Analysis on the Management of Network Classroom Teaching in Multimedia Classroom Teaching

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Abstract: In order to meet the efficiency of school teachers using multimedia teaching to improve classroom teaching, the management problem of multimedia classroom teaching network classroom is put forward. Based on traditional media, multimedia classrooms have higher requirements on the basis of tradition.

Keywords: Multimedia; Classroom teaching; Management

1. Introduction

Since the 1970 s, foreign scholars research on multimedia classroom integrated management system was carried out, to a lot of work on networked multimedia management system construction work, and achieved results [1-3]. In foreign countries, after nearly 30 years of development and exploration, the multimedia classroom management system has become quite mature. The system puts more emphasis on people-oriented and oriented to the development of network intelligence. For example in the leading enterprise engaged in the development of multimedia classroom management system Creston, for example, they developed system is stable and powerful user management interface can be secondary development, and integrate the function of powerful network configuration, realize the intelligent, the centralized management of multimedia classrooms. Many comprehensive classroom management systems have been developed in foreign countries, such as the construction of multimedia classroom management system in line with the current situation of foreign key universities by adopting video monitoring and centralized network control. This system can be controlled by professionals focus on in the background, to effectively reduce the improper operation instructor at the front desk, can according to the video monitoring, timely detection problem of multimedia equipment, and the fault equipment, vulnerable parts to make accurate forecast, such as service life improve the work efficiency of maintenance personnel[4].

For multimedia classroom integrated construction in China, by contrast, the relatively late start, also has the very big disparity compared with developed countries, in the integrated information management of multimedia classrooms less related applications. With the development of information technology and the expansion of college enrollment in China, the number of multimedia classrooms in colleges and universities has increased rapidly, and the information teaching has begun to take shape [5]. The rapid growth of the number of multimedia classrooms has brought many management problems, which will seriously restrict the level and quality of teaching. The management mode of multimedia classroom has gradually changed from the original pure manual management to the use of management system, and the management of multimedia classroom is developing towards integration and intelligence [4-5]. Xue-yong liu et al proposed multimedia classroom management system based on C/S mode, use of the system can automatically for fault diagnosis of multimedia system, and can automatically generate the corresponding report; Ren Wenxuan and others think that C/S mode of multimedia classroom management system has been difficult to meet the current needs, based on B/S mode of multimedia classroom management system, make management personnel do not need to install any management software can be achieved under the condition of the centralized management of multimedia classrooms, can reduce the cost management system.

At present domestic multimedia classroom management system more emphasizes the intelligent equipment operation simplification, centralized operation, information, and gradually apply data mining technology of multimedia equipment information for further analysis, in order to improve the comprehensive management system of intelligent multimedia classroom.

To sum up, in full multimedia classroom system at home and abroad for reference, the advanced management experience, the current situation of the multimedia classroom should also give full consideration to the application unit, combined with advanced computer and network technology, build a set of integrated management system, multimedia classrooms can meet the demand of its own to maximize meet the needs of the management work.

2. Existing Multimedia Problems in Hunan City College

The existing multimedia classroom management system in our hospital has not been able to meet the work needs of system administrators, teachers, maintenance personnel and other users, and there are many problems, which can be summarized as follows:

First, the maintenance progress of multimedia equipment is slow.Due to the various types of equipment, the maintenance work is carried out by using passive manual methods. The work progress is obviously not up to date.

Secondly, the current management mode of our hospital is mostly the management mode of manual paper records, which is inefficient and easy to make mistakes.

The third part, multimedia classroom single most of the existing management system management system function by different equipment manufacturers to provide, the development of the system function is less, difficult to share data with other systems, and expandability of system functions.

Fourth, multimedia equipment hardware damage often based on the characteristics of multimedia, usually connect multiple devices unification of the multimedia teaching platform, multimedia classroom hours, multimedia emergency equipment failure rate is high, the traditional management mode, not for parts replacement, GengHuan Lv precise statistics, lead to maintenance tasks cannot be completed on time, not only affects the normal teaching, and increases the maintenance costs.

Fifth, managers and teachers lack of good communication because of the lack of communication, when use problems, make the teacher cannot receive timely technical support, maintenance staff makes the maintenance and the slow progress of multimedia equipment, personnel's work efficiency is low.

As the management idea of ascension and the continuous development of computer technology, management urgently need to be able to use data mining technology is applied to the equipment status data stored in the database to analyze, predict possible equipment failure, which the passive service into active service, to improve the efficiency of multimedia equipment management and maintenance, at the same time reduce the multimedia teaching progress and effect of the influence of equipment failure. Therefore, in view of the current problems existing in the management process, combined with the actual needs, make full use of modern computer technology, network technology, data mining technology, such as technology, to establish a more standardized and institutionalized management mode, developing a networked and intelligent integrated management system, advanced multimedia classroom is facing a more urgent task.

3. System Functional Requirements Analysis

3.1. Client function

Through the user management function, the system administrator can complete the changes, additions, deletions and other operations of user information, and set the permissions of different users. System administrators backup system databases, set system server parameters, and view logs through system maintenance functions. System administrator through the classroom equipment management function, completed the multimedia device information to add, delete and modify and multimedia equipment information query, such as the installed equipment purchase date, amount, location, personnel, etc.; System administrator through the schedule management function, complete the schedule information of import operations, such as information query courses, such as course name, date of add, add one, when the multimedia equipment malfunction, unable to continue teaching, the system administrator can pass schedule management function for teachers to adjust the classroom in class; System administrator through the maintenance management function, complete equipment maintenance records, maintenance equipment statistics and other operations. Through the maintenance management function. teachers complete the declaration of multimedia equipment fault information, etc. The data acquisition function can automatically collect the status information when the multimedia equipment is working. This feature by control equipment suppliers to develop software to complete, the software can use networked multimedia classroom integrated management system database, and can be a fixed time interval, with the method of round tour to the central control device sends data collection command, after receiving the command, control equipment will be according to the requirement of the command corresponding multimedia devices working condition data, at the same time, the software can be collected data stored in the specified data in the table.

3.2. Browser side functionality

Teachers, maintenance personnel and the system administrator can through the equipment repair service function, the multimedia equipment repair service information to add, delete and modify operations, so as to realize the multimedia equipment failure date, location, the fault information declaration; By using this function, teachers and system administrators can apply for the use of multimedia classrooms, and provide information such as classroom number, name and date of use. Students and system administrators can conduct online training through online training function, and can watch video and share resources. Maintenance personnel and system administrators through the equipment maintenance query function, check the backlog maintenance equipment information, has to do maintenance equipment information, and can through the function of multimedia equipment

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maintenance information update; All legal users of the system can use the personal information management function after correct login, and can modify the information of photos, birth date, name, address and so on. The system administrator can manage the classroom equipment, multimedia equipment maintenance information, the system maintenance, the system user management, and can use of multimedia classroom equipment state information for data mining analysis equipment. Teachers can query the curriculum information, declare the failure of multimedia equipment, apply for the use of classroom, etc. The maintenance personnel can query the maintenance information of multimedia equipment, view the affairs done and done, and report the failure of multimedia equipment. Students can watch video online courses, share information, and maintain personal information.

4. Conclusions

This paper analyzes the current problems existing in the traditional multimedia classroom management system, from the technical feasibility, economic feasibility and data mining application feasibility from three aspects, analyzes the construction of networked multimedia classroom, the feasibility of integrated management system,

four kinds of different users of the system based on use case requirements analysis, and defines the main functions of the system, at the same time analysis system nonfunctional requirements.

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