



USE OF GAMING TECHNOLOGIES AND TRAINING SYSTEMS TO INCREASE MOTIVATION OF STUDENTS OF SECONDARY VOCATIONAL EDUCATION FOR FUTURE PROFESSIONAL ACTIVITIES

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ABSTRACT

The article is presented the possibilities of using educational computer games with technical support as training systems. It is such a combination of the use of pedagogical and information technologies that will increase the level of educational and cognitive activity of students of secondary vocational education.

At present, there is a noticeable decrease in the effectiveness of methods traditionally used in teaching, which is associated with strict regulation of the activities of students in the classroom. This approach leads to the fact that students do not clearly understand the goals of their actions. Actions, do not realize the need to repeat and apply the studied material, and also do not represent its practical significance for the future current professional activity. All this leads to a sharp decrease students' motivation for learning.

In modern pedagogical practice, there are many ways to increase the educational and cognitive activity of students, one of the most promising approaches is the use of educational computer games [1]. Computer games are widely used in modern educational institutions and are becoming a special digital form of education that includes all the advantages of classic didactic games

and supplemented by realistic images and animation of the virtual world.

However, learning means not only the accumulation of knowledge, but also their awareness, that is, embedding them in the student's already existing experience. In order for this to happen, it is not enough to listen to a lecture, a deeper level of information processing is needed so that it is transformed into knowledge. The student must not only learn something new, but also master, comprehend and apply this new in practice, which is impossible without working through the studied material and accumulating on the basis of this specific experience. It is the use of educational computer games that makes it possible to gain this experience through modeling possible situations of the future professional activities and connecting the student to the whole virtual my world of tasks.



Didactic computer games are active teaching methods, since the learning process takes place not only in the form of passive listening or reading. Such games can be adjusted to the individual needs of the user, open up opportunities for self-acquisition of new knowledge, have some intellectual potential due to the mechanisms and algorithms embedded in them [2].

Educational computer games help not only to remember the studied material well and for a long time, but also allow you to immerse yourself in a specially created environment for future professional activities, which contributes to the growth of involvement and, as a result, motivation and enthusiasm. Modern computer games are constantly evolving and improving. Increased graphics capabilities, processing speed information, volumes of data carriers. Interaction coming soon during games will improve when the use of transmission technologies begins speech, neurological and tactile interfaces.

Many researchers argue that high-quality educational computer games are created as a result of a combination of pedagogy with three main elements of computer games - plot, image and software. However, it should be noted that educational computer games and the educational effect associated with them is due not only to brilliant graphics and stunning animation and visualization, but to a greater extent to storylines and realistic game scenarios [3].

In this regard, despite the ambiguity and vagueness of the wording of the definition of the concept of an educational computer game, experts argue that educational computer games must have an explicit or implicit educational goal, game

elements and an interactive environment. We can say that the entertainment element of the game may or may not be a constituent element of educational games. The use of gaming technologies, as a rule, must be carried out in combination with other pedagogical tools and technologies. It is advisable to use CM Labs simulators as technical support and assistance in organizing the game process. A new development of the company was the Dozer training package for bulldozer operators, the interface of which is shown in the figure.

It deals with common problems for the novice user, such as setting the blade angle and learning how to process the material in front of the blade. In addition, the simulator includes additional training exercises such as excavating the drainage inlet and transverse ditch, as well as loading / unloading a trailer. The combination of a simulator and a computer game helps students not only understand the principles of operation of complex technical equipment, but also imagine the time spent when using it, as well as see the features of performing the necessary calculations and settings in the process of using the equipment.

In addition, a key feature of the new bulldozer simulator is how it allows trainees to "experience a unique experience." Resistance of the soil and material collected in front of the blade. Training the package provides a real type of feedback by simulating an interaction between all the virtual elements of the simulator - soil, blade, transmission and engine. All variables are taken into account. Affect how the machine works in the real world. Training exercises of the simulator contain prompts on the screen, indicators



and performance indicators that enable learners to learn at your own pace or as part of an instructor-led training program. The exercises also have several possible solutions, allowing operators to completely transform their skills, creativity and judgment as if they were working on a real job site [2].

Thus, the integrated use of teaching computer- the use of games and simulator

systems in the process of teaching students allows not only to form the necessary professional competencies, but also to increase the level of educational and cognitive activity by including students in the real conditions of their future professional activities.

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