Design of Multimedia Assisted Teaching System for Basketball Theory Course

Jin Li¹, Sihua Li²*

¹Minjiang Teacher College, Fujian, Fuzhou, 350108, China
²Teaching and Research Section of Psychology and Education, Capital University of Physical Education and Sports, Beijing, Haidian, China, 100191

*Corresponding author e-mail: lisihua@cupes.edu.cn

Abstract. With multimedia technology into the university classroom, changed the traditional way of teaching in modern teaching style, bring so many changes back to the classroom teaching, especially some more boring theory courses, chunks of text teaching was replaced by the multimedia way, become colorful, not only brought convenience to the teacher's teaching, and for the students to improve the learning interest in basketball theory course, for example, this paper studies in which the design of the multimedia auxiliary teaching system

Keywords: Basketball Theory, Multimedia Technology, Auxiliary Teaching System, Design

1. Introduction
Multimedia is a combination of a variety of media, generally including text, voice and image, and other forms of media in a computer system, multimedia refers to the combination of two or more media using a man-machine interactive exchange of information and media media, including text image photos voice animation and film, and programs provided by the multimedia interactive is a subset of hypermedia system, and hypermedia system is the use of hyperlinks in the composition of the global information system, global information system is the Internet use TCP/IP and UDP/IP protocol of application system Two-dimensional multimedia web pages using HTML language such as XML, three-dimensional multimedia web pages using VRML language use CD release many multimedia works, will be more use of network issue to be expected, if will be based on the computer network multimedia technology applied in basketball theory course teaching, will cause large enough in such a class enough to welcome change.

2. Reforming traditional teaching methods with multimedia technology
With the rapid development of science and technology and the reform of teaching system, course content and the traditional teaching methods must reform our above structure of multimedia teaching system, is the need of the situation, and have a solid foundation for a castle in the air it is not imagination, but has a strong the realizability of the rapid development of multimedia technology, we reform the traditional teaching methods, the chance more media technology, can understand from two
meanings: one is the diversification of information media, geographical environment integrated it into writing sound image, and other audio-visual media information, are integrated into computer unified platform so don't increase the flexibility of operability and content update trade-off in particular, it has the incomparable abundance flexible mode of graphics features, is produced in the process of sports theory class teaching special need, it also make a lot of media technology had give full play to their specialty places this combination makes the multimedia technology and physical education theory class teaching both complement each other, can have the effect of the combination of bead, can make the traditional analysis of the change of teaching production life of the whole teaching process, which involves two objects, the teachers and students, this is two main body in the whole teaching process therefore, a multimedia teaching system must contain the unity of two systems, namely, the teacher-oriented system and the student-oriented system. The teacher system is used for lectures and demonstrations, and to relieve students' doubts.On the other hand, from the main links experienced in the whole teaching process, we should focus on the three links: teachers' lectures and exercises and the assessment effect of answering questions

3. Functional requirements analysis
According to the different users of basketball auxiliary teaching system, the function of the system can be divided into four aspects: login function, student function, teacher function and administrator function.Login function: both teachers and students can establish a secure login mode according to their preferences [1-3]. After logging in, teacher users can publish teaching information, master students' information dynamics, and answer questions raised by students online. After logging in to the system, student users can learn and communicate online. Be able to ask questions and leave messages to teachers [4-7]. The system administrator is able to manage all site information and maintain the system and usage.Student function: students can understand the contents of basketball teaching by logging on to the auxiliary teaching system of basketball theory course, and can query the important and difficult points in basketball teaching in auxiliary teaching. And the students' test results will be stored in the student files [8, 9]. In the process of auxiliary system learning, students can feedback to teachers in time and discuss among students.Teacher function: after logging into the basketball theory course assistant teaching system, teachers can publish the teaching course content, test content, and can review the students' tests and count the students' scores. The subjective questions are reviewed by the teacher, and the scores can be included in the student file. Teachers can publish teaching tasks with the help of basketball online learning system, and can communicate with students through the system, which can not only solve the problems encountered by students in learning in time, but also adjust and update the teaching plan and teaching content.Administrator function: in the system, the main responsibility of the administrator is to maintain user information, maintain the registration information of the system, and assist the teacher to upload and update the basketball theory teaching plan.

4. Technical selection for the development of auxiliary system in teaching of basketball theory course

4.1. Asp
ASP is a kind of server-side scripting environment, which can combine HTML web pages, ASP instructions and ActiveX components to establish dynamic, interactive and university Web server applications. You can include HTML tags, plain text, script commands, and COM components in ASP pages. You can add interactive content to a web page, in addition to creating HTML applications that use HTML pages as user interfaces.

4.2. Access
Access is widely used in many places, A lot of small businesses and big companies like to use desktop systems that Access make and process data. Access, are also frequently used in the development of
Web reference programs These applications run in ASP technology in internet information Services. More complex Web applications tend to use PHP/MySQL or ASP/Microsoft SQL Server. For example Access storage is simple, Easy to operate; Access is a formation-oriented development tool; Access integration environment can process multiple data information; Access support ODBC, Through Access1 powerful DDE and OLE features, Be able to embed bitmap, sound, and table in a data table, You can also create dynamic database reports and forms, It has the characteristics of good interface and easy operation.

5. Design of auxiliary teaching system of basketball theory course based on asp theory

5.1. Design of design
The system is mainly divided into classroom teaching module and extracurricular auxiliary module. Its specific structure is shown in figure 1.

In the classroom teaching module of the system, the teacher can arrange the content of basketball teaching, the lesson content is mainly displayed in the form of video in the system, and the teacher needs to arrange the students to contact according to the teaching schedule. In the extracurricular auxiliary teaching module, students can choose specific teaching contents according to their own preferences after logging in to the system. Through the analysis of the system, we can find that there are three main users in the system: administrator; teacher; student. All management authority, and there is an independent management platform in the system, can set and adjust the various parameters of the system, and can modify the information of teachers and students, Responsible for curriculum setup and system site maintenance and update. Its main task is to maintain and configure the system to ensure the smooth operation of the whole system. Teachers have only lower authority in the system than administrators. Teachers have an independent teaching management platform in the system. According to this platform, teachers can release teaching tasks in time and modify students' tests. In the teaching management platform, teachers need to answer the students' learning questions in time. In the system, the authority of the teacher is given by the administrator, so the user management authority can be given according to the actual demand. Students are the ordinary users of basketball aided teaching system, the largest user group and the final service of the system. After logging in to the
system, students can browse various course contents under the system navigation, and students can flexibly choose learning methods according to their own needs. And the problems encountered in learning can also communicate with teachers in time, and interact with other students.

5.2. System access flow
As the system user requests ASP home page through a browser, Web the server requests accordingly, The ASP is called to execute the ASP file, And will explain the script language, At this point, the database is connected by ODBC, Database access components to complete database operations, Then ASP generate HTML pages containing database query results to display on the client side. Because ASP run on the server side, And the results are fed back to the user's browser through HTML pages, Therefore, Doesn't cause a leak in ASP source. This greatly enhances the new security and confidentiality of the system. ASP or an object-oriented scripting environment, Users can add their own ActiveX components without extending their functionality. It expands its application scope. tiyu.mdb, is the system information data To improve the security of the system, During system design, the library of the system is named tiyu.asp, There are user tables user、 system information tables sysinfo、 after-class discussion table review and so on.

5.3. Analysis of system function module
In the design of the user management module, the main function of the system user management module is to manage the user's information, including the user name, password, and permissions. The permissions include three categories: administrator, teacher and student. In addition, for users registered for the system, there are also browsing and not allowed to browse in the system, these content needs to be managed at different levels. In the classroom teaching module design, the classroom teaching module is divided into basketball action technology, basketball theory and basketball tactics teaching, three modules, on the basis of which different module functions are divided in detail, and their specific functions are shown in figure 2.

![Figure 2. Classroom modules.](image)

In the auxiliary teaching module, teachers and students can communicate through the extracurricular auxiliary teaching module in the system. Therefore, it can be regarded as an extension of the class. In the auxiliary teaching module, middle school students can ask questions to teachers, teachers need to answer students' questions.
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6.1. Student user page design
In the process of student client page design, the system mainly includes a large number of functions, one refers to problem browsing, the other refers to asking questions. After logging in to the system, students can browse the discussion content between teachers and other teachers, participate in the discussion, and can use the search engine of the system to query the content they need.

6.2. Teacher page
After logging in to the system, the teacher user can enter the teacher browsing page in the system, in which the teacher can see the questions raised by the students and answer them. Teachers can also actively participate in the topics discussed by students to help students answer questions and questions. At the same time, fuzzy filtering function is also provided in the user port of teachers, which can facilitate students to manage information. Teachers can also selectively delete and modify some of the problems discussed by students.

6.3. Online testing module
The online test module plays a very important role in the system. Its main test content focuses on the rules of basketball, because there are more rules involved in basketball. Even if students understand some rules of basketball, there will be some questions in the process of practical application. In addition, students can check their own learning situation through the test system, and teachers can use the system to test the teaching effect, which plays a very important role in improving basketball teaching and can effectively improve the teaching quality.

7. Conclusion
Under the mainstream of the development of science and technology and modernization in the world today, we have to admit that multimedia technology is playing a more and more important role in the field of university education. Multimedia teaching is the innovation and reform of teaching mode. Compared with the traditional classroom, multimedia teaching content is more abundant and more diverse, which can stimulate students' interest in learning more effectively, arouse the enthusiasm of learning, and realize autonomous learning. In various demonstration operations, cultivate and develop students' thinking ability in class. In addition, with the increasing popularity of electronic equipment, multimedia teaching conforms to the trend of the times and responds to the development of science and technology. Through the innovation and reform of educational methods, the teaching quality has been effectively improved. In the teaching of basketball theory, it is necessary and useful to design a scientific multimedia assistant teaching system.

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