jarayoni, axborot texnologiyalari, elektron kompyuter usullari, onlayn texnologiya, kasbiy kompetentsiya.*

INFORMATION AND EDUCATIONAL TECHNOLOGIES IN IMPROVING THE QUALITY OF TRAINING FOR MEDICAL STUDENTS

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Annotation: This study elucidates the significance of information technology in enhancing the educational and methodological initiatives of university departments and other organizational entities. It emphasizes the development of methodological support grounded in information and communication technology (ICT) and its integration into the educational process.

Keywords: *educational process, information technology, electronic computer methods, online technology, professional competence.*

Relevance: The ongoing advancement of computerization, alongside the emergence of telecommunications and multimedia technologies, has ushered in a contemporary phase of educational informatization that fosters students' creative development. Key objectives of this educational informatization include enhancing the quality of specialist training, employing active pedagogical methods, augmenting the creative and intellectual dimensions of the learning experience, and integrating educational and research activities. This integration serves to stimulate motivation for learning and encourages the application of information technologies in the professional practices of medical practitioners across various specialties. [1,3,6]. The state program for advancing higher education through 2030 identifies "creating conditions for the development of competitive human potential" as a primary objective. This initiative underscores the importance of contemporary educational practices, information and communication technologies, and innovative pedagogical approaches. The adoption of new-generation educational standards is facilitated through the application of active learning methodologies.

The transition to these standards is grounded in a competency-based framework, which necessitates the integration of modern information and communication training systems in its practical application [2,4,5]. The objective of this study is to investigate the primary innovative teaching technologies utilized in medical education, formulate a research framework regarding the application of computer technologies within the educational processes of the department, and evaluate the outcomes derived from this analysis.

Materials and methods: The focus of this research involved fourth-year students from the Faculty of Medicine, to examine the impact of digital technologies on student learning in the context of the public health curriculum.

Results and Discussion: The instruction of hygiene and medical ecology within the Faculty of Medicine is characterized by distinct features. A general practitioner is required to evaluate the nutritional quality of both healthy and ill individuals, assess the physical development indicators of children and adolescents, and, based on the collected data, make informed judgments regarding the quality of their educational and developmental environments. Systematic medical oversight of food quality is essential, particularly in organized settings such as hospitals and sanatoriums, where meals are prepared according to specifically designed menu plans. Consequently, it is imperative for physicians not only to possess the skills necessary to develop these menu plans but also to effectively analyze them and propose strategies for optimizing nutritional practices.

The objective of this discipline is to equip students with the necessary knowledge and skills to effectively master the methodologies of preventive medicine. It aims to enhance their understanding of hygienic principles and enable them to evaluate the impact of environmental factors on human health, the well-being of populations, and the condition of human dentition and oral cavity. The curriculum in hygiene and medical ecology encompasses a training period of three to four semesters, during which students engage in 18 hours of lectures and 44 hours of practical sessions specifically designed for the medical faculty. The course culminates in an examination. The final assessment for the discipline is determined by the student's overall performance throughout the year, which includes evaluations of independent work, practical competencies, oral presentations, and results from testing.

The current significance of innovative technologies is rooted in fostering an individual's preparedness for the rapidly evolving societal changes and an uncertain future. This focus is directed towards enhancing creative capabilities, promoting diverse cognitive approaches, and facilitating collaborative skills. Faculty members within the department are actively engaged in seeking methods to enhance the educational process, taking into account the unique characteristics of their instructional context. To this end, they are developing teaching aids and computer-based monitoring programs, as well as refining the methodologies employed in practical classes.

These classes present students with various scenarios that require them to formulate a diagnosis, identify examination methods to validate their assumptions, and establish treatment principles for the identified pathology. Furthermore, thematic questions are provided for all segments of hygiene. The integration of modern computer technologies into the educational framework is evident, with lectures being delivered through multimedia presentations.

The content of these lectures encompasses essential information pertinent to medical professionals across all specialties, as the manifestations of diseases may necessitate referrals to various specialists. Additionally, the lectures address the causes and distinctive features of the environmental crisis in contemporary contexts, as well as the interplay between environmental factors and public health. The significance of biological chains in the transference of hazardous substances from the environment to humans, as well as the chronic effects of these substances on human health, is paramount. This encompasses the need for hygienic regulation and forecasting, alongside the incorporation of hygienic diagnostic elements in the practical activities of general practitioners. In practical classes, a system of thinking and action is developed in the diagnostic and treatment process, aimed at establishing evidentiary connections between detected changes in the state of health, the state of the respiratory system, the cardiovascular system, and the digestive system with the influence of environmental factors. The student is required to autonomously address situational problems derived from the analysis of public catering establishments, incidents of foodborne illness, occurrences of industrial employees seeking medical assistance for varying degrees of noise-induced health issues, and instances of acute and chronic chemical poisoning in the workplace. Additionally, the student must consider exposure to ultraviolet and infrared radiation, as well as ultra- and infrasound. One method of training involves having students compose abstracts on topics related to their independent research projects.

Concurrently, students engage with monographs that focus on particular pathologies. Furthermore, to enhance their understanding of hygiene, the department provides a student scientific circle aimed at promoting more comprehensive study in this area. This innovative methodology offers novel avenues for the education of medical faculty students, facilitating the development of personalized learning experiences. It establishes professional standards encompassing competencies and the culture of professional conduct, while also fostering clinical reasoning and enhancing the emotional and volitional aspects of the individual's character.

Conclusions:

1. Recent advancements and challenges in electronic healthcare necessitate substantial modifications in the educational processes of higher medical educational institutions. The resolution of these issues can only be achieved by professionals possessing the requisite training, which should be communicated to the broader community.

2. The principal aims of higher medical education in the context of digitalization encompass the provision of knowledge, skills, and competencies necessary for students to execute professional medical responsibilities across various sectors of the integrated state information system in healthcare. This initiative seeks to enhance both the accessibility and quality of medical services available to the population.

3. The principal aims of higher medical education in the context of digitalization encompass the provision of knowledge, skills, and competencies necessary for students to execute professional medical responsibilities across various sectors of the integrated state information system in healthcare. This initiative seeks to enhance both the accessibility and quality of medical services available to the population.

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