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VIRTUAL REALITY AS AN INNOVATION IN THE EDUCATIONAL PROCESS

With the rapid development of science and technology, new technologies appear in front of us one by one. After multimedia, simulation, computer network, the field of educational technology and new teaching media, it is Virtual reality technology. Virtual reality technology is the use of computer simulation of the real-world technology, because it can create an environment similar to the real society, users get immersive feeling and experience, so as to solve the learning media situational and natural interaction requirements. Therefore, virtual reality technology has a huge application prospect in the field of education. We can predict that virtual reality technology will become the «star» technology with the most application prospect in the field of modern education.

Experts in the field of education point out that the new technology will bring us a new educational thinking, solve some problems in the teaching process that could not be solved before, and bring a series of major changes to our education. Especially in science and technology research, virtual simulation campus, virtual teaching, virtual experiment, educational entertainment and other aspects of the application is more extensive.

Virtual reality technology not only realizes the transformation from «computer as the main body» to «human as the main body», but also realizes the transformation from «computerized one-dimensional information space» to «humanized multi-dimensional information space».

Virtual reality technology combines computer graphics, computer simulation technology, sensor technology, display technology and other science and technology, it creates a virtual information on the multi-dimensional information space environment, enable the immersive immersive, is perfect ability of interaction with the environment and help inspire ideas. It has the following characteristics:

- Multisensory: it refers to the interaction between a variety of sensors and the virtual environment with multi-dimensional information. In addition to the visual perception provided by computers, there are also auditory perception, tactile perception, motion perception, and even smell, taste and perception. The ideal virtual reality should have all the perceptual functions of human body.

- Sense of presence: it refers to the reverse touch of a variety of sensors on the human body, so that participants can have an immersive feeling in the virtual environment and feel the reality of the protagonist in the simulated environment. The ideal simulated environment should be so that users can hardly distinguish the truth from the falseness.

- Interactivity: when participants control and feel things in the virtual environment through a variety of sensors, the virtual environment countertouches them through sensors. Every information exchange is mutual. The manipulation of objects in the simulated environment and the feedback from the environment are mutual, and the manipulation and feedback are real-time.

- Autonomy: Virtual environment is designed and created by participants according to their own needs and plays a leading role in the operation of virtual

reality. It is designed and made according to the physical objects in the real world and the laws of physical motion.

Virtual reality technology plays a very significant role in education, not only because of its teaching method, but also because of its teaching concept.

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DESIGNING INNOVATIVE ACTIVITIES IN EDUCATIONAL INSTITUTIONS: FROM TEACHER-BASED EDUCATION TO STUDENT- BASED EDUCATION TRANSFORMATION

In the classroom of our traditional teaching, teachers often speak eloquently, sing exclusively or even talk endlessly on the high platform, while students sit passively and listen to the teacher. The students' body and mind are outside the "circle" of teaching activities, completely in a "static" state, without really participating in the dynamic learning, even if the teacher asks or draws questions, it is only occasionally. So the classroom learning atmosphere is not strong, students' interest in learning is also greatly discounted. In this teaching mode where the teacher is too strong, students' enthusiasm and subjectivity are not really reflected at all.

The most fundamental reason is the deviation of the teaching concept, which further shows that it is inevitable to change this concept fundamentally at the level of the education system. And "teacher-based education" is to overturn the above bad