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THE USE OF SIMULATION EDUCATIONAL TECHNOLOGIES IN THE EDUCATIONAL PROCESS OF PROFESSIONAL INSTITUTIONS

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Abstract

This article reveals the issues of educating a future specialist in vocational education institutions. The main methods used in vocational educational institutions in order to form students' professional and general competencies are disclosed and analyzed. The competencies underlying the development of the personality of a specialist contributing to competition in the labor market are determined. The necessity of searching for innovative forms and methods in solving the tasks of educating a graduate with stable skills and abilities to perform professional duties is substantiated.

Keywords: *professional education system, simulation technologies, general competencies, professional competencies, extreme competencies. Human life safety*

Introduction

To date, the increasing relevance is determined in the creation of an improved didactic provision of special disciplines with simulation tools and innovative technologies that affect the formation of professional and general competencies in the training of specialists in the system of vocational education. The rapid reform of the education system, the development of science, technology and technology in Uzbekistan is one of the priorities, namely, the improvement of the activities of all components of the education and upbringing system based on modern labor market requirements, namely, the improvement of the content of education and the creation of safe working conditions for a specialist.

The above tasks were reflected in the resolution of the Cabinet of Ministers of the Republic of Uzbekistan dated August 7, 2020 No. 466 "On approval of regulatory legal acts regulating the system of continuous primary, secondary and secondary specialized vocational education in the Republic of Uzbekistan", according to the charter of this resolution, vocational education in the Republic of Uzbekistan is based on the real need for personnel in the labor market taking into account the prospects and priorities of economic development, modern technical and technological trends, proposals of employers, as well as the training of persons on the principle of "Lifelong learning", at the same time, vocational education is a system of continuing

education that forms and develops students' professional competencies in certain specialties and professions (Resolution of the Cabinet of Ministers).

The personnel trained in the walls of professorial educational institutions in their work successfully apply the formed professional and general competencies. The main formation of competencies takes place in training workshops in the so-called "greenhouse" conditions. The student is always trained under the guidance of an experienced master according to a previously prepared technological map and instructions. In the training workshops, all conditions have been created to ensure the safety of students' learning, but starting their work in the workplace, a student may have a number of difficulties that mentors will help solve. It is important to note that the student should also be able to apply the acquired skills and abilities as much as possible in a vocational educational institution to create a safe environment. It is for this reason that our research is aimed at the formation of primary competencies of human life safety within the framework of general competencies through the use of simulation educational technologies.

The list of key competencies was proposed by the Russian scientist A.V. Khutorsky on the basis of a structural representation of social experience and personal experience, as well as the main activities of students that allow them to master social experience, acquire life skills and practical activities in modern society. The analysis made it possible to assume that some groups of general competencies (socio-labor and value-based) will be successfully formed not only in educational, but also in extracurricular educational activities of vocational educational institutions (Khutorskoy A.V., 2016).

Modern simulation technologies are implemented using information and communication technologies. In professional didactics, there are three types of such simulations, among which the following can be distinguished: the formation of the ability to qualitatively evaluate the received material, quickly analyze it and effectively dispose of it; the development of the ability to solve professional tasks; the development of responsiveness (Matveev N.L., Emelyanov S.I., Bogdanov D. Yu., 2007).

The foundation of modern simulation technologies is evidence-based principles and scientific approach. The formation and dynamic development of all elements of simulation technologies opens up a number of prospects in the future, among which the following can be noted: highly realistic simulation of touch; integration with related visualization systems; development of virtual worlds technologies, etc. The use of one or another type of simulation technology depends on the stage and form of classes, as well as on its purpose. So, simulation technologies come in different types. According to the level of realism, they are classified into visual, tactile, reactive, automated, hardware, interactive and integrated (Possibilities of simulation technologies).

The use of one or another type of simulation technologies in the system of professional education depends on the form of classes from the course in which students are trained, and on its purpose. So, we have divided simulation technologies into several classes:

- visual,
- tactile,
- interactive.

Let's open each type more broadly, interactive simulation technologies imply the use of virtual simulators with tactile feedback or real simulators of any elements or simulators of high realism.

Visual ones are the least realistic simulation technologies. Their use is carried out through the use of electronic textbooks and training mobile platforms.

Tactile simulation technologies can be used for a number of specialties and areas of study, implying the development of practical skills on simulators.

Simulation technologies most often there are types of various technical means, various software products, simulators, dummies, etc. you also need to pay special attention to the organization of the process of various situations that also allow you to get the ability to design your own actions in extreme situations.

It is important to note that from the point of view of the professional activity of each specialist, the situation is a set of interrelated facts, phenomena and problems that characterize a specific period or event in the activity

and require appropriate solutions or other active actions.

The method of analyzing specific situations consists in studying, analyzing and making decisions on a situation that has arisen as a result of events that have occurred or may arise under certain circumstances in a particular organization at one time or another. Analysis of a specific situation is a deep and detailed study of a real or artificial situation, performed in order to identify its characteristic properties. This method develops students' analytical thinking, a systematic approach to problem solving, allows them to identify options for correct and erroneous decisions, choose criteria for finding the optimal solution, learn to establish business and professional contacts, make decisions in difficult circumstances. eliminate conflicts.

The method of analyzing specific situations as a kind of practical training allows students not only to study a certain topic, but also to analyze real-life situations in which some events that took place or could have taken place and which led to mistakes in solving a particular creative or production problem are usually described. The task of students of professional educational institutions is to identify these errors and analyze them using the concepts and ideas of the course, as well as to offer their possible solutions that may affect the final result. This approach to teaching students is much more realistic than a set of individual questions on the topic under study, considered without any connection with reality, which means that the future specialist understands exactly what his activity should be directed at when he gets into a similar situation.

Modern working conditions cause a sharp increase in the volume of scientific and technical, regulatory, reference, legislative information related directly to the activities of a specialist. The ability to search for the right information, navigate in this flow, the ability to select the right one, analyze and generalize it becomes another requirement for a modern specialist. The emerging contradiction between the growing volume of information and the limited amount of knowledge and time is easily overcome by the development of modern reference and search engines, the Internet and other similar means.

It is for this reason that the priorities of simulation technologies in training and preparation for work are imitation of the processing process, where students can understand, imagine and see all the main stages of the implementation of their competencies to analyze and use in the future in independent activities.

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