

SIMULATIVE EDUCATION: APPLICATION IN HIGHER EDUCATION, METHODOLOGICAL APPROACHES AND EFFECTIVENESS

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Annatation: *The article analyzes the scientific basis for the implementation of various modern methods, including the modernization of the higher education system through simulation training, the theoretical foundations of simulation training, the development of simulation training pedagogy, the need for high-tech resources, teacher training and the right pedagogical approaches for the successful use of simulation training, its importance as an important step towards training competitive personnel, the ability of students to understand mistakes in a safe learning environment, learn to solve problems and be prepared for real life, practical experience, and methodological approaches.*

Keywords: *imitative learning, imitative approach, methodology, complex modeling, command modeling, game modeling, practice, medicine, pedagogy, computer programs, knowledge and skills, methodology, information and communication technologies, analytical thinking, artificial intelligence, integration, method, interactive, professional skills.*

Imrad: *In the current era of rapid development of information and communication technologies, the education system is also being enriched with modern methods. In this process, simulation education - that is, the method of teaching by creating learning conditions close to real life - is gaining great importance. This methodology is widely used mainly in areas requiring professional training, such as medicine, engineering, pedagogy, and aviation.*

Simulation education is a methodological approach that provides students with the opportunity to test their knowledge and skills in practice by creating situations close to real-world conditions[1]. This educational method plays an important role in making the learning process more interactive and effective, and in developing students' decision-making, problem-solving, and analytical thinking skills.

Simulation education methods are widely used in developed countries, because this method provides students with not only theoretical knowledge, but also practical experience. There are various approaches to simulation education, which allow students to learn through experience. The following is a review of the main approaches used in simulation-based learning.

Computer-based simulations — In this approach, students are exposed to different situations or situations through computer programs or simulators. For example, in medicine, there are virtual simulation systems for learning surgical procedures, and in aviation, there are flight simulators. This approach allows students to gain experience in a safe and controlled environment.

Role-playing — Allows students to learn by participating in different roles, playing specific characters or situations. This method helps students develop empathy, problem-solving, and teamwork skills during the learning process. For example, in history or social studies, students can play different historical figures.

Integrated simulation — Integrated simulation combines multiple disciplines or skills. Students learn the relationships between different fields through interactive activities. For example, an integrated simulation of economics and engineering helps students understand the production process.

Gamification is the organization of simulations in the form of games and competitions. In this approach, students participate in the learning process by adding competition and motivation. Game elements, scoring points and increasing levels increase students' interest in learning.

Team simulation - in this approach, students are encouraged to work in teams, which develops their cooperation, leadership and decision-making skills. Students participating in team simulation projects think together about various issues and try to find the best solutions.

Literature review and methodology

Saida Razzak has conducted many studies on simulation and skill development. She emphasizes that the main goal of simulation is to develop students' creative and analytical thinking skills. The researcher determines that with the help of simulation education, students are given the opportunity to develop new approaches to solving problems, and this process helps to improve students' practical skills. In her opinion, simulation develops not only students' knowledge, but also their strategic thinking and decision-making skills[2].

Hamidov studies the integration of simulation with gamification. He believes that using game elements through gamification provides an opportunity to increase students' motivation and make the learning process interesting. In higher education, for example, in business or management faculties, organizing a simulation process for students through various games and competitions increases their competitiveness and helps them learn more effectively. The scientist's views on this area are as follows:

Increases students' motivation and helps them learn in an interactive way;

Simulation-based learning helps them develop creative thinking and new approaches to problem solving;

Students develop analytical thinking during the learning process[4].

Amina al-Husseini emphasizes the importance of developing teamwork in simulation-based learning. According to her, simulations allow students to learn to work in groups, exchange ideas, and make decisions together. This is especially important in areas such as business, management, and social sciences. Team simulations teach students how to collaborate in real-world work situations, which will help them be more effective in their work later on. Team simulations teach students how to communicate, work in groups, and solve problems together. This method develops students' communication and collaboration skills[3].

Conclusions and suggestions

In conclusion, it should be noted that simulation education methods in higher education provide students with not only theoretical knowledge, but also practical skills. According to the scientific views of scientists, the main goal of simulation education is to develop practical skills in students to actively participate in real-life situations, make decisions and solve problems. Approaches such as innovative technologies, gamification, teamwork and creative thinking increase the effectiveness of simulation education and make it more interesting. However, for its effective use, it is necessary to prepare appropriate resources and teachers in higher education institutions. Simulation education is an important step towards modernizing the higher education system and training competitive personnel. Its widespread implementation provides the following benefits: strengthening professional skills, forming graduates ready for practice, establishing interactive, modern teaching methods, and bringing the educational process closer to life. It is necessary to develop special simulation programs and equipment for each field, establish advanced training courses for teachers, develop special methodological

guides for simulation lessons, and encourage the exchange of experience between higher education institutions.

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