Research on VR Technology Embedded in College Ideological and Political Course Teaching in the New Media Age

Xu Yanli

Hankou University, Wuhan, Hubei, China

Abstract: With the development of Internet and computer technology, college ideological and political courses are constantly introducing new Internet technologies to optimize teaching effects. The introduction of VR technology can build a virtual reality learning environment on the Internet, which can effectively improve the teaching methods and teaching methods of ideological and political courses in colleges and universities and improve the teaching effect. At present, there are few researches on VR embedded in ideological and political courses in colleges and universities. This paper combines the author's work experience, and discusses its application in teaching, teaching advantages and teaching practice, in order to provide reference for peers.

1. Introduction

General Secretary Xi Jinping said at the meeting: "We must use new media technology to make our work alive, unite the advantages of traditional ideological and political work with high technology, and enhance the sense of the times." In the meeting, General Secretary Xi Jinping particularly emphasized that new media technology can bring excellent promotion to the ideological and political work of colleges and universities. In the modern era, AR and VR are at the forefront in the field of information technology [1]. Among them, AR technology belongs to augmented reality, and VR technology belongs to virtual reality. The application of VR in college teaching can bring a more intuitive experience to students, making education more direct and more effective, which can far exceed the influence of traditional media on college education. Through VR technology, students are given a free learning space, which enhances the students' initiative in learning. After years of continuous research on existing educational programs, VR technology will bring new vitality to the education of the more rigid tradition. This paper is also exploring the application of VR in ideological and political courses in colleges and universities. If we can build a virtual scene around the theoretical courses in the teaching of thinking, this will inevitably arouse students' interest during class and effectively improve the persuasiveness of the course. And the appeal.

2. VR technology and its educational application

2.1 VR technology

VR technology is a technology that can establish the same environment as the reality. It is a means for people to experience reality in a virtual network. It is a fusion simulation system of diversified information formed by computer interaction. The ability to experience real-life experiences on the Internet, by absorbing or replacing some sensory feedback, immersing people in use or appearing directly in a very realistic virtual three-dimensional world. This virtual reality technology is also known as the spirit technology.

2.2 Research Status of VR Technology Education

All-round investigations such as China's HowNet and international papers show that, at present, not only in China, but also in the international community, VR is used in education, which is just in its infancy [2]. To apply VR technology to teaching, many technologies need to be overcome, including related technologies in the fields of technology, construction, arithmetic, technology, and

society. By studying the literature related to political teaching, this paper finds that most of the theories related to sociology are used to develop VR technology. VR technology requires software technology support from computer hardware technology and network. It transforms the original old-fashioned ideological and political education accepted by college students into a vivid form of time-space. This kind of teaching method is flexible, novel and novel. A relatively new approach to education.

3. Advantages of VR technology applied to ideological and political teaching in colleges and universities

3.1 Problems in the teaching of traditional ideological and political courses

The ideological and political curriculum of colleges and universities is different from other professional courses. It is a public class that can be studied in all schools. There are many students studying. Only students of related majors can learn the practical teaching of professional courses, but all students in the school must study the ideological and political courses. Usually even students who study ideological and political practice are several times more or even ten times more likely to study other professional courses. Therefore, this makes it difficult to find a unified time, place and method for the practical teaching of the ideological and political course, which makes it difficult for most universities to carry out the practical teaching of ideological and political courses. Ordinary colleges usually use two methods to carry out practical teaching. One is the practice of students carrying out ideological and political classes spontaneously outside the classroom and outside the school. The other is the form of point-to-face. Some excellent students are selected to visit nearby and conducted by inspection. Practice teaching. But no matter which method, the practical teaching of the ideological and political curriculum is difficult to achieve the planned teaching objectives, and the teaching coverage is relatively small. In addition to the above two methods, the traditional way of conducting practical teaching in schools is to watch videos, speeches or knowledge contests in the classroom. This kind of teaching is relatively simple and very boring. Students do not like to participate in the course. There is also no interest. In the process of practical teaching, students usually do not cooperate very well, which leads to poor effect of ideological and political practice teaching.

3.2 Advantages of VR technology teaching in ideological and political courses

VR technology teaching is not to replace traditional practice teaching, it is to supplement traditional teaching. Introducing VR technology into the practical teaching of ideological and political courses in colleges and universities can solve the problems arising from the above-mentioned practical teaching of ideological and political courses through VR technology, so as to achieve the expected goals of practice. Its specific advantages are as follows:

(1) Effectively improve the timeliness of the practice class. Introducing VR technology into the practical teaching of ideological and political courses, teachers can use their full imagination to develop VR resources, virtualize the curriculum-related stories, plots, tasks and tasks of this course, so that students can feel and experience. Intoxicated in the virtual learning situation [3]. Students can go through the past in practice education, experience history through space, and conduct field trips; they can engage in virtual dialogues with heroes of the past to strengthen the patriotic feelings of students; can travel around China and experience China Great rivers and mountains. Although the background of characters in VR is fake, the knowledge that students learn and the feelings experienced in this virtual scene are real. Through innovative, diverse and vivid practice teaching activities, this will enable students to establish a correct outlook on life, values and worldview.

(2) Students can be subjective. In the teaching of ideological and political practice, students can enjoy their subjective initiative in a virtual environment. China has joined the Internet era since 2004, and now the "post-00" college students have grown up in the development of the Internet age. The college students who have grown up in this mode have long been no longer satisfied or are not accustomed to continuing their studies in traditional practice teaching. Their needs are to be able to

interact rather than cramming, prefer to explore rather than book limits. Knowledge, they need a new model of practical teaching that mobilizes their enthusiasm and innovative curiosity. Through VR technology, we can construct interactive practical topics, so that students' subjective initiative can be fully utilized in the virtual environment.

(3) Personalized teaching methods can be used. In China, there has been an educational philosophy since ancient times - "teaching students according to their aptitude" is the best explanation for the development of individualization. After a long period of development, because of the large number of people, lack of resources, high cost and other issues, modern teaching can only be carried out in a standardized and stylized way. The practical teaching mode can only be carried out in this way. For example, the red study course, because the teaching cost is too large, it takes a long time, and there is still a very big security risk. Some colleges and universities can choose some good students to participate. . In this case, standardized teaching cannot be achieved, let alone personalized teaching. The VR technology can solve this problem very well. The teacher can carry out the virtual practice environment design according to the individual differences among the students with the cooperation of the professionals to meet the needs of different students and the personality of the students. Teaching provides a diverse environment.

4. VR technology challenges in the application of ideological and political courses in colleges and universities

4.1 Technical defects of VR technology itself

The defects of hardware and software facilities existing in VR technology are the biggest obstacles in the teaching of ideological and political courses. Users who want to enter the VR environment must be equipped with VR related equipment [4]. Currently, VR devices are generally head-mounted. Currently, the resolution of the devices provided on the market is relatively poor, and it is difficult for users to obtain a more realistic picture quality, which not only affects the experience of use, but also generates a part of users. The feeling of dizziness. In addition, the head-mounted device has a small field of view, a large volume, and a large cost, which affects the application of VR in ideological and political education.

4.2 Practical teaching design problems

The introduction of VR technology in ideological and political teaching, how to develop, in what direction, the extent of development, etc., requires teachers to carefully and accurately plan the whole process. From teaching strategies to methods, from teaching content to goals, from teaching plans to effects, from the teaching process to the final and post-evaluation. In this paper, the advantages of VR technology in the practical teaching of ideological and political courses are based on the ability to design a meeting to meet the teaching needs, and technically to keep up. If there is a problem with the design of the VR teaching in the ideological and political course, even if the software and hardware are perfect, it is difficult to achieve better results.

5. VR technology embedded in the teaching and practice of ideological and political courses in colleges and universities

5.1 Establishing a VR classroom

Establish a state-of-the-art VR classroom in the school, using VR equipment, computers, headphones, audio and soundproof rubber mats to create a perfect closed three-dimensional virtual classroom [5]. Teachers can break the conventional traditional teaching mode, use VR technology to implement the substitute teaching mode, make learning easier and more efficient, effectively solve the Abstract monotony of book knowledge in traditional mode, and only look at multimedia teaching. Cannot practice and other issues.

5.2 Establish VR training room

Creating a learning environment for VR requires a lot of computer code, as well as related VR devices and computers. Therefore, the training room must be equipped with a curved large-screen display and a stepped classroom. If the virtual teaching base can be successfully established using VR technology, since the teaching content of the kernel is virtual, new content can be designed according to actual needs anytime and anywhere. The teaching of ideological and political courses can also be continuously updated, so that the ideological and political teaching can change with the development of the times.

5.3 VR teaching resources construction

In addition to hardware support, teaching resources are the soul of ideological and political VR teaching. VR teaching resources should include educational videos with substitutions and interactive scenes, such as large and small. Through a variety of teaching resources, we will create a VR teaching base with high technical content, wide knowledge coverage and potential for development. The VR teaching resources of the ideological and political course mainly integrates the traditional teaching knowledge into the interactive VR. Through the game, landscape viewing and interactive teaching resources, students can establish the correct three views in immersion.

6. Conclusion

In general, the application of VR technology to teaching is a new teaching method. As a novel network technology, VR can make the traditional curriculum three-dimensional, so that college students can interact in the established three-dimensional virtual scene, which can greatly stimulate the students' ideological and political courses. Learning passion. In future research, teachers must first recognize the difficulty of using VR technology and improve their Internet technology. The advantage of VR education is its interactivity and diverse teaching resources. Teachers must constantly improve relevant teaching resources and build a resource library. In addition, teachers must be clear that VR technology is only a means of education, not the subject of education as a whole. At the same time of applying VR technology, it is necessary to pay attention to the ideological education of students and realize the teaching goals of ideological and political courses.

References

[1] Yi Wenjing, Zhang Zhen, Li Liuzhou. Analysis of the Application of Virtual Reality Technology in Party Building Ideological and Political Education in Colleges and Universities [J]. Journal of Hubei Correspondence University, 2018(4): 58-59.

[2] Tang Zuchuan, Ma Wenjuan. Exploration of Virtual Practice Teaching in College Ideological and Political Courses in the Age of "Internet +"[J]. Journal of Chizhou University, 2018(1): 23-24.

[3] Yang Ronghua. Discussion on the Reform of Practical Teaching of College Ideological and Political Theory Course Based on Internet+ [J]. Journal of Changsha Civil Administration College of Technology, 2017(4):93-94.

[4] Wang Hongchang. Analysis of Problems in the Practice Teaching of Ideological and Political Theory Courses in Colleges and Universities and Countermeasures [J]. Health Vocational Education, 2017(12): 89-91.

[5] Chen Bao, Liu Huiqiang. Virtual Practice Teaching: A New Exploration of Practical Teaching Reform of College Ideological and Political Theory Courses with Students Participating Independently [J]. Journal of Ideological Theory Education, 2018(8): 38-39.