

Study on Integration Innovation Development of VR Technology and Education

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Abstract. In recent years, virtual reality technology has been favored by various countries because of its own advantages. Various countries are investing a lot of manpower and resources to study computer virtual reality. Many manufacturers' network equipment also provides services to support virtual aspects of network. This study will combine the computer application technology and the development status of VR technology to further analyze the research and development of VR technology and Internet education.

Since the beginning of the 21st century, the application of computer technology has been everywhere in people's lives. The widespread use of computers is a major step forward in the development of human society. In recent years, with the maturity of computer technology, virtual reality technology in China has begun to improve, which further enhances China's overall national strength and continuously reduces the distance with developed countries. Therefore, in a certain sense, the application level of computer technology is a standard for measuring the country's overall national strength, an important tool for promoting national information, and a source of power for the development of science and technology.

Part One Development status of computer application technology

Computer data processing technology

The processing and operation of data and information is a very powerful function of the computer. This function of the computer is used in many fields of our life production, and its application value and significance are fully reflected. Computer data processing technology uses effective network multimedia technology to analyze and process text, sound, video, image and so on which finally achieves the purpose of storing, transforming, transmitting and analyzing data information[1]. In this regard, only a more in-depth analysis and study of the characteristics and processing methods of computer data processing technology can better use the computer application technology and thus improve the development of social economy and social civilization.

Computer communication technology application

By combining network technology, video technology, audio technology and text technology in the application computer, the computer has powerful communication functions. In terms of type, wireless communication technology and wired communication technology are two main types of computer communication. Compared with the single communication method of the old era, computer communication technology can effectively improve the fluency of information communication in various places in China through the effective synchronization and interactivity of information communication, which is incomparable to the quality and level of modern information communication in China.

Application of computer intelligence technology

With the development of social and economic levels and the rapid advancement of science and technology, many applications of computer intelligence technology can be seen. Such as business operations, military fields and health care. Following the development of the times, computer intelligence technology will guide the modernization of computers and which is an important direction for future development. The main components of computer intelligence technology include intelligent identification systems, intelligent monitoring systems and intelligent information

technology systems. Through the effective use of computer intelligence technology, we can better promote the development and innovation of technology in most areas of China, and this plays an important role in better meeting people's needs [2].

Part Two Brief analysis of VR technology

In recent years, the phrase “Visual Reality” has appeared on various news and television media on the Internet, which is often referred to as VR technology. The concept of VR technology was emerged in the United States as early as the mid-20th century. It was first proposed by a US company VPL founder whose name is Lanier. It mainly uses computer and sensor to create a new interactive method, which can give people the feeling that they are immersed in the virtual real environment. When creating VR technology, we need to use a variety of technologies, such as computer graphics technology, computer simulation technology and computer display technology to combine these technologies to realize machines and people inspiring people's thinking and previewing the situation. VR technology mainly includes four characteristics [3], which are: (1) Sensibility, which refers to some human perception systems, such as sight, taste, smell and so on. If VR technology can achieve ideal development in the future, then it will simulating all the perceptions of people in reality, but for now, because some aspects of hardware and software are not perfect, they can only imitate people's partial perception systems, such as sight and taste. (2) Immersion, which refers to the real experience of the first person in the virtual world. But now we feel that there is still a distance from the ideal state. (3) Interactivity, which means that in the virtual world, people can grasp or use certain objects as in the real world and can feel the weight and shape of the objects. (4) Imagination, which means that people can present what they want or do in a virtual world, present different effects that each thing may happen from different angles, and even put some in the real world, and what can happen is conceived in the virtual world.

Part Three Analysis of the status of VR technology

Nowadays, with the rapid development of VR technology, countries all over the world have begun to pay more attention to the further research of VR technology. Virtual reality technology originated in the United States in the middle of the 20th century, so the level of virtual reality in the United States can represent its international level to some extent. With the development level, VR technology is now blooming all over the world, and has made major breakthroughs in perception, user interface and hardware. And in the aviation, satellite and other related departments use the VR technology to establish a corresponding VR training system in addition to the establishment of a nationally available VR education system [4]. In the military, it is possible to simulate the real battlefield environment through VR technology and establish corresponding simulation training, so that the military's combat capability has been greatly improved. At the same time, the United Kingdom and Japan have achieved good results in industrial design, virtual reality knowledge base and virtual reality games. Relatively speaking, the development of VR technology in China is relatively late, and there is still room for improvement.

Part Four Innovative development of VR technology and Internet education

Subverting the traditional concept of Internet education by VR technology

It is well known that the entire field of education has been dominated by the Internet, but even in this case, there are still some loyal guardians in the field of traditional education. They have always maintained the behavioral patterns of traditional education and believe in the atmosphere in traditional classrooms. It is more beneficial to disseminate knowledge and absorb knowledge. In addition, there are still some people who are hesitant and in a state of wait-and-see. Comparing traditional education and Internet education, it can be known that Internet education itself has the drawback of separating learning from teaching. This makes these people always stop thinking about Internet education. On the one hand, the teaching time of Internet education is not restrictive, and

the learning style is more liberal, which attracts them to the Internet education. On the other hand, they worry that the humanization of traditional education cannot be applied to Internet education [5]. But now, with the maturity of VR technology, it has brought tremendous changes to Internet education. It has completely subverted the teaching ideas of traditional education professors, reshaping the concept of Internet education by the educated, and letting some Investors in the Internet education sector be more confident about the future of Internet education.

Rebuilding new mode of Internet education by VR technology

The inadequacies of traditional education have been supplemented by Internet education, from the original single teaching method to the more flexible and free learning mode, allowing the educated to have a more specific and comprehensive learning process. The use of VR technology has led to a new model of Internet education. Prior to this, there were many problems in Internet education, such as lack of restraint and supervision, but the new model of Internet education will solve these problems. Under the use of VR technology, the contradiction between freedom and self-control in education will be solved perfectly. In the Internet education with using VR technology, the educated people are no longer faced with boring teaching content all day long, and are no longer subject to the inherent defects of the lack of binding of Internet education itself [6]. VR technology can largely simulate the real environment of learning and teaching, and realize the recombination of learning and teaching, so that Internet education can create a vivid and realistic learning environment and learning atmosphere for learners, so that professors and recipients discussions can be held between the teachers, and the learners can learn from each other making the teaching results more gratifying.

Conclusion

In short, in order to achieve greater development, Internet education is necessary to combine the already mature VR technology because it is consistent with the development trend of the Internet. The application of VR technology in Internet education has injected fresh blood into Internet education and enhanced the competitiveness of Internet education in the field of education.

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