Application of Computer Virtual Reality Technology in College Sports Training

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Abstract: With the continuous development of social science and technology, the application of computers is more and more extensive. The application of computer "virtual reality" technology in college physical education training can enrich the content of physical education classroom teaching, update classroom teaching methods, and improve the quality and efficiency of physical education training teaching. However, in the process of practical application, there are still some problems to be solved.

With the development of computer technology, the application of computer to simulate various practical scenarios has gradually become a reality, and has been widely applied in various fields in recent years. In the field of education, especially in efficient sports training, the role has gradually emerged. In view of the characteristics of computer virtual reality technology, its practical and effective application in the process of sports training can greatly improve the training efficiency and quality, and promote the development of modern sports.

1. Characteristics of computer virtual reality technology

The continuous development of computer technology has created a good working environment for the application of computer "virtual reality". Relevant research shows that computer "virtual reality" technology can be divided into four types: interactive, multi-perception, conceptual and immersive. As shown in figure 1.

![Characteristics of Computer Virtual Reality Technology](image)

Figure 1. Characteristics of Computer Virtual Reality Technology
1.1 Interactive characteristic "virtual reality"

Mainly through the computer to simulate various scenes of reality, so, under the artificial operation, the simulated scenes can be transformed accordingly, and the reality and imagination can be perfectly linked. This ability has two-way interaction, which makes the computer "virtual reality" technology interactive. Because of this, technicians can selectively simulate all kinds of non-existent scenarios in real life, whether in film and television shooting or physical research scenarios simulation has a very important significance.

1.2 Mufti-perception characteristics

Because "virtual reality" technology is mainly composed of various sensors, computer hardware and software, it can be used for image acquisition and analysis. At the same time, "virtual reality" can judge and process non-specific information such as force field, magnetic field and tactile sense, and can present the results of analysis and processing in the form of atlas or signals. Based on these characteristics, computer "virtual reality" technology has the characteristics of multi-perception.

2. Problems in College Physical Education Teaching

As mentioned above, although the reform of the teaching system has improved the teaching significance of physical education courses to a certain extent, increased the teaching content, and shortened the teaching time, the application of current teaching methods can effectively teach many subjects to students in a limited time. Although students have learned more, none of them are skilled, which greatly reduces physical education. The practical role of learning. Summarizing the current problems in college physical education teaching can be faster and better for improving the quality of College Physical Education training. As shown in figure 2.

![Figure 2. Problems in College Physical Education Teaching](image)

2.1 Less class hours, more subjects and poor teaching quality

Increasing training subjects and reducing class hours are the most prominent characteristics in the current physical education training in Colleges and universities, which makes it difficult to meet the current curriculum standards by using traditional training methods and teaching methods. At the same time, the traditional teaching method pays more attention to the studentships level, ignores the improvement of their comprehensive quality, the training method is relatively single, the process is more tedious, and the teaching quality is difficult to be guaranteed. The introduction of virtual reality technology into college sports training can greatly improve the quality of college sports
training.

2.2 The poor enthusiastically and the unclear criteria of evaluation

In the process of physical education teaching in Colleges and universities, students often cope with things, and counterintelligence in management has also increased this abnormal learning atmosphere, which is extremely unfavorable in terms of the cultivation of students’ comprehensive quality. At the same time, at this stage, there are no strict regulations on the recognition of physical education teaching results in some colleges and universities. Teachers blindly increase their scores in order to take care of demonstrations. This vicious interaction between students and teachers leads to obvious problems in physical education training in Colleges and universities. Introducing computer virtual reality technology into college physical education training can greatly improve enthusiastically to participate in physical education activities. Through the virtual environment constructed by virtual reality technology, students can experience the experience of participating in training in different situations.

3. Application of computer virtual reality technology in physical education

The process of introducing virtual reality technology into college physical education is a systematic project. There will inevitably be some obstacles. Whether it can run effectively to improve the effectiveness of physical training needs to be analyzed according to the specific characteristics of virtual reality technology and specific subjects of physical training.

3.1 Application of virtual reality technology in the contrast between virtual and reality of sports technical movements

One of the most important contents of physical education curriculum in Colleges and universities is to improve a certain technical action of students through relevant training, so as to standardize and practicability their action, which is also an effective means to improve enthusiastically education literacy at present. With the gradual improvement of computer technology, many countries have established virtual computer systems with sports action simulation and simulation effect. Because on the one hand, this simulation system can analyze the training work of athletes, find the defective connection points in the movement, and then improve and improve through the actual training in the later stage.

3.2 Motion virtual reality technology for action virtual and virtual contrast

Nowadays, sensor technology has made great achievements, but it is undeniable that there are still some defects in the perception process of some fine signals in the real sensor technology. It is difficult to meet the needs of comparing virtual action with real action in order to better analyze sports action in detail. Therefore, the use of computer virtual reality technology on the computer and build a standard action and students in the actual training of the impact of information such as comparison, through the comparison between the virtual and virtual can be found through the computer there are differences.

4. Conclusion

The development of science and technology has brought new impetus to sports training in Colleges and universities in China. Whether computer virtual reality technology can be introduced
into sports training in Colleges and universities reasonably and effectively requires the joint efforts of sports workers. It is believed that with the continuous development of virtual reality technology, there is still great room for improvement of the level of efficient sports training. Therefore, only by keeping pace with the times, understanding advanced science and technology, and making use of existing science and technology to continuously improve the level of physical education in Colleges and universities, can we fundamentally and continuously contribute to the promotion of physical education in Colleges and universities in China.

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