

Research On The Universities Second Classroom Teaching Mode Resources System

Desheng wu^a, Guangyu Mu^b, Yuanhui Guan^{a,*}

^aSchool of Information Communication Engineering Changchun University of Technology, Changchun
130012, China

^bSchool of Management Science and Information Engineering Jilin University of Finance and Economics,
Changchun 130117, China

Abstract. A new kind of teaching model called the second classroom for college teaching system platform is presented, it can arouse students' interest in learning and avoid wasting time. The platform contains the system of the teacher, the teacher plays the core part of the system through the module, including the student management information, the examination paper information, news information, chapter information and the message information management. The student personal information is designed for students to the use learning, which should reflect student-centered theory. Through it, students can download videos and self-study materials, do on-line tests, communicate with teachers and other students and so on. By the system the students can learn more out of class. And platform have already been put into use, the effect is very good.

Keywords: MANAGNMEN, THE SECOND CLASSROOM, ONLIN TEACHER SYSTEM, INSTRUCTIONAL TESOURES

1. Introudction

Earlier this year, the central, the ministry of education and the national students federation issued "the plan about further developing student's quality (drafts opinion)", and this is an important measure taken by the CYL central committee and the national students federation since "College students' Quality Development Plan" piloted in several colleges in 2002. It aims to comprehensively press ahead the undergraduate quality expansion plan, integrate and deepen the second classroom activity projects, improve students' comprehensive quality and promote the development of quality education. The rich student extracurricular activities as the carrier of the second class, has covered a wide range, flexible organization form, highlighting the student individuality and training, etc. It has equally important function as classroom in education in colleges, which is an indispensable important segment of the college students' growth.

2. Colleges And Universities Second Classroom Teaching Situation Of Resource System

The future society is a comprehensive information society, the 21st century is the century of creating. Only knowledgeable or highly intelligent is far from being able to cannot the needs of the future society[1]. In order to meet new technical challenges, our basic task is to impart knowledge to the students and then we can stimulate and develop the students' mental or moral growth, making the cultivation of creative talents as the goal. Carrying out the second classroom is to prepare students for the future society, to train them into people who dares to reform and innovate and is full of creative mind[2]. There has already been a lot of extensive and intensive research of the second class at home and abroad, but there's no professional college training implementation support for research, so we will study how to implement the college professional training so as to provide mature measures and the corresponding experiences for college professional education.

* Corresponding author. Tel:+86-1 13844040118
E-mail address: guanyuanhui@mail.ccut.edu.cn

3. Colleges And Universities Second Classroom Teaching Resources System Of Feasibility Analysis

3.1. Research for students expected gains

It inspires students' interest to explore the subjects. Students produced a curiosity during the second classroom activities, triggered a wonderful imagination, and enhanced the idea of participation.[3] In the process of exploration, the students realized the hardships and happiness of research, enhanced students' learning awareness and aroused the student's enthusiasm of study, stimulated the passion of learning.

It improves the students' self-study ability. Students choose research-based study topics by themselves and voluntarily participate in the second classroom activities, which easily cultivates their self-study abilities. For students, doing research is essentially a self-learning process.

It cultivates the students' spirit of cooperation. The second classroom activities advocate cooperation, which is a platform for them to communicate mutually, cooperate and make technology-innovation together[4]. It can make students complement each other's advantages, improve their learning efficiency and promote common development. Students learned to communicate, dare to communicate, then the modern consciousness and cooperation spirit will be strong, which makes class become a warm and dynamic team.

3.2. Research will improve teachers' teaching research quality

Teachers update education ideas. The inquiry learning style changes the traditional teacher-centered teaching pattern, changes the teachers' teaching concepts. Teaching is an exchange activity, students doing exploration activities under the guidance of teacher. It should be an interactive process. And then there will be a very totally new form-more problems, less notes; more solutions, less answers; more student-designed activities, less teacher-designed activities.

Teachers improve the knowledge structure. The research-based study activities strengthens interdisciplinary, prompting the cooperation between counseling teachers and other teachers, inspiring teachers to acquire more knowledge, thus improve the knowledge structure of the teachers.

It improves the teachers' scientific research ability. In science and technology activities, teachers should not only guide students, but also consider more comprehensively than students. Students' technology activities pushed the teachers to the forefront of school scientific research[5]. Teachers must be familiar with general procedure of subject research education scientific research, master the basic methods, and have certain scientific research ability.

3.3. Subject research campus cultural atmosphere to create the new role

Based on the teaching atmosphere of problems probing, in the student-centered classroom activities, the second classroom teachers will no longer be the ruler of imparting knowledge, the students' learning, and became the collaborators, promoters[6]. Individual counseling teachers to be enthusiastic, enthusiastic help student lending material; Students dare ask the teacher for advice, dared to ask the teacher talk about such a different view of teachers and students to interact. My college will greatly improve the second classroom activity the teacher-student relationship.

the second classroom activity good result, will make teachers and students has changed the traditional teaching concept, thus activate the classroom teaching. Some disciplines proposed "big education" view, interdisciplinary positive of extracurricular position, against between subjects, strengthen the contact and penetration in the classroom teaching in the right position "subject" and "dominant" position, problems probing become the theme of classroom teaching[7]. The new teaching mode, the new management way gradually produce comes on stage in succession, the new idea of teaching and learning, students, quality forms gradually.

the second classroom activities will benefit the school regularly conduct, rich connotation of school quality education, strengthened our school does well quality engineering confidence.

Institutions of higher learning the second classroom teaching resources system construction

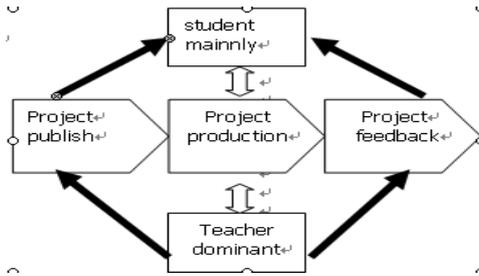


Fig. 1. The model of knowledge second classroom teaching

3.4. Programming languages choice

The design language is Java and Jsp, Java do background design language, Jsp as a receptionist page language. Chose them, because their own advantagments.

Java Write Once, Run Anywhere, Security, Network as the center of Programming , Dynamic, and Dynamic Extensible offers, Internationalization, (Performance, programmers Efficiency and Efficiency and a Programmer to - Market[8]. And the generation of the content Jsp tags for separation, showing emphasized reusable component, USES the logo simplified page development, robustness and safety, good portability, of enterprise-level scalability and performance.

3.5. Database choice

The purpose of small data I choose Server2000 database SQL is standard version. The standard version on the system for very low, parameters are:

- Microsoft Windows NT Server 4.0 Service Pack 5 or higher version,
- Windows NT 4.0 Server Enterprise Pack five or more happen Service version,
- Windows 2000 Server, Windows 2000 on the Server or higher version

Table 1. A table Of hardware requirement

hardware	follows requirement
CPU	The Intel or compatible Pentium 166 MHz or faster
RAM	At least 64 MB, suggest using 128 MB or more (if the operating system has higher requirement, must first meet)
Hard drive space	400 MB
CRT	VGA or higher resolution. Need to 800x600 or higher resolution for SQL Server graphic tools
Pointer quipment	Microsoft mouse or compatible mouse
CD-ROM	necessary

4. Module Design For The On-Line System Of The Extracurricular Educational Activities

4.1. Teacher-end

The teacher-end is the core part of the whole system, through which teachers can manage all other modules, including Students Management, Examination, News, Messages, Course, Personnel, Setup, and can indirectly manage the student-end.

4.1.1. The Students Management

Students management consists of two sub-modules, which are the batch import and the students list.

Batch import: Students' information is primarily Excel-format files, the module will load it into the database automatically without the ordeal of typing. But the Excel format file must be in accordance with requirements of the format design: CODE (student Numbers), NAME (the student's NAME), PASSWORD (your PASSWORD), BELONG_INCLASS (by class). Content may vary but the order has to be followed to ensure that it works properly. Besides, information of the same student is not allowed to be repeated.

Students list: a display of all the specific information of the students, including student id, name, class and password. The teacher also is in the administrator can modify, delete, or add students' information, and can export the information out of selected batch in the Excel format.

4.1.2. The Examination

It consists of three sub-modules, which are the batch import,, the test question list, and setup.

Batch import: same with Students Management. But examinations have to be categorized into types and chapters and be listed in order. Repetition is not allowed.

Test question list: manifesting information of the code number, questions and type (true-or-false or multiple choice). Administrators can locate object question effectively by chapter or type information. Administrators can also edit a single question, option, answer, or explanation, but have to do it in order. The delete function is available, the upper limit being ten. They may also backup what they want in the Excel format.

Setup: Only the amount of questions can be modified with the type being true-or-false or multiple choice. Digital number is required to pass the backstage test. It will limit the amount of tests students are to take.

4.1.3. News

News is the entry of the news system management. Users can publish, edit, and delete news. When releasing a piece of news, it is necessary to have title and content[9]. Appendices are supported, but no more than ten, be it a compressed package, a word document, or a picture. Amendment is limited to a single piece of news. Modify its title, content and appendices are allowed. Besides, the number of outdated news being deleted has a upper limit of 10.

4.1.4. Message

Message is where the teachers and students get mutual interaction and communication. The teacher can release relevant teaching materials, and answer questions. Message list on the home page displays message information list, including message title, reply message issued amount, time, and in accordance with the time descending order. Click on the title of the single message this title may enter the discussion, users can see all this title reply message. Users can participate in this topic discussion, and use the shortcut Ctrl + Enter quick reply. Can delete this message and reply to delete this message, the contents of the cascade deletion this message when all the reply message. Delete one of the reply of message does not affect other message information. In addition, users can also batch delete multiple message information.

4.1.5. Section management

Section management, mainly is the course add chapters, modify chapters of its name, can also order etc.

Chapter Settings: display section information table, including permutation order, chapter Numbers, chapters in accordance with the name, and the order of the ascending arrangement chapters. Its operation is also add, edit, and delete. Add chapters need to fill in chapters, arrange order, chapter Numbers, ranging must chapters name for the digital and submit to the corresponding after tooltip[10]. A single chapter

information, modification of permutation order cannot be modified for existing permutation order, otherwise will give corresponding tip information. Users can delete the batch of chapters.

4.1.6. The cipher modification

Password changing, users can of personal information in the security Settings. Modify the password, must to enter the correct password, and twice the new password, enter the same new password length must in 20 less than. If the above operation have error, click the submit button give corresponding hints.

4.2. Students end design

The student is designed for students to use, learning, should reflect student-centered theory. Students through access can download video, self-study materials, on-line test, online and teacher, classmates, etc.

4.2.1. Home page

The home page is a sites attract the layout of window, so homepage appears to also is important.

Home page mainly display course introduction, news dynamic, experimental teaching, etc.

4.2.2. Online teaching

Online teaching mainly shows the main content, teaching is the main content of the course will be recorded in the website. When recording must have good typesetting, distinct paragraph structure.

4.2.3. The experimental teaching

Experiment teaching union with experimental video online teaching, the form to allow students to the understanding of the course material and digestion. Realize the teaching provide a lot of video material for students to download to watch.

4.2.4. Sself-study heaven and earth

Self-study of heaven and earth, is the student learns course content, watching video, in this experiment testing his learning effect. Students may at any time extracting any chapter to test his test of this chapter learning. Try out system will give the correct answer and detailed explanation of the answer.

4.2.5. Online FAQ

Online FAQ is the place, teachers and students to interact with students in this class, and his teacher for communication.

Online FAQ home page displays message list, show the message title and time. Click on the title may enter the discussion about this problem, learners can any reply message. In addition, trainees also to be released in the new message.

5. Conclusion

The extracurricular educational activities have an indispensable value in the all-round education. Advantages are as follows:

Education should be accomplished with the mutual effort of both students and teachers, rather than in a one-way mode. This idea is fully illustrated in the extracurricular educational activities, in which students enjoy full autonomy and therefore show great passion.

Education should adhere to the principle of respecting diversity. In extracurricular educational activities, students with unique characteristics have varied activities and roles specially designed for them, which leads to an individualized education.

Education should not attempt to perfect students, but to better them. Extracurricular educational activities play such a role and help foster the relationship between students and teachers.

6. Acknowledgment

The authors are grateful to the support of The Education Science Programming Funds of Jilin Province under Grant No.GH08130.

7. References

- [1] Qian Jin and Ye Feiyue. Study on Practice Reform and Innovation of Information Management and Information System. Modern information Aug. 2009:199-202.
- [2] Long Zhaoyang and Jin Xiao en.Research on training pattern of the practical ability in major of information management and information system. Researches in Library Science Sep.2006:2-8.
- [3] Chen Yan-shou and Song Ping-ping. Practice teaching reform and practice of information management and information system specialty.Experimental Technology and Management May 2008:139-143.
- [4] Liang Chang-yong, Gu Dong-xiao, Li Xing-guo, and Yang Shang-lin. Exploration and Practice of the Reform of Undergraduate Education of the Specialties of Information Management. Journal of Higher Education Research. Jan 2008:64-66.
- [5] Abdullah,SheikhSH,KhairuddinO,eta. license seplate recognition based on support vector machine.CEEI,Electrical Engineering and Informatics 2009:78-82.
- [6] JimeHnezP,Thoma~F,TorraSC. D collision detection a survey . Computers&Graphi 2001:269-285.
- [7] XIAO Chengyong,Xiang Weiming. Constructing 3D Gam e Engine Based on XNA.Computer Knowledge and Technology May 2010:3401-340.
- [8] Architecture of 3D Game Renderer and Its Technologies.Application Research of Computers.Aug. 2009:45-48.
- [9] Wang lei.The Game Scripting Language Lua.Computer Knowledge and Technology Feb 2010:899-901.
- [10] HeXianjian,ZhengLihong,Wuqiang,eta. Segmentation of characters on carlicen seplates.IEEE,MultimediaSignal Proessing 2008:399-402.