VR Technology in International Education of Chinese Language

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Abstract. The integration of VR technology and international education of Chinese language is the trend and trend of future education development. VR technology will inevitably provide new ideas for the reform of education and teaching mode. This paper focuses on the combination of virtual reality technology and international education of Chinese language, and conducts research on application advantages and application forms. The diverse needs of learners promote the development of international education of Chinese language under the COVID-19 pandemic.

Keywords: virtual reality technology; international education of Chinese language; application

1   Introduction

Virtual reality is a computer technology that uses sensing auxiliary equipment to exchange data to build a digital environment similar to the real environment. In 1989 the American J. Lanier first proposed the concept of Virtual Reality, or VR for short. In China, "Virtual Reality" is translated into "virtual environment", "digital reality" and "computer space".

2   Concepts related to VR virtual reality technology

2.1   The concept of virtual reality

VR users are "projected" into a digital virtual environment simulated by a computer through VR equipment (such as stereo glasses, smart helmets, etc.), and interact with things in the digital virtual environment to achieve an experience that is indistinguishable from the real world. The user sends various instructions to the computer in a simple way(such as body language, sign language, etc.) through the VR equipment to generate dynamic visual, auditory and tactile similar to the real world, and browse and interactively inspect the objects in the digital environment. The definition of virtual reality has

the following aspects: realistic audio-visual feeling, natural communication and interaction, personal perspective and rapid response feedback[1].

Virtual reality is a multi-disciplinary comprehensive technology involving computer science, human-computer interaction technology, and artificial intelligence sensing technologies. Virtual reality technology expects to use scientific and technological means to allow users to have simulated experience effects and achieve efficient human-computer interaction. Systems that can carry such technology are generally called virtual reality systems.

Characteristics of Virtual Reality in international education of Chinese language

2.2   Immersion

In the field of education, the biggest advantage of virtual reality technology is its unparalleled immersion. Virtual reality technology allows teachers and students to get rid of many external interferences, and is not limited by time and space conditions. Teachers can design and complete any topic of Chinese Teaching courses and activities, teachers and students can fully focus on Chinese learning in a virtual environment without interruption[2]. Its immersive somatosensory can mobilize all the senses of the learner and visualize the knowledge, so that the learner can enter the learning state more quickly and efficiently, and further improve the concentration and learning efficiency. In the virtual environment, It is no longer the traditional cramming education, but let the educated participate in Chinese learning, feel the charm of culture and language, and realize the 5C goals of language learning. In addition, in the virtual situation, learners use their sense organs to obtain direct experience and knowledge, which can form long-term memory in the learners' minds.

2.3   Interactivity

Virtual reality technology is more interactive. Through digital guidance and description, it creates realistic communication scenes and pursues "on-the-spot" communication effects and social experience. Chinese requires a language that learners can master through a lot of communication. Only continuous communication can dynamically grasp the situation of learners and carry out targeted teaching. The construction of virtual reality technology can improve the interactivity of Chinese learning, so that the communication and interaction between teachers and students and students can break through the limitations of time and space. Educators can also fully immerse themselves in virtual reality and interact with virtual objects, which is unmatched by other teaching tools.

3   The application advantages of VR technology in international education of Chinese language

3.1   Breaking through the limitations of time and space, cultivating learners' thinking ability and exploration ability of independent learning.

At present, the world is undergoing profound changes unseen in a century. Under the dual pressures of the epidemic and the Chinese fever, VR technology has greatly alleviated the dilemma of the shortage of teachers and poor teaching facilities in teaching Chinese as a foreign language. Relying on the freedom of VR technology and VR equipment, the cost and speed of international teaching and local teaching on the Internet are the same. Breaking through the constraints of physical time and space, information dissemination becomes simple and efficient without hindrance. Virtual reality technology breaks through the shackles of the traditional Chinese teaching mode, and the learning method is flexible and free, turning one-way knowledge transfer into two-way interaction, allowing the traditional one-way offline teaching to achieve an infinite extension of time and space. Learners can maximize their initiative and enthusiasm, customize learning time and content, get rid of time difference and location troubles, use fragmented time to study anytime and anywhere, and get the same timely interaction and feedback as traditional classrooms. VR technology combines learners ' learning with self- practice tests to form a new vivid and effective teaching method, which cannot be achieved by any other traditional teaching mode and is irreplaceable[3].

VR technology is suitable for a variety of teaching methods and means, such as heuristic suggestion teaching method, discovery discussion teaching method, situational teaching method and other methods to attract learners, stimulate their senses, make learners' brains alternately in excited mode, stimulate The learners' interest in learning Chinese independently, activate their thinking, broaden their thinking, and enrich their imagination, thereby cultivating students' divergent thinking and laying a good foundation for the cultivation of innovative thinking[4].

3.2   Narrow the differences in national backgrounds, and realize teaching students according to their aptitude and aptitude

International education of Chinese language is different from other education. Learners have different social experiences, cultural beliefs, knowledge structures and personality characteristics. Everyone has different language potential and cognitive styles. These internal factors lead to the diversity of Chinese learning, individual needs. In the traditional teaching mode, the teacher 's teaching tasks are predetermined each time, and it is difficult to carry out different learning tasks for different students in the same classroom. Students develop their own teaching plans and goals. However, the human-computer interaction learning mode provided by virtual reality is suitable for individualized education, and it can cultivate high -level comprehensive international Chinese talents[5].

virtual reality system is a very strong system with a sense of substitution, presence and multi-dimensionality, and learners can communicate with it in real time through multiple channels. Learners realize human-computer interaction or human-computer dialogue through posture, posture and even micro- expressions, reducing the social fear of some learners and the aesthetic fatigue of books and textbooks, and immersing themselves in the comprehensive dynamic of "crossing reality and being there". In a virtual learning environment, explore and learn Chinese independently. Learners can also choose suitable textbooks and task topics for individualized learning according to their actual situation and needs, under the suggestion of the computer, so as to strengthen the self-learning awareness, improve the learning effect, and also enhance the enthusiasm and enthusiasm of learners to learn Chinese confidence.

4   The application form of VR technology in international education of Chinese language

4.1   Virtual reality entity and roaming

Virtual reality entity refers to the use of computer modeling to display the actual teaching aids or objects required in teaching in a virtual environment. The learner can contact the virtual reality entity by himself, operate it, and complete the invisible meaning of knowledge learning. For example, when explaining the chopsticks in the Chinese table culture, the virtual reality is used to build a table, and the rules and taboos of the placement and use of chopsticks are demonstrated, so that the learners can quickly understand the Chinese table culture and special dining tools.

Virtual reality roaming refers to the use of virtual methods to construct teaching scenes. The learner chooses the tour route, speed and viewpoint independently, and completes the meaning construction of the knowledge learned by visiting the virtual scene. The virtual learning system simulates and constructs a variety of teaching scenarios to create a real social communication atmosphere for learners, so that learners can feel the customs of China without leaving home, and improve learners' cross-cultural communication skills. At the same time, in the virtual environment, students can browse and watch by themselves, freely learn in the system to master relevant knowledge and cultural background, and even switch to other scenarios for learning at any time according to their learning interests and level, which not only completes the main learning task, but also varies from person to person related information.

4.2   Virtual reality test

virtual reality test is to provide a virtual environment for the assessment, and design the test according to the learning content. In the virtual environment test, there is no need for teachers to be present to organize, and learners can complete all the test steps. The system provides the learners with the materials needed in the test with pictures, texts and sounds. The level and extent of presentation as complete as possible. Reduce learners' resistance and nervousness about exams. Second language learning emphasizes

timely feedback and evaluation. In such teaching evaluation, virtual reality test can effectively reduce the workload of teachers of Chinese as a foreign language and improve teaching efficiency through technical evaluation methods such as automatic speech and text intelligent evaluation.

5   Conclusion

virtual reality technology to be integrated into teaching Chinese as a foreign language. It is necessary to make full use of technology to study the cognition and learning rules of teaching Chinese as a foreign language, improve the interest and practicability of teaching, allow learners to explore and learn Chinese independently, and actively "immerse" Chinese is accepted. Learners are always the core of education and teaching. Technology cannot replace teachers. Pure technology cannot carry the breadth and depth of Chinese language and the long history of Chinese culture. Only when technology and teaching mode complement each other can we solve the predicament of Chinese language teaching, meet the diverse needs of learners in Chinese language learning, improve the international Chinese language education system and teaching mode, and better promote Chinese language and Chinese excellent culture.

6   Reference

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