A Brief Analysis of Virtual Reality Technology of Animation Teaching in Higher Education Based on the Internet

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Keywords: Virtual Reality Technology; Animation Teaching; Application

Abstract: Virtual reality technology is a kind of computer simulation system that can create and experience virtual world.[1] Nowadays, virtual reality technology is widely used in the teaching of many colleges and universities. Teaching students with this technology has gained a lot of effects that they did not have before. Taking the application of virtual reality technology in animation teaching as an example, this paper analyzes the application of virtual reality technology in various aspects, hoping to contribute to the continuous improvement of animation teaching level.
Virtual reality technology, which is based on multimedia computer technology, integrates sensor technology and simulation technology. So how is virtual reality being used in schools?

I   The application of virtual reality technology in school

1.   It is convenient to manage and use the information resource database

In the process of constructing the information resource system, colleges and universities apply the virtual reality technology to the digital management of the information resource database, which brings a lot of convenience and benefits to the management and use of the information resource database. At present, the digital resource database of colleges and universities is generally two-dimensional display, so it is impossible to effectively use the resource database to achieve a higher level of teaching quality and teaching effect. For example, some precious data, users can only feel his shock when they are in the scene, which will be generated by virtual reality technology into three-dimensional virtual reality data. The real realization of the value of the resources themselves, but also facilitate the better preservation of these resources.

2.   Strengthen the integration of digital information resources

Digital resource system in school is very huge, covers all kinds of resources and information, at the same time, the function of digital repository system based on the application, its data structure and organization is different, this leads to the digital repository system in the query and there is a big difference on the interface display, give the reader a lot of unnecessary trouble. However, the resource database based on virtual reality technology can effectively solve the above problems, flexibly convert complex data, and closely link all kinds of resources together for the convenience of readers. Seemingly, VR is small technology, but it has such a great effect.

3. Apply to reference consultation service

Before each service system is put into use, it is necessary to understand the needs of customers. Before the school's digital resource database officially provides resources to readers, it also investigates the needs of readers, and fully mines all kinds of information and resources according to the needs of readers, so as to meet the needs of readers.

II   The advantages of virtual reality technology in animation teaching

1. It provides a favorable condition for students to study independently

Virtual reality teaching resources may be saved in paper books or mobile devices so that students can realize autonomous learning, which is of great significance to the improvement of students'

autonomy and enthusiasm. Students can use the teaching resources of virtual reality technology anytime and anywhere, or they can use them repeatedly. Excellent students can also consolidate their knowledge through this technology. It can also give teachers more time to solve problems left over by students in class. This kind of teaching method is welcomed by both teachers and students.

2. Provide students with more realistic scenarios

In the traditional classroom, the teacher mainly imparts knowledge through text, pictures, audio and other forms. When faced with complex situations, the use of these forms is particularly monotonous. It is difficult for the teacher to explain the knowledge points clearly and for the students to understand what the teacher wants to express, so the learning effect is uneven. By using virtual reality technology to teach students and make them feel knowledge in three-dimensional space, they can make up for the deficiency of traditional teaching. Not only space is three-dimensional, but also knowledge is three-dimensional. Things that originally existed in the imagination are presented in front of the eyes through this technology, which can be more impressive to see visually than to read from a book. Students can also understand the relevant knowledge of memory through this real scene. Through this technology, students' imagination has been strengthened, and their creativity has been enhanced to a certain extent.

III The application of virtual reality technology in animation teaching

1. Realize curriculum development

In today's society, digital technology continues to develop at a fast speed, and traditional teaching methods can no longer adapt to the current situation, so we should find another way. Students' courses should be expanded to enrich their horizons. The application of virtual reality technology in the classroom has made a breakthrough in the scope of teaching materials for animation major and deepened the teaching content. At the same time, new knowledge and content are integrated in, allowing students to expand their knowledge. Most of the previous teaching is presented in paper resources, which have many limitations. Virtual reality technology can break this status quo, paper resources are no longer the main body, and the teaching content of animation class is presented in an all-round way. The emergence of this technology has formed a situation in which the Internet is the main body and paper resource teaching is the auxiliary helper. This kind of teaching can promote the development of network teaching and help students to learn independently, which lays a foundation for classroom reform.

2. Promote student learning

Students majoring in animation can complete the teacher's tasks on the Internet platform, and can also independently and effectively complete the teacher's teaching content and homework. In addition, questions and confusion in the process of completion can be put forward on the platform. When teachers see these questions and opinions, they can make corresponding adjustments to the classroom teaching plan according to students' learning conditions. The application of this technology can enable teachers to know each student better and make plans according to individual differences, so as to promote the all-round development of each student. Before the class, the teacher teaches the students some knowledge, then assigns the students the task, lets the students do the related experiment according to the task.

3. Applied in action module teaching

For the important and difficult content, such as the action module, how to teach this technical, difficult to understand knowledge is the top priority. The application of virtual reality technology in animation teaching can effectively solve this problem. Software based on virtual reality technology, for example, have developed 18 different cases, the role of action to solve the problem of students,

with the method of past students can take 20 hours to adjust the feel good character animation, but in the virtual reality technology for software, only need half of the time can be completed. From this, we can see that virtual reality technology can not only solve some important and difficult problems, but also solve problems quickly and effectively, which can save classroom time and prepare students better to accept new content.

4. Apply to the teaching of exercise rules

The law of motion is an important unit in the basic course of animation. When exposed to the laws of motion, students may not be able to understand this abstract thing, so they need to resort to virtual reality technology. Let the students increase their knowledge through close observation of motion rules and simulation. Students can broaden their knowledge and enrich their knowledge through exposure to these rare things.

IV Conclusion

With the popularization of new media technology," virtualization "gradually began to enter people's lives. [2]Along with the development of computer hardware and digital technology[3], higher education based on Internet animation of virtual reality technology in teaching, can stimulate students' interest in learning, interest is the best teacher, if teachers teach book knowledge blindly, and don't let the student to feel hard to be interested in learning, students interested in knowledge can be better in the classroom. At the same time, students can have a sense of immersive experience, can better understand the knowledge. Virtual reality technology can properly reduce the workload of teachers, but also can reduce the burden of students by reducing the difficulty of learning. When teachers actively apply this technology in teaching, animation teaching can be better and better, and students' level will be higher and higher. As teachers, they should actively explore the skills and rules of using this technology, so as to make classroom teaching colorful and animation teaching simple and not boring. As students, they should study hard and learn these knowledge independently after class so as to expand their knowledge and improve their ability. In a word, internet-based virtual reality technology of animation teaching in higher education is widely used in colleges and universities, which is a benign trend, and also lays the foundation for exploring new and more effective teaching methods.

Acknowledgements

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