

**PROBLEMS AND PROSPECTS FOR INTRODUCING A
TECHNOLOGICAL APPROACH INTO THE PRACTICE OF MEDICAL
EDUCATION**

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Abstract: This scientific article explores the challenges and opportunities associated with integrating technological approaches into medical education. With the rapid advancement of technology, there is an increasing need to enhance traditional teaching methods in medical education. The article discusses the key problems faced in incorporating technology, outlines the research methods employed to investigate these issues, presents the findings, and concludes with insights into the prospects of technological integration in medical education.

Keywords: Medical education, technology, e-learning, challenges, prospects, pedagogy, simulation, virtual reality.

Introduction: The landscape of medical education is evolving, with technology playing a crucial role in reshaping traditional teaching methodologies. This article aims to delve into the problems encountered during the incorporation of technological approaches in medical education and explore the prospects for the future. The integration of technology holds promises for improving learning outcomes, but it also brings forth a unique set of challenges that need to be addressed. The technological approach in the pedagogical process is an important condition for improving the quality of higher medical education. The goal of vocational education in general and medical education in particular is to prepare a qualified worker of the appropriate level and profile, competitive in the labor

market, competent, fluent in the profession and oriented in related fields of activity, ready for constant professional growth, social and professional mobility.

A study of the information available in the literature on the use of teaching methods in higher medical schools led to the conclusion that the authors tend to divide them into traditional and innovative. Traditional forms of the educational process at a university usually include classical forms of the educational process at a university, such as lecturing, conducting practical and seminar classes, tests and exams, innovative ones include case technologies, problem-based modular organization of training, business and role-playing games, the introduction of electronic educational resources, interactive methods, etc. At clinical departments, traditional forms are clinical analysis of the patient, work “at the patient’s bedside” in the process of independent supervision of patients. At the same time, it is customary to attribute disadvantages to traditional forms (the active role of the teacher with the passive and driven role of the student, as a result - insufficient efficiency, etc.). Many years of experience in teaching the clinical discipline allows us to assert with full responsibility that there are no contradictions between traditional and innovative technologies. Moreover, the process of convergence and mutual penetration of various teaching methods makes it possible to use them in the educational process as effectively as possible. Thus, clinical analysis with the proper methodological approach, presentation and equipment is an excellent, (perhaps the best) model of case technology in clinical teaching. This follows even from the very name of this teaching technology (Case study - method of specific situations), allowing you to analyze information, understand the essence of the problem and make optimal solutions based on the real, in this case, clinical situation. Even the division into field (real) and armchair (fictional) cases proposed by the developers of case technology fits well into the practice of clinical teaching (real patients and fictional stories based on real ones, for example, in the form of situational tasks). Working with a patient in a practical lesson, followed by a

detailed analysis of all its stages, implies setting a goal (to make a diagnosis, prescribing treatment), and formulating tasks that specify the achievement of the goal (collecting complete and qualified information, analyzing it properly, outlining a plan for further examination), and independent verification of one's actions towards achieving the goal - formulating a diagnosis, prescribing treatment.

Material and Research Methods: To investigate the problems and prospects of integrating technology into medical education, a comprehensive literature review was conducted. The review covered scholarly articles, research papers, and case studies published in reputable medical education journals. Additionally, surveys and interviews were conducted among medical educators and students to gather firsthand insights into their experiences and perspectives on the use of technology in the classroom.

Research Results: The analysis of the literature and empirical data revealed several challenges in the implementation of technological approaches in medical education. These challenges include resistance to change among faculty, the digital divide among students, concerns about the effectiveness of virtual learning tools, and the need for substantial investments in infrastructure. On the positive side, the research identified promising prospects, such as improved accessibility to medical resources, enhanced collaboration through virtual platforms, and the potential for realistic simulation experiences using virtual reality. The study surveys included 100 teachers from 35 to 55 years old. Of these, from 35 to 44 years old, 53% of teachers support and know how to use technology in the teaching process. Teachers 22% from 45 to 52 years old claim that the use of technology in the educational process is convenient, they are almost fluent in using technology, but there are some nuances and difficulties in using very developed technological devices, applications, etc. But 25% of teachers aged 53 to 55 claim that they more often use traditional teaching methods. Among 100 students, surveys were also conducted on the introduction of technology into the educational process; 65% of

students said that it is necessary to use all types of technologies in the educational process. and they are satisfied with it. 21% of students claim that there are deficiencies in technical support, poor Internet connection and lack of competence in the use of technology by some teachers. And only 14% of students confirmed that they mostly study independently; they are not interested in whether the teacher uses technology in the educational process or not.

Conclusions: The findings suggest that while there are significant challenges in integrating technology into medical education, there are also promising opportunities that can transform the learning experience. Faculty development programs, investment in infrastructure, and addressing the concerns of both educators and students are critical steps in overcoming challenges. The prospects include creating a more dynamic and interactive learning environment, providing access to a wealth of medical resources, and preparing students for the technological demands of modern healthcare.

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