Problems and Analysis of Network Mixed Teaching Under The Dackground of Innovative Education

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Abstract: The spirit of modern education is that information technology should be used as an aided learning tool in all learning areas to expand learning in various areas and improve students' ability to solve problems. Through the Internet, teachers and students in different locations can effectively interact with each other, thereby enhancing the quality of teaching. Modern education emphasizes that the study area should take into account the principles of curriculum planning and collaborative teaching, which shows that collaborative teaching is one of the important core topics of teaching promotion. Collaborative teaching can enable students to obtain complete knowledge and life experience. If Internet technology can be used to promote collaborative teaching, it is expected that it will be easier to integrate teachers with different specialties to conduct teaching activities, so that students can obtain a complete learning experience.

Keywords: Internet Teaching ; Hybrid teaching ; Cloud technology ; Distance teaching ; Digital learning

1. Foreword

With the continuous advancement of Internet technology, an increasing number of individuals are acquiring knowledge and engaging in learning activities through online platforms. The virtual digital education environment transcends the constraints of traditional educational settings, enabling a more flexible and diverse learning experience. Furthermore, driven by widespread internet access and government initiatives, there has been significant integration and development of the virtual digital education environment. The application of information technology in the classroom has effectively promoted the integration and innovation of traditional teaching and network technology, The promotion of Internet blended teaching has played a crucial role in facilitating its advancement.

Under the leadership of the government, the education industry also applies cloud technology to teaching. Through the virtualization of the basic environment and the existing Internet foundation, the efficiency of the original environment is strengthened to provide better cloud education applications. The network hybrid teaching supported by the new generation of information technology is based on the network platform learning environment, and carries out online and offline hybrid teaching. It organically combines online and offline teaching with face-to-face classroom teaching, and gives full play to the advantages of "online" and "offline" classroom teaching of network teaching. Through the reform of teaching methods and teaching models, the diversified learning needs of learners can be learned anywhere, effectively improve the quality of classroom teaching, promote students' active and effective learning, and cultivate high-quality talents with innovative spirit.

2. Teaching analysis

2.1 Problems at this stage

Under the leadership of the government, the education industry also applies cloud technology to teaching. Through the virtualization of the basic environment and the existing Internet foundation, the efficiency of the original environment is strengthened to provide better cloud education applications. The network hybrid teaching supported by the new generation of information technology is based on the network platform learning environment, and carries out online and offline hybrid teaching. It organically combines online and offline teaching with face-to-face classroom teaching, and gives full play to the advantages of "online" and "offline" classroom teaching of network teaching. Through the reform of teaching methods and teaching models, the diversified learning needs of learners can be learned anywhere, effectively improve the quality of classroom teaching, promote students' active and effective learning, and

cultivate high-quality talents with innovative spirit.

According to Cisco President Chambers, in the future, the combination of the Internet and teaching will enable students to find the best teachers and learn what they want to learn at any time and any place. [1] More and more people are combining the Internet with computers and applying them to teaching work, making the closed classroom an open classroom, both in terms of learning content and learning methods. In addition, online resources are abundant, and learning efficiency has also been greatly improved. In view of the advantages brought by Internet teaching, Internet-based derivative teaching activities have gradually received attention, making the use of Internet-based teaching methods become a mainstream teaching method. Not only does the learner and lecturer have a high degree of flexibility and easy to use, and school units can also use this online teaching platform to conduct classroom attendance, learning resource control, learning record statistics, etc. Effectively save administrative resources and reach the realm of learning management automation.

2.2 Interactive teaching model

2.2.1 Cloud technology.

As the development of the Internet matures, it is easier to access and exchange teaching materials, and even real-time use of cloud-based teaching resources at teaching sites is becoming increasingly popular; the rise of cloud-based teaching platforms is inextricably linked to the development of cloud computing technologies.The application of cloud technology in teaching can include three aspects: teaching activities, teaching environment, and teaching evaluation. Teachers can conduct teaching activities through free cloud resources, or build the teaching environment on the cloud, and use the platforms and resources constructed by cloud technology to create a learning environment. Finally, record the student learning status and teacher teaching results on the cloud platform. In order to achieve the group interaction goals that the classroom will focus on in the future in digital learning, we must use the Internet synchronous video communication teaching method to interact[2]

2.2.2 Collaborative teaching.

Traditional Internet teaching platforms focus on digital teaching content, online test and evaluation, and teacher evaluation background management. The recent enhancement of Internet data transmission capabilities has enabled Internet live broadcasts to be upgraded from traditional professional equipment and dedicated Internet to the use of personal consumer electronics equipment at teaching sites, and live broadcasts with almost no time difference using the Internet are delivered to all corners of the world.[3] The development of cloud computing technology and the use of computers and the Internet can change the traditional face-to-face teaching method of the school. Through cloud technology, it can combine the teaching resources of the Internet endpoints to expand the energy of traditional distance teaching and collaborative teaching, enabling scholars and experts to conduct cross-region Restricted Internet collaborative teaching.

2.2.3 Human-Computer Interaction.

Human-Computer Interaction (HCI) is a discipline that focuses on the design of user-operated computer interfaces. It is a combination of computer science and cognitive engineering. Communication between humans and machines must rely on human-computer interfaces.[4] The human-computer interaction mode is constantly updated. some of them are currently hot topics, such as artificial intelligence, natural language processing, body motion capture and recognition, etc. The classroom of the future is to use technology in teaching, and the teaching method focuses on interaction between groups, and learners are the central design of teaching materials, thereby establishing a collaborative teaching learning environment. Through simple and easy-to-use technology operations, technology and students Interaction without disrupting teaching. The most critical factors for the success of future classrooms are whether teachers are willing to use new technology and how to make the most of the convenience of technology.

3. Future outlook

3.1 In terms of teaching media

Due to the rise of constructive learning theory and the prevalence of open education in recent years, the use of media to assist teaching has been widely appealed. Scientists' experiments indicate that: 75%-90% of the knowledge we obtain comes from the eyes, that is, vision; 10% -15% comes from the ears, that is hearing; the rest comes from the sense of smell, taste and touch. Relying on the traditional "teacher-speak, student-listening" learning method is no longer sufficient to meet the needs of the times, and traditional telling teaching methods have been difficult to meet the diverse and changing knowledge needs of learners. Therefore, everyone is eagerly looking forward to a kind that enables us to "learn faster, learn more, remember long, and remember complete", which has stimulated a strong interest in learning; that is, the comprehensive presentation of visual and auditory— " Media Teaching. "Many education scholars have done research on the effectiveness of teaching media, and their research results have proved that both

traditional teaching media and Internet teaching media have a positive effect on learning effects to varying degrees.

3.2 In teaching evaluation

Teaching evaluation is the last part of the teaching process, but it is not the end of teaching activities. Through the evaluation of learning results, teachers can understand whether the teaching tasks have been met or what needs to be improved, as an important basis for the next unit of teaching activities. The benefits are described below:

First, the Internet collaborative teaching process automation and auxiliary teaching human-machine interface interaction function can solve the problem that there is only one teacher in a classroom at the same time. In addition to providing classrooms that are not limited by classroom space on the campus, this project can carry out collaborative teaching across classes and share teaching resources and interaction with teachers from other schools.

Secondly, the multi-projection system architecture is used to present multi-endpoint Internet collaborative teaching. Through the projection screen, the field teaching and interaction between the co-teaching end and the teaching teacher can be connected in series, which can promote the positive interaction between teachers and students on the Internet, which can establish a sense of presence in the distance.

Third, the system also has real-time Internet video streaming and course recording. While the teaching is in progress, it can be uploaded in real time for multiple people to watch the course. With the small window function of the camera used in multimedia teaching, its synchronization or after-school teaching Course recording and storage can provide reference for remedial teaching, Internet self-study and flip learning.

4. Conclusion

Education is the cornerstone of national rejuvenation and social progress. With the continuous development of education in China, the overall quality of the population and the level of education have been improved, people's emphasis on education has continued to increase, and the general autonomy of students has also improved, so many learners are not satisfied with the knowledge in the books , And the Internet mixed education is providing this platform, so that the majority of learners can broaden their horizons and knowledge. Li Weitao, CEO of Beijing Xuebang Education, said in an interview with China Economic Times reporters: The model of" education + Internet "contributes to the achievement of balanced and high-quality education resources and the fairness of education. With the development of the times, the openness and tolerance of the society, and the development of respect for the personality of students will be the direction of education reform and the trend of the times. Teaching based on aptitude and learning on the Internet can expand students 'more interest areas, cultivate students' independent thinking, active learning, problem discovery and solution The ability to solve problems effectively improves students' learning interest and learning efficiency.

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