Explore How Artificial Intelligence and VR Technology will Change the Development of Future Education

Hui Yang*
Hubei Business College, Wuhan, Hubei 430000, China

*Corresponding author e-mail: yanghui@hbc.edu.cn

Abstract. In recent years, with the rapid development of VR technology and artificial intelligence, its application scope has gradually involved the education field. VR technology can break through the limitations of the traditional curriculum environment and simulate complex environments. It can visualize complex and abstract theoretical knowledge, provide learners with scientific and precise guidance and gain more knowledge. Based on this, this article discusses how artificial intelligence and VR technology can change the development of education in the future. The research of this article is mainly divided into three parts: the first part is the research on the impact of artificial intelligence on education; the second part is the research on the application of VR technology in the classroom; the third part is the investigation and research. Through research, it is found that in the current small environment of school education, artificial intelligence has the advantages of fast and accurate, and its ability to detect students' deficiencies and improve learning efficiency far exceeds teachers. However, the current education sector is busy improving students' memory of knowledge, while neglecting to cultivate students' imagination and creativity. The students trained in this way will surely be replaced by artificial intelligence. Therefore, the popularization of VR technology and artificial intelligence will inevitably promote the change of education goals, so as to cultivate talents who can meet the needs of future society.

Keywords: Artificial Intelligence, VR Technology, Future Education, Development Problems

1. Introduction
Virtual reality (virtual reality technology, referred to as VR) [1-2] is a virtual human-computer interaction technology, which has three main characteristics: First, VR technology can build a virtual world of three-dimensional models, allowing users to produce "Immersive" experience; second, the VR device can give feedback according to the user's instructions, thereby realizing human-computer interaction [3]; third, the user can be immersed in various preset virtual scenes of simulation, Can greatly increase user interest. Therefore, in VR devices, users can interact well in virtual scenes, thereby enhancing the authenticity experience.

Artificial intelligence [4-6] and virtual reality technology have a significant impact on school education. In order to cultivate talents that meet the needs of the future society, from the perspective of
social development, the development of artificial intelligence will inevitably force changes in educational goals. VR technology based on artificial intelligence can break through the boundaries of time and space, and build an overall virtual reality [7] and environment according to teaching needs. Therefore, students can not only carry out scientific and logical education and training, but also be proficient in theoretical knowledge and related skills. At present, when many schools offer courses, only relying on boring teaching venues cannot reproduce various realistic and complex scenes, and cannot enhance learning interest. However, using VR equipment can really simulate various complex scenes. The application of artificial intelligence and VR technology to teaching is a revolutionary exploration. On the basis of changing traditional teaching [8], using VR equipment to introduce students into different environments and arouse students’ interest in learning, which is not only conducive to course teaching The smooth progress also reduced the investment in teaching equipment to a certain extent.

Therefore, this article focuses on how artificial intelligence and VR technology can change the development of future education [9-10]. The research of this article is mainly divided into three parts: The first part is the impact of artificial intelligence on education. The second part is the application research of virtual reality technology in the classroom. The third part is investigation and research. Studies have shown that artificial intelligence and virtual reality technology have immediate practical benefits in the current school environment, and their ability to improve students' learning ability is far superior to teachers. But in general, for better or worse, artificial intelligence is still in its infancy and faces a series of development problems.

2. The Impact of Artificial Intelligence and VR Technology on the Development of Education

2.1. The Impact of Artificial Intelligence on the Development of Education
Artificial intelligence (IA) and virtual reality (VR) will bring a new governance model to schools in the information age, creating a digital, personalized and lifelong learning education system, and making it more open, more humane and more Sustainable. The school will gradually introduce intelligent robots, drones and virtual reality technologies into classrooms to build a new model of talent training under the artificial intelligence environment.

The impact of the current weak artificial intelligence stage on school education is more complementary. The current level of artificial intelligence more assists school education, but it cannot replace school education. When we see powerful artificial intelligence products, the future of education will begin to change dramatically. Districts and schools first use artificial intelligence to make up for their own shortcomings. Finally, the choice of the ability market promotes the improvement of the academic ability system. Therefore, artificial intelligence finally eliminates the allocation of educational resources, so every student can choose the direction he wants and obtain high-quality educational services.

2.2. The Impact of VR Technology on the Development of Education
The application of VR technology in the teaching field opens up a new teaching method. It has greatly changed the traditional teaching methods and improved students' learning motivation. The simulated campus environment is to use VR panoramic technology to create a realistic three-dimensional virtual campus environment, so that students can feel the real campus. Classroom simulation is to expand the time and space of classroom teaching and create a realistic virtual learning atmosphere. It contains a very rich interactive teaching method, and is easy to implement in various activities; the simulation of the actual teaching environment requires effective and true input of relevant data of teaching facilities, thereby reducing appropriate financial support; the goal of interactive course design is Use appropriate technology to achieve resource sharing and classroom interaction.

3. Experimental Thinking and Design
3.1 Experimental Ideas
This article mainly discusses how artificial intelligence and VR technology will change the development of education in the future. The VR technology teaching based on artificial intelligence is used as the experimental group, and the traditional teaching based on the control group is used for comparative analysis. Study the impact of artificial intelligence on education and the impact of VR technology on the classroom.

3.2 Experimental Design
Artificial intelligence has a profound impact on primary and secondary education. The construction of intelligent campus has been put on the agenda, and the traditional education information management system will be abolished soon. Based on the intelligent campus system, teachers will be able to identify students' past learning situation before the beginning of the semester. The report card received by the students not only includes the scores, but also the learning suggestions and knowledge analysis reports about the scores. The attendance of the students in the "shift system" teaching does not need to be called by the teacher. The automatic face recognition system records the attendance of the students and sends them to the teachers and parents in time.

The purpose of this research is to study the construction and implementation of the intelligent education teaching forum. According to the division of the experimental group and the control group, courses based on artificial intelligence and VR technology are used for the experimental group, and the experimental culture based on the control group is used for comparative analysis. In traditional education, teachers usually teach the subject orally, and then perform simple calculations. Most students have no motivation to learn. Therefore, using VRR tools in the classroom can also increase students' interest in learning and social development. Table 1 lists the comparison between real media teaching and experimental education in real technology.

| Compare items            | Traditional teaching | VR technology teaching |
|-------------------------|----------------------|------------------------|
| Teaching content        | Methods and techniques | VR panorama, VR video, virtual scene |
| teaching methods        | One-way professor    | Two-way interaction |
| Teaching characteristics | Less practice        | Conduct immersive one-to-one teaching |

4. Discussion

4.1 Discussion on the Future Development of Artificial Intelligence and VR Technology
Education is developing into an era of ingenuity, and the integration and innovation of artificial intelligence and virtual reality technology and education has become an important trend for future education improvement. Today, educational artificial intelligence has developed an application model that is tailored for various groups of people through compensation education, traditional business alternative education and service development. However, in general, artificial intelligence is still in its infancy, and there are four main development problems: First, the quantity and quality of educational information are "defects", and the value of artificial intelligence technology is difficult to play. In general, artificial intelligence technology has exacerbated the problem of "satisfaction" in education. Third, educators are confused about the value and role relationship between artificial intelligence technology applications, and it is difficult to avoid a crisis of trust in computers. Fourth, there is a lack of artificial intelligence and curriculum. Integrating artificial intelligence into education is slow. The future of artificial intelligence in education must be realized in the following areas: technological research and development, the development of educational artificial intelligence products and the improvement of technical service quality; educational innovation, expanding the
application space of artificial intelligence education, and building a new ecological symbiosis "human-machine integration" ecology System; at the practical level, establish educational artificial intelligence display sites and gradually introduce artificial intelligence models.

![Figure 1: Survey of students' interest in classroom learning](image)

In order to make a comparative analysis of learning interest, students' interest levels are divided into four levels: boring, general, interesting and very funny. A simple table is used to assess the learning interest of two groups of students. The upper limit of the score is 10 points, the higher the score, the better the indicator processing. Comparing the experimental class and the control class, it can be seen from Figure 1 that in the experimental class, the proportion of people who are interested in learning using artificial intelligence and VR equipment and those who are very interested is very large, and few people are not interested. Compared with the experimental class, the control class is based on the traditional course learning method, and the data of the control class shows the shortcomings of traditional boring teaching.
In the experiment, this article uses a questionnaire survey method to investigate students' opinions on the application of VR technology in teaching. Both the experimental group and the control group have 120 people participating in the survey. In addition to collecting data through questionnaire surveys, students are also observed during the teaching process to verify the authenticity and accuracy of the experiment. The concentration time is divided into four levels: within 10 minutes, within 20 minutes, within 30 minutes and within 40 minutes. Use the data from the experimental class and the control class for comparative experiments. The results of the experiment are shown in Figure 2. It can be seen from the figure that the immersion of the virtual reality device makes the students' attention very concentrated, which to a certain extent makes the students more engaged in class and a better learning atmosphere.

4.2 Realistic Problems and Drawbacks of Artificial Intelligence and VR Technology

1. Artificial intelligence technology "grafting" education issues

   Education is a very complex system involving many businesses, such as teaching, management, scientific research and services. Although the businesses of different regions and schools have some things in common, they differ greatly. The education business is constantly evolving in schools, disciplines, knowledge transfer methods and practices. Therefore, the complexity of the education system sets high standards for artificial intelligence technology, and general artificial intelligence cannot meet the individual needs of students, teachers, and administrators. In the education industry, artificial intelligence is "formed" and needs to be adjusted to meet the needs of different companies and different employees.

2. Teach users that the trust in artificial intelligence technology is not strong

   Research shows that most teachers and administrators are vague about the relationship between artificial intelligence and teachers, which may lead to a lack of confidence in teachers' ability to rely on artificial intelligence. First, teachers are confused about how to cooperate with artificial intelligence to complete education. Second, teachers use artificial intelligence to teach and have questions about who is responsible for teaching. In addition, many negative public perceptions of artificial intelligence in the community have also affected teachers and administrators' perceptions of artificial intelligence.

3. Students develop dependence

![Figure 2. Comparative analysis of learning concentration in two classes](image-url)
If a person frequently uses VR equipment, students will become more immersed in the virtual world, unable to focus on real life, the communication and learning knowledge of people around. Most users of VR devices are young people, most of whom are under tremendous pressure in their lives, so VR devices are a way for them to relieve stress. The content of VR is novel and attractive. Many young people do not have the ability to control themselves. If they are not advised and guided in time, they can easily fall into it and develop autism.

5. Conclusions
In the research on how artificial intelligence and VR technology can change the development of education in the future, this paper has carried out three parts of research: the first part is the research on the impact of artificial intelligence on education; the second part is the research on the application of VR technology in classroom; the third part is based on the teaching of artificial intelligence and VR technology as the experimental group, and the traditional teaching as the control group. The research results show that, in the current small environment of school education, in traditional teaching, the instructor generally teaches the course orally, and then after simple calculation and display, most students lack the enthusiasm for learning; while artificial intelligence has the advantages of fast and accurate, which is far better than teachers in discovering students' shortcomings and improving learning efficiency. In addition, artificial intelligence technology enables machines to work efficiently and repeatedly according to preset procedures. Alternative education for conventional business can not only save a lot of human resources and provide convenient services for education and teaching, but also promote the diversification and intellectualization of students' learning methods and meet the learning needs of many students. Therefore, the application of artificial intelligence and VR equipment in the classroom can promote students' interest in learning and even their social development.

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