

OPPORTUNITIES FOR DEVELOPING STUDENTS' PROFESSIONAL COMPETENCES USING IMITATION MODELS

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Abstract:

This article analyzes the possibilities of developing students' professional competence using simulation models. Interactive and practical approaches are important in modern education, and simulation models are an effective tool for creating an educational process that is close to real working conditions. The article highlights how these models affect the development of students' critical thinking, decision-making skills, and the ability to work independently. The application of artificial intelligence and virtual reality technologies in simulation education is also discussed.

Keywords: Simulation models, professional competence, educational technologies, interactive education, virtual reality, artificial intelligence.

Introduction

The modern education system sets itself the task of providing students with theoretical knowledge, as well as preparing them well in practice. Simulation models play an important role in the process of forming and developing professional competence. Because through these models, students gain experience close to real professional activities, improve their problem-solving skills, and have the opportunity to consolidate their knowledge. Simulation models are especially important for students studying in engineering, medicine, economics, pedagogy, and technology, and serve to increase their professional readiness. These technologies, integrated into the educational process, connect students' theoretical knowledge with real situations, which plays an important role in their future work. The learning process using simulation models is interactive, dynamic, and interesting, while also increasing students' readiness for their professional activities. With the help of such models, students develop skills such as analyzing specific situations related to a particular profession, making decisions, solving

problems, and adapting to different situations. For example, students studying in the medical field learn to perform operations through simulation models and gain practical experience in diagnosing patients' diseases. Students studying in the field of engineering will have the opportunity to model engineering processes, solve technical problems and create technological innovations. This will help them improve their professional skills and become highly qualified specialists in their fields.

Organizing the educational process based on simulation models not only increases the efficiency of education, but also helps students develop their skills for independent work and self-improvement. While in the traditional education system, students are trained mainly based on theoretical knowledge, simulation models ensure their practical development. For example, students studying in the field of economics and management can acquire the skills to model various economic processes, predict market trends and make important decisions in business management. This will allow them to deeply understand and effectively manage economic processes in the future.

Learning through simulation models not only strengthens students' knowledge, but also develops their critical and creative thinking skills. Because such models provide students with the opportunity to make decisions in specific situations and see the results of their decisions. Students have the opportunity to gain experience in a simulated environment and minimize errors. This process gives them important experience in solving problems encountered in real work situations. In particular, students studying in the field of pedagogy develop their skills in planning the educational process, solving problems that may arise during the lesson, and communicating effectively with students. Imitation models are presented in combination with technological innovations to improve the professional training of students. Today, artificial intelligence, virtual reality, and augmented reality technologies are leading to the development of educational platforms based on simulation models. Through such technologies, students have the opportunity to study processes related to their fields in more depth. Virtual laboratories, interactive simulations, and artificial intelligence-powered learning systems are expanding the possibilities for providing students with an individualized approach to education. This helps them independently develop their knowledge and skills and successfully apply them in practice.

When introducing simulation models into the educational process, it is important to develop specific pedagogical strategies for their effective use. Teachers and educational organizations should use a scientific approach to increase their effectiveness when introducing such models into curricula. It is also necessary to train teachers to work with simulation models, develop innovative teaching methods using them, and provide education to students based on an individual approach. By introducing such models into the educational process, students not only deepen their professional knowledge, but also develop skills in solving problems encountered in real-life situations. In the future, simulation models are expected to develop further and be used more widely in the educational process. Modern technologies, including artificial intelligence and virtual reality-based simulation systems, will create a more realistic and interactive learning environment for students. This will allow them to independently develop their professional skills and develop innovative approaches. Therefore, educational institutions, researchers and specialists should work on the development of simulation models and their wider application in the education system. As a result, the educational process will improve in accordance with modern requirements, and students will have the opportunity to receive higher quality education.

In conclusion, simulation models are one of the important tools for increasing the efficiency of the educational process, especially in developing students' professional competence. Through these models, students not only receive theoretical knowledge, but also acquire practical skills, adapt to real professional conditions and test their knowledge in practice. This will help them succeed in their future professional activities. Therefore, the wider application of simulation models in the education system, the full use of their capabilities and the development of the educational process in an innovative direction are one of the urgent tasks of today.

Simulation models are one of the important tools for developing students' professional competence in the modern education system. They help make the learning process more interactive and effective, creating favorable conditions for preparing students for real professional activities. By introducing such models into the educational process, it is possible to consolidate theoretical knowledge and increase practical experience. Especially in such fields as technology, medicine, economics, engineering, and pedagogy, the use of simulation models is of great

benefit to students. Because these areas require practical skills, and students have the opportunity to learn in real conditions without the risk of making mistakes.

Simulation models serve to develop students' critical thinking, decision-making, and problem-solving skills. While traditional educational methods are dominated by theoretical knowledge, through training in a simulation environment, students have the opportunity to test their knowledge in practice. For example, students studying in the medical field can practice on virtual patients, learn to diagnose, and perform operations. In the engineering field, students develop their professional knowledge by creating projects, simulating engineering processes, and developing technological solutions.

Students who receive training through simulation models are also prepared to develop innovative approaches and apply new technologies in their fields. As a result of the development of modern educational technologies, simulated educational environments created on the basis of artificial intelligence, virtual reality and augmented reality are becoming more widely used. This helps to make the learning process more effective. With the help of such models, students directly connect theoretical knowledge with practical situations, which accelerates their professional development.

Simulation models not only make the learning process more interesting, but also develop students' skills in self-improvement, independent thinking, and innovative approaches. With the help of such models, students are prepared for real conditions in their field, work on mistakes, and gain experience in solving problems they will encounter in their future work. Also, the expansion of simulation training methods opens up new opportunities for educational institutions and specialists. Simulation models are one of the effective methods for developing professional competence and play an important role in preparing students for a real work environment. In the future, the wider implementation of these models in the education system, the full use of their capabilities, and the development of the educational process in an innovative direction will remain one of the priority tasks of the education sector.

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