



LIFE SAFETY TRAINING USING VIRTUAL LEARNING TECHNOLOGIES

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Abstract

This article describes how to train a Life Safety Course using virtual learning technologies.

Keywords: Virtual laboratory, smartphone, interactive whiteboard, device, safe, effect, rescuer, technology.

A virtual laboratory is an environment that simulates the equipment of a training laboratory in an installed device, such as a computer, smartphone, tablet and interactive whiteboard. Such equipment can be used by both teachers and students. With the help of virtual laboratories, teachers can create various interactive tasks that students can use not only in the classroom, but also at home.

Virtual technology allows you to safely conduct experiments that are difficult to conduct in the classroom. A virtual laboratory is not just a sequence of images or videos, but training laboratories in which you can conduct familiar and complex experiments. The main feature of the laboratory is that the same chemical and physical laws apply here as in real life. This means that if a student makes mistakes when performing work, he does not achieve the expected results, but on the contrary, an effect occurs when such an error is allowed when working with a regular laboratory.

For a teacher, such equipment provides huge opportunities for action: it can encourage students to "conduct experiments that are not usually done in the classroom." For example, learning the topics included in the Life Safety Course curriculum through virtual laboratories will help ensure an effective learning outcome. To do this, of course, with a programmer, you need to pre-select topics, form the content of laboratories based on topics. While this would be labor and economic intensive, if the idea were to be implemented, it would provide a practical



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solution for emergency prevention and response. For this, in our opinion, it is advisable to implement practical projects.

In particular, it is necessary to install such equipment in open water bodies, which as soon as possible should inform rescuers about this, as well as protect a drowning person at the scene. It will also be easier for rescuers if their content is reflected in virtual laboratories.

It is advisable that special equipment that will be installed on the roads is also designed to prevent various accidents. We think that the inclusion of the Life Safety Course in the curriculum, starting from the lower stages of training, will help each student and student learn to behave in emergency situations, act against them depending on the type of events, and develop certain skills. The organization of virtual training on the course will contribute to ensuring the personal activity of a person in the preservation, protection and extension of his life.

Virtual lab equipment has a huge impact on learning efficiency. They are considered insignificant if they do not have a positive impact on the educational activities of their students. By conducting experiments on a life safety course in a virtual environment, students can make mistakes and return to the beginning of practice. Thanks to this, they can combine the right actions. Teachers can offer students jobs they normally can't do in the study hall, further increasing their interest in science. Through virtual laboratories, the levels of difficulty of tasks can be increased and reduced, talented students can be offered more complex and interesting tasks. Students who are forced to skip classes due to illness can complete all tasks at home on their own or under the guidance of a teacher. Students use phones, tablets and computers for a variety of purposes. Learning how to use virtual technologies in emergencies gives the Life Safety Course practical importance. All this has a positive effect on the interest of students in science and knowledge in general, as well as increases learning results.

What is virtual reality? Virtual reality (VR) is an interactive world created using modern computer programs that a person perceives through basic sensations: vision, hearing, capture and odors. Virtual reality technology consists in creating an imaginary environment using special touch devices. There are various features that describe the virtual world, but they are rarely available. In the course of research,



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scientists have scientifically substantiated that important conditions for virtual modeling are:

1. Naturalness and conviction. When a user enters a virtual environment, they should not doubt what is happening and trust the facts of virtual reality. This requires that "learning situations remain natural."
2. Interactivity. This is a mutually beneficial impression on various subjects, which implies the activity of students.
3. Virtual space granularity. This will allow the user not only to see the huge virtual space, but also to explore it. The environment should not have a negative impact on the psychology of students.
4. High-quality equipment that ensures uninterrupted operation. In virtual labs, each experience requires a specific consistency in training and skills.
5. Influence of existence. The user acts not only as an observer, but also as a direct participant in events, interacts with the virtual environment using emotions.

It is worth noting that a convincing simulation allows the student to think that he is real. In order for the virtual space, its properties and reactions to look natural, this allows you to deeply analyze the processes of computer synthesis and compare them with real-time actions.

Virtual technologies add digital objects to the real world, changing human perception. In other words, it is a filter that allows a person to see something that is not really there. In virtual reality, a person continues to exist in the physical world, but notices some additions to it and makes an impression. At the same time, mobile devices, such as a tablet or smartphone, are the main means of tracking. The use of virtual technologies is quite wide. It is used in show business, education, art, literature and cinema, navigation, trade and large-scale mass events. Its capabilities today are used mainly for advertising purposes. The opportunity to see virtual reality is to wear special glasses, helmets and gloves. However, they are not common in everyday life. They are mainly used in production.

The use of virtual educational technologies in the prevention and elimination of the consequences of emergencies develops students' skills in studying vision techniques and working with artificial reality using special devices. Using gadgets and joysticks also makes it convenient.



Literature used

1. Sherdonov Z. The use of information and communication technologies in the teaching of chemistry//Chemistry at school. - Tashkent, 2013. – № 4. - B. 4-8.
2. Shuaybova M.O., Minbulatova I.S., Bagandov M.K. Implementation of a competent approach in the study of the discipline "Life Safety" in the higher education system//Vestnik ChSPU, 2017. – № 4. - S 107-112.
3. Chto takoe virtual laboratoriya i kak s ee pomoshchyu mojno uluchshit uspevaemost uchenikov.<https://digi-tech.dev/news/chto-takoe-virtualnaya-laboratoriya-i-kak-s-ee-pomoshchyu-mozhno-uluchshit-uspevaemost-uchenikov/>.