Research on the Construction of Network Teaching and Resource Sharing Management Platform in Digital Campus

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Abstract: With the advancement of science and technology, the digital age has come. Digitalization can not only promote the development of all walks of life, but also is helpful to education. By using digital technology, students can learn better and demands of teachers can be satisfied. Transmitting data resources in the campus network system, the digital teaching platform can be constructed so as to realize the construction of the cloud platform of teaching resources and complete the construction of the digital campus.

Keywords: Digital campus; Network teaching resources; Shared management platform; Construction research

1. Introduction

With the rapid development of the digital age, digital campuses also have more practice and improvement, and a digital system integrating network technology has been initially constructed. The purpose of establishing a resource platform is to establish a resource library that can be expanded and managed. The teaching resource platform needs to be explored through practice, so as to improve the efficiency of teachers' teaching and guarantee a better learning atmosphere. Through richer teaching resources, students can expand their thinking and have better learning methods.

2. Overview of the Digital Campus Network Platform

In the new era, the development goal of digital education is to build a digital campus application system, effectively integrate the data and IT resources in the digital campus, and continuously optimize the digital campus resource sharing management platform. Digital campus is mainly elaborated from several aspects, including digital resources and management on them. The digital campus can adjust various business processes, optimize and coordinate the association of business processes, so that various business departments can have horizontal and vertical interconnection information systems. To break through the obstacles between information can obtain better centralized data, which can optimize operating environment and transform it into a student-centered business model. Digital campus can promote more first-class research on campus and form a comprehensive and innovative university. Exploring more advanced technologies and methods and integrating campus information resources are currently the key tasks. With the development of integrated network technology, the integrated network can make the university an interconnected campus network, that's to merge the current campus network, and form a network system under the same IP. By integrating the redundant part of the network and the communication system together, a secure network can be established. The network can enhance network applications, including continuous applications, to ensure the security of data information, and applications can be accessed anytime, anywhere. In addition, centralized management and enlargement of servers can make service software applications more interactive, which can expand the central processing unit, better input and output resources, expand the performance of the wide area network, and optimize applications to ensure that the entire campus network is transparent and comprehensive. With the coverage status, both students and teachers are not affected by time and place, and can share various teaching resources and application information. The current digital campus needs to establish a comprehensive campus information network, organize various information resources on the campus network in a scientific and reasonable way, and classify and optimize the resources, so that teachers and students can use the resource sharing management platform to locate the information resources they need. To build a digital campus, information and communication can be carried out on the Internet to ensure better communication between teachers and students, so as to standardize school management personnel and better manage teaching data.

3. The Construction Trend of Digital Campus Resource Sharing Management Platform

At present, the digital campus has developed rapidly. The network resource sharing management platform has begun to develop rapidly, and the development of educational informatization has become more complete. The informatization application of the digital campus is also assisting teachers in teaching and ensuring students' daily learning, so that the education industry has undergone earth-shaking changes. At present, the school's online teaching includes teaching and educational administration management and logistics management and so on. The school has built a preliminary campus community service application system, and most colleges and universities also have smart-card application, which has improved their awareness, and they are more willing to use information tools. At present, the development prospects of education informatization in most schools are very optimistic, and they have basically broken away from the teaching mode of blackboard teaching. After several years of teaching exploration and development, a network teaching resource sharing management platform has been established, and computer teaching has basically been realized. The computer center also has more computer rooms and computers can better assist teaching. The campus has become a networked model. Broadband wireless networks have also been applied to the library and student dormitories. The campus wireless covers the entire campus. Teachers have also established the next development goal of education informatization, built a teaching management platform and credits system, which is used to manage students' learning. The school roll system is applied to manage students and manages the teachers and students of the whole school, and guarantees the effectiveness of teaching data. Teachers can use digital network in the course of lectures, and students can query information or scores by network teaching resource sharing management platform. The construction of a digital campus office system can continuously improve the office computer management system, make the office digitalization basically established, and strengthen efficiency and resource management level, continuously standardize teaching and moral education construction, and establish standardized and serialized digital office management system. Through the network teaching resources management of various departments, we can also use the network system to provide more services to the education bureau.

4. The Construction Method of Network Teaching and Resource Sharing Management Platform in Digital Campus

Through the practice of digital campus construction, a relatively open and unified network teaching has been basically established. Standard IP communication technology has been established. Digital network platforms and multi-service platforms can be integrated to establish data resources and other aspects. In the overall construction, secure technology can be infiltrated to ensure the smooth progress of operation and management, and enable the integration of digital campus resources to produce more meaningful effects.

4.1. Integration and sharing of online teaching and resource platforms in digital campuses

First, a secure network needs to be built to ensure that educational resources can be accessed and referenced. Using pure IP technology to build a network platform can better meet the basic needs of campus networks. Effective use of network resources can continuously optimize the network architecture and provide more optimized solutions for the campus. Therefore, the campus core network and access network can be more reliable and better controlled. Combining the actual business distribution in the campus, the network structure and layout can be used to make digital campus activities more reasonable. The development of digital campus services needs to rely on IPv6 technology and mobility technology. Using IP communication technology can better develop digital campus applications. Now, the first thing is to let the campus network platform have relevant technical support capabilities, and also to build an IPv6 campus network and a wireless campus network. We should optimize the construction of campus network, explore campus network business horizontally, and ensure that the campus network is safe and orderly on this basis. To investigate hidden dangers that affect campus safety from the vertical dimension can prevent and control illegal behaviors.

4.2. Establish a campus data resource sharing management platform

After digitalization went deep into campus teaching, a relatively complete campus portal and mail system have been established. There are also more and more complete information systems in business systems such as libraries and educational administration systems. The information system requires storage capacity and data protection technology. The campus data service department must have a storage area network, as well as a backup platform and recovery and other data storage. After the campus data resources are integrated with the network platform, they can play the role of the campus network and run more server resources on the campus. Teachers and students can download and upload information teaching resources when they have the network and access to the server resources. It can be ensured that the campus have a personalized teaching mode and a student-centered teach-

ing system. Teachers can use the network teaching and resource sharing management platform for visual teaching, and guide students to interactive learning through interactive and collaborative methods. Through the rich courseware analysis information, students can more easily understand the content taught by the teacher, and carry out continuing education and adult online vocational training.

4.3. Integrate multiple campus businesses to form a shared platform

There are often many different businesses on campus, and multiple businesses need to be integrated to truly realize a digital shared management platform, such as a campus video surveillance network, a campus broadcast network, and so on. These systems must be maintained by professionals. The intelligent information network can integrate all networks into the same IP network, and a set of pipelines can form a general management system. The maintenance process will be more convenient, and the required cost is not high. Security factors have become the most important part of network construction. Security factors are integrated into all links of the network. By setting up intelligent resources, user information can be authorized at anytime and anywhere, so that more resources can be accessed. In this way, the school's work process can be improved and automated, thereby ensuring efficiency and accuracy. Teachers can also use the digital platform to communicate, have better communication through video, etc., and can also save costs and resources. Students can make inquiries through the student status information system, or use the student identification system to borrow from the library. Through the card system, students can borrow suitable books and computers.

4.4. Building a shared teaching resource platform

Schools can build shared teaching resources to integrate materials and teaching courseware to create an integrated resource library for test questions. The core resource library for curriculum reform can cooperate with more companies and multimedia courseware to carry out teaching work, and establish key majors. At the same time, we can continue to strengthen the construction of the library, and enrich the construction of e-books and other literature resource libraries. Professional courses must have high-quality teaching resources.

4.5. Building an interactive resource management platform

A digital campus needs an interactive resource management platform. Network teaching resources should have temporary exchange folders so that teachers can store and exchange data. Teachers should have their own folders. By accessing and exchanging data, the folder can be enriched. Materials and courseware are continuously optimized for teaching. The online teaching resource management platform can also allow teachers to have personal information folders, thereby saving personal information, improving teachers' work efficiency, and realizing paperless management and office.

4.6. Building an online teaching platform

At present, most colleges and universities has built an online teaching platform in 2015. The platform functions mainly include online classroom teaching and simulation training. We can also apply for elective courses, assign homework, and teachers will evaluate students and manage student performance management. The application of the network teaching platform can ensure higher quality of teaching resources, share information resources, and disseminate intellectual resources. It can ensure that all links of teaching have a digital teaching model. It can also allow teachers and students to have better interactions, so that students take the initiative to learn to achieve a collaborative teaching model, and have innovative learning methods to form an open and efficient teaching model. Students give full play to the enthusiasm of independent learning, and have a stronger ability to solve problems when facing problems and innovation ability.

5. Conclusion

In summary, it is necessary to create a teaching atmosphere for lifelong learning, and to make universities more open, so that more people can get knowledge in the university. Graduates can always enjoy the atmosphere of the university, so that universities can become a part of society. Through the establishment of a digital network teaching resource sharing management platform, higher education institutions and society can be united, and it is also the foundation of social economy. After graduating, students can study educational courses, maintain close contact with the university, acquire a steady stream of knowledge to satisfy their career development, and achieve life-long skills training. By building a network teaching resource sharing management platform, students can learn more abilities through the sharing platform and carry out collaborative and interdisciplinary research better.

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