

Application Research of Cloud Multimedia Teaching System

1st Xu Guangyang
College of Physics and Information
Engineering
Zhaotong University
Zhaotong, China
410344843@qq.com

4th Zhou Li
College of Physics and Information
Engineering
Zhaotong University
Zhaotong, China
398509209@qq.com

2nd Yang Haiyan *
College of Physics and Information
Engineering
Zhaotong University
Zhaotong, China
elaincoco@foxmail.com

5th Wu Delan
College of Physics and Information
Engineering
Zhaotong University
Zhaotong, China
387967702@qq.com

3rd Zhang Mei
College of Physics and Information
Engineering
Zhaotong University
Zhaotong, China
592076066@qq.com

Abstract—The application of cloud multimedia teaching system in education is the necessity of the reform of education and teaching. However, many educators have a little understanding of cloud multimedia teaching system and are not able to use it correctly. This paper discusses this problem from the aspects of overview, advantages and skills of cloud multimedia teaching system.

Keywords—cloud multimedia, teaching, application

I. INTRODUCTION

With the emergence and application of computers and networks, information technology has penetrated into all aspects of our work, life and study, slowly changing people's behavior patterns and thinking modes in work, life and study. In the field of education, in order to improve teaching efficiency and students' learning quality, the application of various multimedia teaching systems is essential. In recent years, the state has invested a large amount of money in all kinds of schools at all levels to carry out information construction of schools, in which the first thing is to build various multimedia teaching systems. However, due to various factors, such as technical framework, use, management and maintenance, there are many difficulties and problems in the application and maintenance of multimedia teaching system, so it is very important to explore a new multimedia teaching system. Due to the development and application of network technology, cloud multimedia teaching system can solve this problem well.

II. OVERVIEW OF CLOUD MULTIMEDIA TEACHING SYSTEM

Due to the rapid development of science and technology and with the rapid development and cross-integration of computer technology, network technology, communication technology and Internet of Things technology, cloud computing, big data and other technologies came into being. Cloud computing is applied to education and teaching to further improve service efficiency, enhance effective interactive utilization of information and improve the quality and efficiency of education, thus creating a cloud multimedia teaching system. After years of development and application, the application of cloud multimedia teaching system in the field of education and teaching is the necessity of education and teaching reform.

What is cloud multimedia teaching system? Cloud multimedia teaching system is to use the Internet, big data, cloud computing and other technologies to realize all digital processing and application from the hardware of educational equipment, educational resources and teaching activities. The cloud multimedia teaching system has built a new intelligent campus, expanded the functions of the traditional campus and improved the efficiency of education informatization in the intelligent campus. Cloud multimedia teaching system uses advanced cloud computing technology and unified management platform to achieve educational balance, realize data interconnection and exchange and realize resource integration and sharing. It integrates teaching, management, learning, entertainment, sharing, interaction and other functions, so that education departments, schools, teachers, students, parents and other educators share a common platform to collect and process different information according to their needs and authorities, and accomplish different tasks, thus enabling the informatization of education for all.

III. ADVANTAGES OF CLOUD MULTIMEDIA TEACHING SYSTEM

With the application of cloud multimedia teaching system, education and teaching have undergone great changes. The traditional teaching mode has realized continuous teaching in a wider field with the help of cloud multimedia teaching system. The cloud multimedia teaching system mode with reliable quality has become the most important teaching mode in the field of education and teaching with many advantages. Through the comparative study of cloud multimedia teaching system and

traditional multimedia teaching system, it is found that the advantages of cloud multimedia teaching system are mainly reflected in the following aspects.

A. Low Investment and Operating Costs

With the smooth development of education and teaching, the investment and maintenance of various hardware and equipment are indispensable. Due to the unique structural characteristics, compared with the traditional multimedia system, the construction costs of the cloud multimedia teaching system is much less. Taking 60 students' classroom as an example, the investment in the construction of general multimedia classroom is about twice as much as that of cloud multimedia teaching system. In the later use and maintenance, only server needs maintenance in the cloud multimedia teaching system, which makes the workload greatly reduce and the cost correspondingly reduce.

B. No Time and Space Limitation

The cloud multimedia teaching system is easy to log in and can be operated online through the browsers of computers, thin clients and mobile phones, so as to break through the limitation of time and place of use and further provide a more convenient way for the dissemination of educational information.

C. Strong Integration

The integration and sharing mechanism of digital educational resources is an effective mechanism to ensure the creation and sharing of educational information resources. Traditional multimedia systems often result in the simplification and lack of sharing of resources, while cloud multimedia teaching systems can effectively integrate schools, institutions, teachers, students and all teaching resources at all levels, realize the sharing of resources, further promote the informatization of teaching and greatly improve the quality of education.

D. Rich Expansion Space

Cloud multimedia teaching system has rich expansion space. With the continuous development of education and teaching, people need more and more information. Cloud multimedia teaching system can update data in real time, and new functional components can be developed by users to expand and upgrade, which further meets the development needs of education and teaching.

E. Higher Flexibility

With the progress of time, the advantages of cloud multimedia teaching system will become more and more prominent, showing higher flexibility. For example, cloud servers enable users (teachers or students) to access the system through a web browser, wherever they are or whatever devices they use (e.g. PC, mobile phone), so that they can connect to the system from anywhere and use relevant resources.

F. Sharing Resources

Education and teaching resources are the basic materials for the development of education, so realizing the sharing of education resources is the basic guarantee for realizing the modernization of education. Educational resource sharing is a very important part of resource allocation research, mainly to analyze the efficiency and feasibility of sharing. In the traditional media technology, resource sharing is relatively weak with slow access and poor security. The cloud multimedia teaching system stores, controls and manages all resources in the cloud server, and all managers and users realize the management and use of resources by accessing the cloud server, thus realizing the real sharing of resources.

IV. APPLICATION SKILLS OF CLOUD COMPUTING MULTIMEDIA TEACHING SYSTEM

With the application and development of educational informatization, multimedia teaching methods are also widely used in the teaching fields of various disciplines. Although multimedia classroom teaching has incomparable advantages over traditional one, due to various factors, many teachers often forget the "instrumental" and "auxiliary" natures in use, which results in failing to achieve the goal of optimizing teaching and seriously affecting the teaching effect. In teaching, we should pay attention to the following points in the application of cloud computing multimedia teaching system:

A. Learn to Use Cloud Computing Multimedia Teaching System

As a teacher, if you want to improve the quality and efficiency of teaching, you must first learn to use the tools skillfully and freely. Although the cloud computing multimedia teaching system is developed on the basis of the traditional multimedia teaching system, it has its uniqueness with different operation. Before using, teachers must be familiar with the system structure and operation process, and learn to skillfully use various devices in the system. Only in this way can the cloud multimedia teaching system effectively play its role in teaching.

B. Fully Prepare, Organically integrate Teaching Information with cloud Computing Multimedia Teaching System

As a teacher, no matter how old and famous he or she is, no matter what teaching mode he or she uses, preparing lessons is essential. Teachers should fully prepare when using cloud computing multimedia teaching system. In order to achieve twice the result with half the effort and effectively improve the quality and efficiency of teaching, it is necessary to deeply study the teaching content, choose appropriate teaching methods and modes, do a good job in teaching design, make necessary

courseware and provide enough learning resources, etc., and organically integrate the dissemination of teaching information with the cloud computing multimedia teaching system, so that its value can be fully reflected.

C. Targeted and Reasonable Use

The ultimate goal of teaching is to improve teaching quality, achieve better teaching results and improve learning performance. If this principle is violated, advanced media is useless. Because teaching does not depend on how much media is used, it is to highlight the teaching theme and solve teaching difficulties. Therefore, it must be clear that all media are only for teaching, all media are only tools and subordinate, educators are the main body of teaching, and the use of media cannot replace all of teaching. In the use of the cloud computing multimedia teaching system, it is also necessary to understand this point, in order to use the cloud multimedia teaching system targeted and reasonably.

D. Inheritance of Tradition, Simultaneous Use of Multiple Methods and Rational Application

The organic integration of information technology and traditional teaching has greatly enhanced the intuition and interests of teaching. There is no doubt about its advanced nature and superiority in improving teaching quality and efficiency, but it cannot completely replace traditional teaching methods. After thousands of years of development and accumulation of education, many teaching experiences and teaching methods summarized and refined by predecessors are scientific and practical. In the process of applying cloud computing multimedia teaching system, we should objectively consider the advantages of traditional teaching, organically combine the two, and simultaneously and rationally apply multiple methods, in order to achieve better teaching effect and improve learning performance.

E. Really do the Role in Teaching and Educating

No matter how advanced the teaching system is used, it is only a modern teaching method and is used to improve teaching efficiency, break through key points and solve difficult problems in teaching. Teachers should not only act as media players, but should fully reflect the leading role of teachers and the main role of students in the whole teaching. They should play a good role as real teachers and effectively disseminate teaching information and educate people by organically integrating teaching contents with media, scientific presentation, vivid speech, teacher-student interaction and emotional influence.

In short, it is an inevitable trend for the development of education and teaching to use modern media to effectively disseminate education and teaching information. The educators in the new era must keep up with the pace of technology development and application, constantly learn new media technologies, master new education and teaching systems, scientifically combine them with the advantages of traditional teaching, learn to use them well and truly improve the quality and efficiency of teaching and realize the informatization and modernization of education.

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