

VIRTUAL REALITY

Belarusian State University of Informatics and Radioelectronics
Minsk, Republic of Belarus

Stiopkina S. A.

Perevyshko A. I. - Senior Lecturer
Department of Foreign Languages №1

The purpose of this article is to review the possibilities of using virtual reality in different fields of activity in the present and in the future.

Virtual reality (VR) provides a computer-generated 3D environment that surrounds a user and responds to that individual's actions in a natural way, usually through immersive head-mounted displays and head tracking. Gloves providing hand tracking and haptic (touch sensitive) feedback may be used as well. Virtual reality is a new stage in the development of media, a new technological leap.

VR-technologies at the moment have become very widespread among IT companies as a means of interactive support of their information products. Including this technology has become interesting in the field of educational services to improve the quality and visibility of training programs. This is due to the fact that the use of virtual reality technologies opens new horizons not only in the field of computer games, but also in such fields as medicine, construction, education.

Even today, VR is used in a variety of areas. *The real estate market* - before buying a mansion, you can put on glasses and study in detail the house, being on the other end of the planet.

Virtual Reality is playing an important role in *Aeronautics* which is very helpful for Army, Air force, Navy.

Virtual Reality Programs are also used in *parachute training* and it is only due this technology that life risk can be totally avoided.

You can *explore every corner of the world* with the help of virtual reality technology.

Nowadays *surgeons*, make use of virtual artificial to check through a patient's body so that he can determine exactly where tumors are located and he can also determine how best to reach all of them.

Also some *museums* have uploaded their collection of items on different virtual reality platforms. All you need is to have both VR headset and access to any of the platforms. You will be able to access the museums from the comfort of your home at any time of the day.

Education is another area which has adopted virtual reality for teaching and learning situations. The advantage of this is that it enables large groups of students to interact with each other as well as within a three dimensional environment.

The *advantages* of using virtual reality technologies in educational institutions:

There is no need to purchase expensive and bulky stands.

Access to virtual laboratories is carried out from any place, it is enough to have a VR-helmet and a PC.

There is an opportunity to create additional educational programs.

The university can use VR technologies to train people with disabilities.

Studying the mechanisms of linguistic and verbal abilities has shown that the most effective method of teaching a foreign language is the full immersion method, since students get into the natural language environment and are constantly in it. So the process of learning in the classroom, however organized and communicative, can not replace the experience of real language learning.

Education has moved on from books, pencils and pens to the use of interactive technologies to help impart knowledge and understanding.

In general, virtual reality is an ideal learning environment, and the possibilities of its technologies for teaching and research have extremely high potential for application. Education using virtual reality allows you to visually conduct lectures and seminars, conduct training, which improves the quality and speed of educational processes, reducing their cost.

References:

1. <https://greenlightinsights.com/industry-analysis/>
2. <https://www.gartner.com/it-glossary/vr-virtual-reality/>
3. <https://www.theguardian.com/technology/virtual-reality>
4. <http://www.realitytechnologies.com/virtual-reality>
5. <https://vrgeek.ru/>