

Research on College English Teaching Mode based on Multimedia Network Platform and Autonomous Inquiry

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Abstract

In recent years, Multimedia technology has been popularized in higher education. In order to construct the multimedia system design the author study the multi-layer C/S technology and the Joomla framework based on MVC model. By using PHP and MySQL database, Joomla framework can realize the commonly used function in Web system. On the other hand, as English teaching mainly to impart language knowledge, however, the teaching method that cultivates learners' ability has not been paid enough attention. Based on the empirical analysis, the author analyzes the college English teaching mode based on autonomous inquiry; the result shows that 60% teacher use multimedia aided instruction, 70% teacher willing to organize English dialogue, 30% teacher will held group discussion in English. While only 10% teacher select case analysis and specify the students to introduce knowledge. Through the contrast experiment, the results show that the inquiry teaching can significantly improve the students' English learning ability; the students' score has been significantly improved.

Keywords: *Multimedia network; C/S; English education; MVC framework; autonomous inquiry*

1. Introduction

With the development of educational technology and the advancement of educational information, the development of educational technology has brought about great changes in educational philosophy and teaching methods, and also changed the teaching environment of the school. State key construction universities set up courses, using multimedia to teach the class proportion should reach more than 30%, the other institutions of higher learning should reach more than 15%, developed by a certain number of multimedia courseware, also specified multimedia teaching is refers to the use of multimedia technology teaching[1]. Under such a background, increasing investment in the environment of modern educational technology and the campus network of colleges and universities, colleges and universities teachers to use the multimedia technology in teaching and learning has been popular, in the multimedia teaching and the educational teaching reform plays a pivotal role[2-3]. In our country, although the development of information technology is relatively backward, the integration of information technology and foreign language teaching has become the main stream of College English teaching reform in recent years[4]. In this context, based on our in the school student's characteristics and actual teaching, aimed at the practical problems existing in the teaching of College English listening, active integration of information technology and College English listening and speaking courses, to cultivate students' autonomous inquiry ability oriented, to explore the construction of the inquiry mode of College English audio-visual said network teaching system and put into practice teaching, good teaching effect is achieved.

The idea of inquiry teaching is the first proposed by Dewey, a famous American educator. He believes that education is not only to enable students to learn a lot of knowledge, more important is to study the process of scientific research or methods. For education reform, the states of a common and basic point is how to make local youngsters who have needed in the 21st century key ability, obtain and information processing ability. Government should take the initiative to explore the unknown ability, analyzes and solves the question ability, cooperation and coordination ability and sense of responsibility, and the ability of lifelong learning[5]. As an active learning process, inquiry teaching is a kind of learning way that students explore their own problems under the guidance of teachers. Inquiry learning is a relatively receptive learning; it is a way of learning in the discovery and experience. In the inquiry based learning, the students in front of the conclusion is not ready, but the problem, students should participate in the process of solving the problem, to obtain knowledge[6]. Students from cannot only learn the knowledge, can also learn the information collection, analysis, and judgment, and the formation of the initiative to acquire knowledge, apply knowledge, to solve the problem of good learning attitude and habit, to cultivate their thinking ability, creativity and practical ability. Inquiry teaching process, the teacher is the organizer, helper and supervisor. Teachers do not directly tell students the relevant knowledge and questions, but to create the necessary exploration environment for students to stimulate the enthusiasm of the students to explore, so that students find problems and solve problems. This process tends to enable students to better grasp the knowledge and skills, and will help them learn to learn.

This paper provides some ways to improve the exploratory teaching in our country. At present, our research about inquiry learning is still at the primary stage, the general characteristics of more research of inquiry learning, the research on inquiry teaching model is not too much, but most scholars only study application mode in scientific disciplines, little research in the history of the subject, the application of language subjects in especially its application in College English culture teaching, is almost blank, based on the domestic and foreign famous inquiry teaching mode as the foundation, from the perspective of cognition, build a student-centered, teachers on the teaching pattern of English cultural leading university, to change the traditional teacher centered injection mode College English teaching mode, teachers can give full play to the leading role of learning, the students under the guidance of teachers, to explore and learn together[7-8]. This can not only improve the students' cognitive ability of the culture of English speaking countries, cognitive strategies, and increase students' cross cultural communicative competence and improve the quality of College English teaching, but also to cultivate students' innovative thinking, exploring consciousness, enable students to develop in the direction of study and lifelong learners.

2. Multimedia Management Service System

2.1. Software Development Architecture

The system model of software development mainly experienced three stages: Client/Server and multi-layer model based on Browser/Server. Centralized model, has not adapted to the requirements of the development of information technology. C/S and B /S are the two mainstream technology of architecture of technology in today's world development mode, C/S also known as client / server mode, server usually uses high performance PC, workstation and minicomputer and using large databases such as Oracle, Sybase, Informix, or SQL Server, the client needs to install a dedicated client software, C/S system architecture, such as shown in Figure 1.

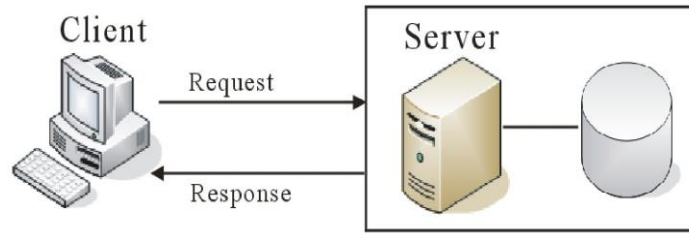


Figure 1. C/S System Architecture

B/S structure, that is Browser/Server structure, is only the installation and maintenance of a server, and the client uses the browser running software, such as Firefox or IE. Server installed Oracle, Sybase, Informix or Server SQL, MySQL, and other databases, the browser through the Server Web data with the database to interact. Three layers of B/S system structure with three layers client / server structure, three layer patterns, the system divided into three layer: presentation layer, also known as user interface layer, application layer, and data store layer, also known as the data management layer.

2.2. MVC Software Design Patterns

Model-View-Controller to an application of the input, processing, output in accordance with the Model, View, and Control way to separate. Applications that use MVC are divided into three core components: the model, view and the controller, which are separated from each other, each is dealing with their own tasks, MVC mode design ideas as shown in Figure 2. Three parts correspond to internal data, data representation and input and output control. Model for packaging and application of the business logic data and the data processing method; the view is model of the external representation, a model may correspond to one or more view, the view is program system and external system interface; controller communication model and view the role for the application of process control. It handles events from the user's behavioral events and data models, and responds to events.

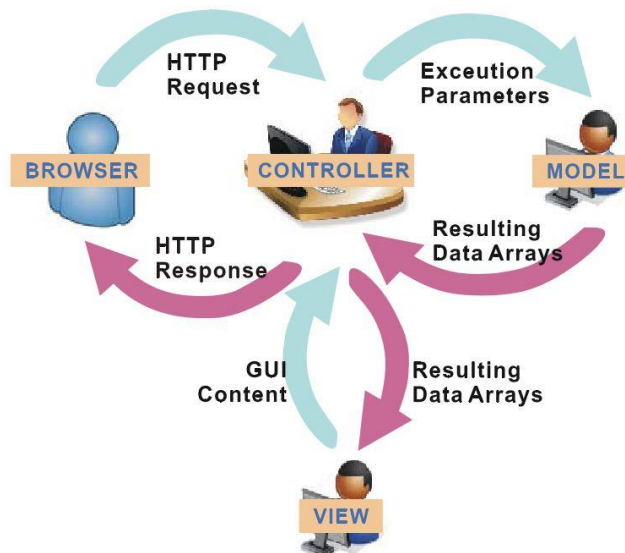


Figure 2. Schematic Diagram of MVC Design Pattern

Joomla! is a set of PHP+MySQL database development, open source content management system that can run across the platform. Joomla! Framework has its own

user registration management, news release, media management and other components, but also has excellent ability to expand the ability to. For the Web system programmer, Joomla! Framework has achieved the most commonly used functions in the Web system, and the later versions of Joomla 1.5 have adopted the excellent MVC model development. If web system development for other functional requirements, you can use this framework to web system of secondary or expansion and development, without the need to alter the core code of the Joomla!, which follows the Joomla! Framework is extended development of norms and mechanisms written components, modules and plug-ins to meet the functional requirements of Web System development. To improve the efficiency and flexibility, it is widely used in the development of small and medium Web system. In the framework of Joomla, the component is the main part of the realization of the function of Web system, and it is the application program to complete certain functions. Joomla! The most important extension mechanism of the framework is the component extension mechanism MVC model diagram.

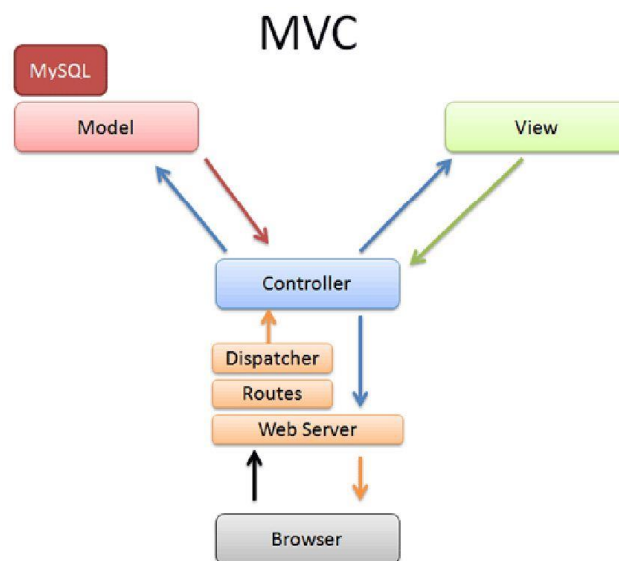


Figure 3. Joomla! Framework Component Extension Mechanism MVC Model

3. Model Building

We first highlight according to the teaching contents to determine inquiry goal, arranging explorations is because any inquiry activities is the most important prerequisite knowledge, the lack of necessary knowledge, inquiry activities will not be able to start again, for students of English culture inquiry skills and thinking ability training is the core of the model lies in the process of teaching, students' comprehensive use their has some life experience and cultural knowledge "through data collection, to discuss cooperation to solve a new problem, of English culture knowledge in the process of middle school students and exploring ability will get double development. In the inquiry of College English culture teaching mode, teachers for students to explore as much as possible to reduce the restrictions, which is conducive to play the subjective "potential students' English teacher must encourage students according to their own methods to a question inquiry, must allow students to form their own views, allowing them to find ways to clarify they observed that" the only way to design the teaching mode of College English culture

is in an open state of "teacher's task is to study the students in addition to existing knowledge, design of teaching content, teaching methods, designing evaluation methods, but also to the students to discuss free exploration of space, but this kind of open the research environment, and not let things drift, the entire teaching activity must be under the guidance of the teacher, when students choose to explore the target. When the teacher can provide guidance to students, to help students, if students ask, teachers should also provide supplementary information or clues, and even to give more detailed guidance and help.

Student's inquiry learning time! Space and conclusions are also open, was the first to break the in class and after class boundaries, classroom teaching moderate extends to the community, and the classroom teaching and social problems associated. Secondly, it is the way to open the learning channels, classrooms, libraries, newspapers, TV and so on are the way to explore the cultural knowledge of English. In previous inquiry teaching, the students between the mutual exchanges and cooperation, teachers just in the side observe, and not a member to participate in the discussion of "inquiry type of culture teaching in College English teaching pattern not only emphasizes the students between cooperation and exchanges, but also stressed that the exchanges and cooperation between the students and the teacher. Inquiry type of culture teaching in College English teaching mode of English classroom teachers in student organizations, find the learning materials and students to create cooperation to explore their own time at the same time, but also as a collaborator and students together to construct new knowledge, experience a variety of emotional experience, and use their own rich experience, scientific method and extraordinary magnanimity to influence students "in the process of teacher-student mutual cooperation and exchange, students can receive the correct guidance, teachers can in and students in the process of cooperation and communication more accurately grasp the students' thinking to, thus more accurate feedback to obtain information, the timely guidance and help.

3.1. Teaching Mode Analysis

In recent years, culture teaching has attracted more and more attention of the domestic English education, many college English teachers in specific teaching practice constantly explore effective English culture teaching mode. However, because of the traditional education in China, at present, the culture teaching in College English teaching level is not high, have not formed a systematic and effective culture teaching mode. In order to get a deeper understanding of the current situation of College English culture teaching in China, I conducted a network questionnaire interview to college English teachers.

Table 1. Present Situation of College English Teaching Mode

Serial	English teaching model	result
1	The cultural knowledge	80%
2	Chinese and Western culture	50%
3	Teachers select case analysis	10%
4	Specify the students to introduce knowledge	10%
5	Teachers guide students role play	10%
6	Multimedia aided instruction	60%
7	Introduction to the film	80%
8	Organize English dialogue	70%
9	Group discussion in English	30%
10	Play English songs	20%

From the point of view, the current practice of culture teaching in College English teaching, culture teaching model of single issue has not been effective attention and solve. The culture in English teaching is still in the classroom as the center! In the books as the center, the teacher as the center of the classroom mode and most of the College English teaching are class, chalk and talk, and black chalk, notes and homework, although many schools with multimedia classrooms, but the utilization rate is very low, the traditional culture teaching pattern information quantity is small, lack of interactive education, is not conducive to the mobilization of the enthusiasm of students' autonomous learning is also contrary to the rules of language learning. When the students on a topic in depth research, they need through the Internet, libraries, newspapers, magazines, and other channels to read a lot of information, learn the relevant knowledge, thinking and problems related to the themes, then in the class presented different forms of research results, and to the questions and reply. This process makes them not only through the comprehensive training of reading and writing, but also the knowledge of the textbook is far beyond the scope of the textbook. Although each person's energy is limited, it is impossible to do a thorough research on all topics, it is important to explore in-depth study and study the ability to get training and training.

Table 2. Questionnaire of English Teaching in Class

time	number	percentage
<5mins	3	10%
6 mins -10 mins	6	20%
11mins-15mins	9	30%
16 mins -20mins	6	20%
21 mins -25 mins	3	10%
25 mins -30 mins	2	6%
>30mins	1	3%

3.2. Experimental Analysis

The goal of this experiment is mainly to verify the implementation of the inquiry mode of College English culture teaching mode: Students' comprehension of the target language and culture is improved, the students intercultural communicative competence whether to raise the, students' autonomous learning ability of the cultural knowledge of the target language is improved. If the experiment research tool is two exams, namely: culture test before the experiment culture test, after the experiment, two culture test scores used to analysis of the implementation of inquiry type of culture teaching in College English teaching mode, the experimental group students' overall level of English cultural knowledge has improved, the two culture tests is by researchers to existing cultural knowledge of students as the basis, in accordance with the English cultural teaching objectives and curriculum standard design. Cultural test before the experiment in order to understand the two groups of students at present to the cultural knowledge mastery and the culture test is to study college English culture teaching mode, students in the experimental group of cultural understanding and intercultural communicative competence is improved.

The conclusion is that the experimental group student achievement and control group students are extremely significant differences, score of experimental group was significantly higher than that of the control group students, suggesting that the inquiry of English culture knowledge in College English culture teaching model and students' autonomous learning ability, cultural understanding and intercultural communicative competence is positively related. Practice has proved that the inquiry based teaching has achieved good teaching results. After a period of time of

inquiry learning exercise, the students in exploring the cultural background knowledge and understanding of the themes and exploring the language points and their research achievement in class in English to show the process to obtain the beyond the language itself and just is to language is the carrier of learning ability, and gradually develop the habit of their own learning. Embodied as follows: (1) learning ability has been strengthened by the students in the process of discovery, study and solve the problem of reading level, using the Internet, books, magazines and retrieval, data access, and processed by computer, management, processing information ability can be improved. (2) Enhance the ability to test. Students are no longer afraid of listening, speaking, reading, writing, *etc.* as the main form of a variety of examinations. (3) Students' learning desire and interest. At each end of the semester, the author should provide feedback and advice to the inquiry teaching mode through the questionnaire and the interview form. Most of the students in favor of this to solve the problem as a starting point, pay attention to their self-discovery and creativity of teaching methods. They think, around the theme, topics themselves, their through various resources to seek answers to the way keep their participation in the initiative and enthusiasm for learning, and in the analysis of exercise thinking ability and problem solving ability, expand the knowledge and the cultivation of autonomous learning and language ability in the practical application of problem solving process is improved.

Table 3. The Test Item Discrimination Index Evaluation

index	evaluate
>0.4	very nice
0.30–0.39	good
0.20–0.29	Need to modify
<0.19	difference

Table 4. Test Score Significance Test

group	number	average	standard deviation	Z Test
experience group	40	60.3	9.39	-0.26
control group	40	60	9.30	

Table 5. Test Results After Experiment

group	number	average	standard deviation	Z Test
experience group	40	71	7.16	3.1
control group	40	65	7.31	

The significance of the textbook compilation, the study of College English culture teaching mode provides a reference model for the preparation of English textbooks. English textbooks write both should keep the fine tradition of the Chinese College English textbooks and excellent experience, and should reflect the distinct characteristics of the times and cultural connotation, make foreign language teaching design fully reflects students as the main body of the teaching idea, but also give full consideration to the physiological and psychological features of students, follow the rules of English cultural knowledge learning and help teachers to use flexible teaching methods to guide the students to study. In addition, the content of the teaching material should be closely related to the students' actual life, let the students come out from the teaching materials, design the real communication environment, and cultivate the students' communicative ability. For

students the meaning of inquiry in College English culture teaching mode, students must clearly realize that they are the main body of the class; students to get rid of the shackles of the traditional teaching mode as soon as possible, to participate in the process of research activities in the past. Group discussions often require in the inquiry of College English culture teaching mode in the debate and opinions! Overall, due to the understanding of things and different students have experienced different, for the same thing, there are different opinions and views of different students, students should learn how to cooperate with others and for reflection and improvement of his views and his people, so as to construct a new and deeper understanding of the students. We must understand that learning and knowledge construction process, consciously and consciously develop the habit of active learning and inquiry. Significance for teachers, explore the type of culture teaching in College English teaching mode of teachers put forward very high requirements, teachers should for students to create a good study environment, always pay attention to the students' interest, encourage students to actively participate in inquiry activities, give students independent activities and performance of the self-opportunity, should also be given to the students in a timely and effective learning cues and affective implied. Teachers should stimulate the students' thirst for knowledge, cultivate students' study interest, cultivate students' ability of cooperation and exchanges and promote students to construct reasonable knowledge structure "of teachers in traditional teaching is the authority of knowledge and classroom instruction at the same time, the inquiry teaching mode for teachers to change their roles, as the guide of students at the same time and partners in the evaluation of students' inquiry learning teachers should according to the specific circumstances, according to the students' learning advantages and disadvantages put forward targeted improvements" evaluation of students cannot use the same standard, but to consider different personality characteristics, students' interest and ability to find their potential and expertise to help students in self-understanding, build self-confidence.

4. Conclusions

The significance of classroom teaching design, to explore the type of culture teaching in College English teaching mode in the classroom, teachers are not the traditional knowledge teaching but students intermediary, guide, the idea changed thought of the traditional teaching with the teacher teaching as the main principles, and establish a take the student as the guiding ideology of the subject. This teaching model advocates take the student as the center, focus on the cultivation of students' cross cultural communicative competence. In the implementation process of advocate students to participate in the experience, independent thinking, let the students under the guidance of teachers, discussed from the cooperation, actively participating in knowledge discovery, to solve the problem. Exploration of College English culture teaching mode focus on English cultural knowledge formation process, and not just the teacher acts as the mediator's role, through interactive become students learning English culture knowledge consultation, guidance and supervision. Outstanding students for students and teachers to guide practice show that this inquiry mode of College English culture teaching mode to cultivate students' initiative spirit and innovative spirit, to improve the independent learning ability of students' English cultural knowledge to improve.

In this study, we construct a network teaching system of College English listening and speaking, which is based on the learner's self-inquiry learning and the integration of information technology and foreign language courses. Practice has proved that the teaching system is helpful to cultivate students' autonomous learning ability, improve students' learning interest and cooperative consciousness, arouse students' initiative and

improve their English listening and speaking ability. At the same time, the teaching system realized the students' network of autonomous learning process for effective monitoring and evaluation, improve the students' self-management consciousness and self-regulatory strategies, form the good circulation of the knowledge. Of course, in the implementation process of the teaching system, there are still some problems and shortcomings, through the feedback information timely collected from students and teachers, we will to these problems and deficiencies of reflection and research, in order to further adjustment and improve the teaching system. We should first change the teaching idea, from the previous with the teacher as the center, to impart the knowledge and skills of the language teaching ideas and teaching practice into take the student as the center, pay more attention to cultivate the language practical ability, autonomous learning ability and practice ability, and gradually achieve the training the sustainability of lifelong learning ability as the goal of educational thinking. This transformation also requires a process of adaptation and learning. At the same time, in guiding student's inquiry learning process, teachers to explore the theme of the determination, to explore the mode and process of guidance, evaluation of the inquiry will directly affect the inquiry learning effect, therefore, the challenge will increase. In addition evaluation methods need to be changed. Inquiry learning to encourage highly involved in the learning process of students, which requires corresponding changes in evaluation methods, gradually changed from original summative evaluation index evaluation method to process evaluation and summative assessment using a combination of multiple evaluation methods.

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