Research on the Cultivation of the Core Literacy of History Subject from the Perspective of Virtual Reality (VR)

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Abstract: With the rapid development of the times, the education field is also undergoing quiet changes. The competition for talents between countries is intensifying, which indicates that education technology must advance with the times. The application of 5G network means virtual reality (VR) promotion of technology at the classroom level becomes possible, and the application of virtual reality technology to history teaching has responded to the demand for talent training from the aspect of subject core literacy. Taking one lesson as an example, five major ways to improve the core literacy of students in history is analyzed from the perspective of applying virtual reality technology to demonstrate the necessity of virtual reality technology as a teaching aid.

1. Introduction

Virtual Reality, or Virtual Reality, is referred to as VR. This is a computer simulation system that can create and experience a virtual world. It uses computers to generate a multi-source information fusion, interactive three-dimensional dynamic scene and physical behavior simulation environment. In addition to the visual perception generated by computer graphics technology, virtual reality can also simulate perceptions such as hearing, touch, force, motion, and even olfaction and taste [1]. Virtual reality technology is a modern educational technology, it is one of the important means of teaching, and it has broad prospects in teaching applications, especially history classrooms.

The core literacy of history is the most stable and indispensable common literacy developed by students in the course of studying history. The core literacy of history shows the concentration of students through history learning. The formed historical concepts, historical abilities, and historical sentiments collectively reflect the unique educational value of history disciplines in quality education. At the high school stage, the core literacy of history disciplines contains the five basic qualities necessary for middle school students to study history. Ideas, empirical evidence, historical interpretation, historical materialism, and family feelings [2].

The application of virtual reality technology to high school history teaching must be aimed at improving the core literacy of students in the history discipline. In the past, related research mainly showed the following major characteristics: The number is small. Applied to the field of high school teaching, the dissertation can be described as full bloom, but in comparison, the field of high school history seems to be scattered, and only more than ten papers by researchers such as Li Jiaxin have responded to this problem positively. The quality is low. When the benefits of reality technology are applied to history teaching, most researchers often take a few pens, lacking a proper analysis, let alone mentioning the role of virtual reality technology in improving the core literacy of history disciplines. I think that as a researcher Due to the lack of attention to the history teaching field in senior high school, and the failure to link the core literacy of history with the innovation of teaching technology, the author will deepen the benefits of virtual reality technology to enhance the core literacy of history disciplines from five aspects. Specific analysis, and look forward to its future development.
2. Organization of the Text

"The landing of core literacy depends first and foremost on the relevance, specificity and moderation of the daily teaching goals. Teachers can help students find the grasping and effective paths for investment [3]." First, from the requirements of the curriculum standards, the "May Fourth Movement and the Communist Party of China" The lesson of "The Birth of" requires the understanding of the historical significance of the May 4th Patriotic Movement, the far-reaching impact of the spread of Marxism in China and the establishment of the Communist Party of China on the Chinese revolution; the historical role of the cooperation between the KMT and the Communist Party in leading the national revolution [4]. The Outline of History (Volume 1), Unit 6, "The Revolution of 1911 and the Founding of the Republic of China," starts the New Democratic Revolution [5]. As part of China's modern history, its importance is self-evident. Virtual reality (VR) technology is used as teaching Auxiliary tools, which have the following five paths in developing core literacy in history:

2.1 Create Teaching Situations and Foster Historical Materialism

Historical materialism specifically refers to the respect for history and objective ideology, which is one of the many connotative elements of core literacy and one of the important goals of the cultivation of historical literacy for high school students. For the teaching of this course, the traditional history classroom has its drawbacks. Many textbooks are used as media, the teaching content is boring, the thunderous May 4th Movement, and the pioneering Chinese Communist Party was born ... Under the traditional teaching mode, just a few words in textbooks can not meet the growing knowledge of students. Desire and curiosity, even if there are multimedia aids represented by Power Point, they often appear as textbook porters, and it is impossible to cultivate students' materialistic historical literacy. Virtual reality technology can enable students to stay with the age. The May Fourth era, which produced alienation and strangeness, returned to the students in a three-dimensional and sensible form, and merged audio, animation, and image functions that multimedia could not have, with realistic and vivid pictures, so that the entire teaching process had a sound shape. The characteristics of blending and blending scenes have greatly enhanced the scalability of the history classroom.

In addition, virtual reality technology can not only create teaching situations with lively and vivid animation effects and realistic historical pictures, while stimulating the audience's senses, it can also visually demonstrate the process of historical evolution. The five core literacy of history disciplines The historical materialism emphasizes that the development of history has its objective laws. Studying history should be based on objective reality. By placing the two important historical events of the May 4th Movement and the birth of the Chinese Communist Party in the timeline of the entire history of Chinese revolution, The objective presentation of science and technology helps reveal the laws of objective development behind historical phenomena. From this point of view, the use of virtual reality technology is indeed a good helper for students to correctly establish historical materialism.

2.2 Break Through the Barriers of Time and Space and Cultivate the Concept of Time and Space

The concept of time and space of history refers to the concept of observing and analyzing the known historical events under specific conditions of time and space [4]. In essence, history is the past person and thing, and this is one of the biggest difficulties in history teaching in high school. That is, these historical scenes that are too far away cannot be restored well, so that abstraction becomes concrete and boring into vividness. On the other hand, virtual reality technology is an ideal application object for history teaching in middle schools. The reason is that the virtual reality technology can break through the limitation of time and space at the lowest cost, so as to restore the corresponding historical scene and make the students feel immersive.
On the one hand, for the subject—students, under the premise that virtual reality technology restores historical contexts and carries rich historical and cultural knowledge in the contexts, students can “traverse” more than a hundred years of distant space and time. Take a close look at the background of the failure of the Paris Peace Conference at the time of China's diplomacy, how the young students with enthusiasm organized themselves to protest against the shameless traitorous act; you can also sit on a red boat in the South Lake of Jiaxing and watch China's aspiration Scholars discussed the setting up of the Communist Party of China. Virtual reality technology has given lively connotations to people and things in history, virtually closing the distance between students and their minds, and making them more accurate in their grasp of time and space.

On the other hand, for the object—history, the writers of the textbooks have no intention or intentionally cut the entire large history into modules such as economic history, history of science and technology, political history, etc., which makes students' concepts of time and space tend to Vagueness. And virtual reality technology can well turn these into a complete situation, let history go out of study, return to reality, and students can correspond to economic and political factors one by one to build their own "historical coordinates".

2.3 Create a Mobile Classroom and Develop Historical Evidence

Evidence of historical data refers to the acquisition of credible historical data through rigorous inspections and the efforts to reproduce the true attitudes and methods of history [4]. History emphasizes the study of historical data as the starting point to restore history to the maximum extent and interpret history on this basis Teachers cannot "port" rich historical materials such as unearthed cultural relics, contract documents, etc. to the classroom, but allow students to understand historical materials in limited forms such as oral language and old photos, which is undoubtedly one of the pain points of traditional history classroom teaching. However, in the context of "Internet +" today, virtual reality technology seems promising.

First of all, in terms of historical relics and historical monument reconstruction, virtual reality technology has broadened the space of the classroom, incorporating a variety of historical materials, such as flags with student slogans, "New Declaration", "Manifesto of the Communist Party of China", etc. The powerful three-dimensional image expressiveness is integrated, allowing key scenes in the May 4th Movement, such as students to stop school, travel to Paris, conference venues, and the first National Congress of the Communist Party of China. Contact, so as to interpret history with the correct attitude and method, and develop the empirical quality of historical materials.

In addition, virtual reality technology has also greatly increased the accessibility of museums and archeological sites. Beijing New Culture Movement Memorial Hall, as a place where we remember the patriotism and revolutionary spirit of the May 4th pioneers, the historical materials in it are for students to understand history, perception History has many benefits, and virtual reality technology can "migrate" classrooms to museums, giving students access to historical materials.

2.4 Analyze the Ins and Outs and Delve into Historical Explanations

Historical interpretation refers to the ability to analyze and objectively judge historical things based on historical data and based on historical understanding [4]. The role of virtual reality technology in developing historical interpretation literacy is mainly reflected in two levels, one is to assist historical data Mutual evidence, isolated historical phenomena or historical materials often lead to one-sided historical interpretations. If the concept of the "May 4th Movement" is put forward separately, many students will not be able to understand the historical roots of it because they do not know its previous causes and consequences. In the classroom, it is mostly discussed that the teaching progress will be delayed, and virtual reality technology can present a long period of modern Chinese history in the classroom in a short period of time, allowing students to understand the "May 4th Movement" in the context and framework. To find out the root cause of the May 4th Movement; the second is to cultivate historical empathy. Students do not know much about the characters that emerged in the changing times a hundred years ago, and they often look at it from
the perspective of God. To a certain extent, it restores the virtual historical figures and "talks" with the students, so that the students' historical thinking can truly fit the historical scene of the time, and the historical interpretation conforms to the objective Regularity, not subjective fabrication.

2.5 Restore Historical Scenes and Cultivate the Feelings at Home and Abroad

Home country feelings are the human pursuit that history should have, and it reflects the feelings for the country's prosperity and happiness, and the people's happiness, as well as a high sense of identity, belonging, responsibility, and mission to the country [4]. Home country feelings are the correct guidance of the value level Is one of the ultimate goals pursued by middle school history teaching.

First of all, virtual reality technology can maximize the restoration of the scene of China being bullied by imperialist countries because of poverty and weakness, and aroused the resonance of students at the patriotic level. In addition, virtual reality technology can also help students at that time to defend national sovereignty and The territorial integrity of the strike parade truly appeared in the eyes of the students, inspiring them to serve as role models, often cherishing patriotism and the desire to serve the country, thereby establishing correct life goals and ideals and convictions.

3. Problem

While confirming that VR can bring great convenience to history classroom teaching and help improve students' core accomplishment in history discipline, it is undeniable that there are still many problems to be solved in the application and promotion of virtual reality (VR) technology, which are mainly reflected in the following aspects:

To begin with, whether the technology is mature. Compared with cutting-edge technology development more mature European and American countries, the current in the field of VR technology in our country is still at the fledgling stage, the development of VR operating system exist, such as don't match, not perfect, immature, and a series of defects, and can direct adaptation classroom system are much rarer, if there is no advanced talents continue to scientific research, a breakthrough in the technology, so on a national scale to the possibility of promotion will be greatly reduced.

Additionally, whether the money is in place. As a sunrise industry, "VR + education" is at the cusp of the Chinese market. In recent years, the government has been continuously increasing its investment in the research and development of virtual reality technology, and successively held VR industry conferences in nanchang and other places. However, the rise of an industry does not happen overnight. If there is a lack of long-term and sustained investment, it will be more difficult to incubate relevant enterprises, which will lead to the delay of the introduction of virtual reality technology on the market.

Furthermore, whether the impact is controllable. Middle school students are in the physical and mental development of highly active, and virtual reality technology in use will make an audience is similar to carsick discomfort, if improper operation can cause ghosting, dizziness and other problems, even make the junior student perception of the real world produces deviation, for middle school students' personality, moral, the will of the negative impacts on the physical and mental health development.

What's more, the content is reasonable. As we all know, the essence of virtual reality technology is to change the presentation of information to make it more acceptable to the audience. When it is applied to a specific historical discipline, it is undoubtedly a problem that every operator thinks deeply about whether it can accurately combine historical materials and information and restore the historical scene as much as possible. If there is a deviation in the presentation of historical materials, it will not only affect the classroom effect, but also affect the students' view of history, thus affecting the improvement of their core accomplishment in history.

In a word, to make the virtual reality technology truly perfect, it needs the cooperation and efforts of the government, enterprises, schools, teachers and other parties.
4. Conclusion

"Go new, new, and new". With the advent of the 5g era and the "Internet +" context, virtual reality (VR) technology has finally reached the core of cultivating history disciplines in enriching teaching content, optimizing teaching methods, and improving classroom efficiency. The aspect of literacy has a unique advantage. We should actively innovate and take the initiative to make the role of virtual reality technology truly manifest and penetrate the hearts of the people, so that the ancient history disciplines will continue to renew their vitality as the times advance.

References


