Research on the Application of Virtual Reality Technology in Specialized English Teaching

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Abstract: Due to the continuous development of scientific and technological research in China, many scientific and technological fields have made major breakthroughs. In particular, network information follows the footsteps of the international community, and the development of computer multimedia technology is very rapid, and virtual reality technology has emerged. The development of virtual reality technology has brought great convenience to many industries. Virtual technology can be used in a variety of forms in the display space. Therefore, there are many industries that can be applied, and the fields involved are wide. According to the diversified features of virtual reality technology, it can play different roles in different fields. Strengths. Because of the emergence of new technologies, they will be applied in many fields of society. Therefore, the application of virtual reality technology in display space is of great significance. Specialized English teaching has always had many problems in the process of education development. In the current virtual reality technology, the application of virtual reality technology can solve the problems in the development of special English.

1. Introduction

China's emphasis on education is constantly improving, and specialized English is a typical discipline that can comprehensively cultivate students. Specialized English is a good way to develop students' learning, communication skills and skills in learning other languages. It is to make education more international and make the university more international. As China attaches more importance to education, the form of education is increasingly diversified. Nowadays, for English learning, many schools have increased their emphasis. In order to be in line with international standards, English courses are increasing. However, nowadays the faculty is not enough. Whether it is traditional English teaching or continuous reform of English teaching, the problems in the special English teaching cannot be better solved. The emergence of virtual reality technology is a flash in the history of science and technology. The characteristics of interactivity, perception and conception of virtual reality technology have fulfilled many requirements that various industries cannot achieve in the past. As the foundation of virtual reality technology, digital media provides a lot of technical support, making virtual technology realize the form from static to stereo dynamic. The application of virtual reality technology in education is very convenient, and it can make learning more efficient, which is very helpful for the reform and improvement of special English teaching.

2. The concept and characteristics of virtual reality technology

2.1 The concept of virtual reality technology

Virtual reality technology can be understood from the literal meaning. This technology mainly uses computers or multimedia devices to simulate the existence of real things. Not only that, digital media, as the foundation of virtual reality technology, provides a lot of technical support, making virtual technology realize the form from static to stereo dynamic. Because the reality of the simulation can be induced according to the real reality, resulting in corresponding changes. When the real thing is virtualized, many operations become very convenient, and the risky plans and plans can be tested first. Low-risk research in the virtual world is very beneficial for companies, both cost

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and benefit.

2.2 Characteristics of virtual reality technology

(1) Interactivity. Interactivity features are that participants can manipulate objects in a computer virtual environment, and this behavior can be fed back to the machine, interactive and real-time. The application of the entire virtual reality technology is inseparable from computer equipment. The keyboard and mouse are tools for the experiencers to communicate with each other. These sensing devices are capable of accurately sensing the two-way information reception of human body changes, and realizing the interaction between humans and virtual objects.

(2) Immersion. Perception refers to the participants in the virtual reality environment, able to feel the virtual reality of the immersive virtual world, the same action and action feedback activities as the real world, the end user can fully immerse in it, creating an immersive feeling The whole experience process has a strong sense of reality.

(3) Conceptuality. Relying on people's subjective initiative, imagining future movements according to changes in the operating state of the system, deepening concepts, generating new ideas and concepts, actively seeking information, imagining and creating in virtual space, participating in virtual dynamic generation of activities, so it can be said that virtual The reality is to stimulate creative thinking activities.

3. Application of virtual reality technology in education

3.1 Research and application of science and technology

At present, many colleges and universities are actively researching virtual reality technology and its applications, and have established virtual reality and system simulation research laboratories to rapidly transform scientific research results into practical technologies. The characteristics of virtual reality technologies, such as interactivity, perception, and concepts, have fulfilled many of the requirements that were not possible in the past. As the foundation of virtual reality technology, digital media provides a lot of technical support, enabling virtual technology to achieve dynamic form from static to three-dimensional. Although virtual technology can bring better classroom real-time education effects, it should be moderate, and virtual reality technology cannot be applied excessively just for the pursuit of fast pace. If you don't pay attention to authenticity and pursue cost-saving, you will lose people's trust in the long run and no longer believe in the truth and reliability of technology. Virtual reality technology can provide students with a vivid and realistic learning environment. It is more convincing to experience and feel than to be empty and Abstract. Positive interaction is fundamentally different from negative indoctrination.

3.2 Virtual Training Application

The teaching content can be continuously updated to keep the training up to date with the development of technology. At the same time, the immersion and interactivity of virtual reality enables students to play a role in the virtual learning environment and devote themselves to the learning environment, which is very beneficial to the development of students' skills. Utilize the perceptuality of virtual reality technology to realize the immersive feeling of people. For example, it can be applied in museum exhibitions, using virtual reality technology to virtualize extinct species, restore the existing scenes of ancient creatures, and give people an immersive and intuitive experience; in addition, it can be applied to large games to make people In the game process, there is a more management experience, real experience of the scenes and objects in the game; or applied to virtual driving, easy to learn to drive.

3.3 Virtual Simulation Campus Application

Virtual campus is the earliest specific application of virtual reality technology. The Internet has just entered China, and online education has not yet begun. It is rare to have such a masterpiece. Virtual reality provides a mobile e-learning place for branch campuses and distance education teaching points established after college expansion, which makes resources change from

“exclusive” to “shared” among multiple campuses. Using the virtual reality system, students can conduct various experiments through the campus network and gain the same experience as real experiments, thus enriching the perceptual knowledge, deepening the understanding of the teaching content, and improving the teaching effect. Although virtual reality technology has many advantages, there are still many aspects that are not mature, and the cost of virtual equipment can be high, so it is necessary to establish a corresponding system service platform. Support the development of related tools and equipment, and then establish a system service platform to achieve the normal operation of the entire system and promote the development of technology.

4. Application of virtual reality technology in special English teaching

In the past, the education methods were all fixed teachers. They used their own teaching methods to teach English to college students in the form of blackboards in the classroom. The teaching was mainly based on the content of the teaching materials, but with the development of education, this The efficiency of teaching methods is more and more unable to keep up with the fast-paced era. Therefore, teachers have established learning teams, thus sharing teaching methods and making progress together, citing virtual reality technology into specialized English teaching, and then making teachers Proficiency in this technology, flexible application of virtual reality technology in the teaching process, under the class. In this way, students' interest in classroom learning and self-learning under the class will improve their ability to summarize.

4.1 Build a virtual classroom to achieve immersion teaching.

In the content of the scene and the story, you can use virtual reality technology to bring students into the scene, fully understand the event, and deepen the understanding of the text through comprehensive sensory stimulation. In this process, real-time English voice prompts will further strengthen their language memory, and play a simple classroom teaching can not achieve the effect. The emergence of virtual reality technology is a flash in the history of science and technology. The characteristics of interactivity, perception and conception of virtual reality technology have fulfilled many requirements that various industries cannot achieve in the past. As the foundation of virtual reality technology, digital media provides a lot of technical support, making virtual technology realize the form from static to stereo dynamic. Virtual technology can be used in a variety of forms in the display space. Therefore, there are many industries that can be applied, and the fields involved are wide. According to the diversified features of virtual reality technology, it can play different roles in different fields. Strengths. This kind of advantage directly changes the teacher's hard teaching from top to bottom, and the content of the class is richer, which can attract students' attention and enhance their interest in learning.

4.2 Break the social fear and let the “dumb” speak.

Nowadays, after passing the brutal selection of the college entrance examination, college students have adapted to the rigid learning. Many exams for English exams are also very high, such as English forty-six and professional English forty-eight. However, the ability to test is not strong, it does not mean that the ability to use English is strong. Many students' oral communication is far less than their own test scores. There are two reasons for this phenomenon. One is that the oral English is not good, and there is a lack of oral English. Second, I lack the confidence and courage to speak English.

Virtual reality technology can solve these two factors that affect students' proficiency in applying English. In the case that students already have a large vocabulary, but do not speak English, virtual reality technology can create virtual reality space for students, so that students can distinguish between reality and virtual reality, and can train students to communicate with others. When students face virtual reality, they will not be ashamed to speak. This kind of exercise is increasing and the level of speaking will be improved. For many students with good oral English, virtual reality English oral training can gradually establish students' self-confidence and gradually overcome their psychological barriers.

4.3 Expand classroom space and build a full-time classroom.

The main body of the current special English teaching is still classroom teaching, but the biggest limitation of classroom teaching is that time space is limited. In order to fully utilize the advantages of virtual reality technology, we should not only carry out rigid teaching in class, but also encourage students to use mobile devices and apply virtual reality technology to learn independently. Because virtual reality technology can make people feel immersive and feel the same, students will be more immersed in it. Then the application of virtual reality technology in specialized English teaching is no longer limited to classroom teaching.

5. Conclusion

Virtual reality can realize the simulation of space, and also realize the transmission and simulation of time. As a result, the amount of information transmitted is larger, and the greater advantage is revealed. Many schools now pay more attention to English learning. In order to be in line with international standards, English courses are increasing. However, at present, the faculty is not enough. Traditional English teaching and continuous reform of English teaching can not solve the problems in professional English teaching. The emergence of virtual reality technology is a flash point in the history of science and technology. The interactivity, perceptuality, and conceptual nature of virtual reality technology have enabled many of the needs that were not possible in all walks of life. As the foundation of virtual reality technology, digital media provides a lot of technical support, enabling virtual technology to implement dynamic forms from static to three-dimensional. The application of virtual reality technology in education is very convenient, which can make learning more efficient, which is very helpful for the reform and improvement of esl.

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