



PEDAGOGICAL EFFECTIVENESS OF INTERACTIVE EDUCATIONAL PLATFORMS IN MEDICAL EDUCATION

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Abstract: *This article analyzes the modern requirements, didactic foundations, practical results, and role of implementing interactive platforms in the medical education process in developing clinical skills. It has been shown that interactive technologies allow students to independently acquire knowledge, form clinical thinking, strengthen practical skills in safe conditions, and increase the effectiveness of the educational process.*

Keywords: *interactive, platform, clinical, virtual, laboratories, simulators, 3D models, AR/VR, technologies, 3D anatomy*

Introduction: In developed countries of the world, new requirements are being set for the training of comprehensively developed and harmoniously developed medical personnel in the medical education system, related to the development of their professional thinking. Currently, the reform of the education system and the healthcare system in our country, the training of highly qualified specialists, the formation of professional practical and clinical practice classes "Teaching students modern knowledge and skills through the development of the education system" is defined as an important priority task. In this regard, the specifics of providing a simulation educational environment, pedagogical conditions, and didactic opportunities for students studying in the field of medicine to improve technologies aimed at strengthening their practical skills and developing scientific inquiry, as well as mastering various levels of innovative activity at the required level, are of great importance.

In medical higher educational institutions of our country, research is being conducted on the introduction of modern approaches to the teaching of professional medical disciplines, a healthy lifestyle, a culture of a healthy lifestyle, including N.Akhmedova, G.Kurbanova, R.Zhuraev, M.Inomova, A.Isimova, Z.Ismailova, S.Yuldasheva, M.Makhmudova, O.Musurmanova, N.Ortikov, M.Ochilov, K.Riskulova, D.Ruziyeva, S.Tursunov, D.Sharipova, Sh.Shodmonova, N.Egamberdiyeva, Sh.Kurbanov, and others. Among the pedagogical scientists of medical education of our country, L.A.Abdurakhimova conducted research on the integration of innovative and simulation technologies in the educational process, M.R.Kadirova - on the methodological improvement of professional competence of students in medical universities, Sh.P.Ergasheva - on technologies for the development of communicative competence in preparing students for professional activity.

Scientists of the Commonwealth of Independent States S.G.Izard, J.A.Juanes Mendez, P.R. Palomera, A.D.Karabasheva, Y.A.Mensh, G.P.Novikova, Jeffries P, O.A.Plaksina, and



others studied the issues of educating students based on a healthy lifestyle from a scientific and pedagogical point of view, preparing them as individuals with high professional qualities in conjunction with medical and regulatory competencies, and issues of medical pedagogy were studied by M.S.Diankina, N.V.Kudryavaya, K.V.Zorin.

Below are the main advantages of using interactive educational platforms in teaching medical professional disciplines:

- **In strengthening practical skills in medical sciences:** Interactive platforms (virtual laboratories, simulators, 3D models) allow students to practice complex clinical processes in a safe environment.

- **Allows experimental processes to be performed in real clinical situations:** Virtual patients, simulated disease processes allow students to study emergency care, diagnostic, and treatment algorithms in close proximity to real life, and the student conducts independent analysis of various clinical situations.

- **Interactive lessons:** they are more interesting than traditional lectures and increase students' internal motivation to study. Gamification, assignments, ratings increase student participation in the lesson.

- **Clear and systematic assessment:** Automated tests, OSCE simulators, and online training on clinical situations help to objectively and quickly assess the student's knowledge and skills. The teacher fully controls the rating, activities, and assignments.

- **Development of teamwork skills** Communicative and leadership skills are formed in students through online group projects, collective analysis of clinical situations, and discussion rooms.


- **Improves skills in working with modern medical technologies:** AR/VR technologies, 3D anatomy, surgical simulators prepare students for real clinical surgery.

The student develops practical skills in using modern medical technologies.

Conclusion: interactive platforms in medical education are an important tool for improving the quality of the educational process, forming clinical skills close to the real situation, strengthening the student's motivation for independent learning, and effectively organizing the pedagogical process. The introduction of interactive technologies will contribute to the improvement of medical education in accordance with modern requirements and will allow for the training of competitive medical specialists in the future.

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