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Study on College English Teaching Mode Multimedia Assisted Based on Computer Platform

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Abstract

College english teaching mode multimedia assisted based on computer platform is studied in this paper, and the inevitable trend is discussed which to cultivate students' English language proficiency by computer networks and multimedia tools in the college English teaching reform. It has unparalleled advantages than traditional teaching mode. Then foreign language teaching mode based on B/S architecture and computer networks is paid more attention to introduce, which provides a new way of thinking of college English teaching reform and is also a good reference of the similar institutions in computer-aided teaching.

Keywords: *college English teaching; multimedia; computer-aided platform; networks*

1. Introduction

The rapid development of science and technology promotes that human society enters the computer information age, and the information technology has become a human basic skill in 21st century. As information technology continues to mature, the computer network enters into modern life at an unprecedented speed, and changing people's daily life fundamentally. So, we should stand on a high level of the information society, and revisit our university English education with a new perspective and vision [1]. We can use the modern information technology based on computer multimedia platform and network to reform the education system and teaching mode. This paper will investigate the integration of computer networks and college English teaching mode in the context of the rapid development of information technology and English teaching reform. The problems and difficulties in the process of the integration of computer network and teaching mode are focused on to explore the corresponding methods and countermeasures.

2. Multimedia Assisted Platform and English Teaching Mode

2.1. New Mode of College English Teaching Based on Computer

In terms of China's foreign language teaching currently, the overall level is relatively low, and there is a long term with the drawbacks, like "dumb English", which have a great relationship with the traditional English teaching mode. In our college English class, the teachers are the mainly core of the teaching, such as teaching vocabulary and grammar, organizing practice and checking the answer. But this "chalk and talk" teaching mode ignores the learner's competent initiative [2]. With the development of the times, especially in the 21st century, college English teaching mode has created a new model with the development of computers, which is based on computer and classroom. This mode is shown in Figure 2-1.

Colleges and universities take full advantage of modern information technology while using "classroom and computer-based English teaching mode", especially improving the

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single teaching mode which teacher is the core of teaching by the use of computer multimedia platform. In this way, English teaching and learning can not be limited to time and place, which towards personalized and self learning direction.

Changing the teaching mode is not only a change in teaching methods and means, but also the transformation of teaching philosophy. And it implements the transition from the teaching ideas and practices which teacher-centered and simple teaching language knowledge to new teaching mode which student-centered and both teaching language knowledge and skills. In the transition language practical ability and self-learning ability are focused on training. It should be said that the new teaching mode implementation is a revolutionary change of our traditional foreign language teaching mode and method.

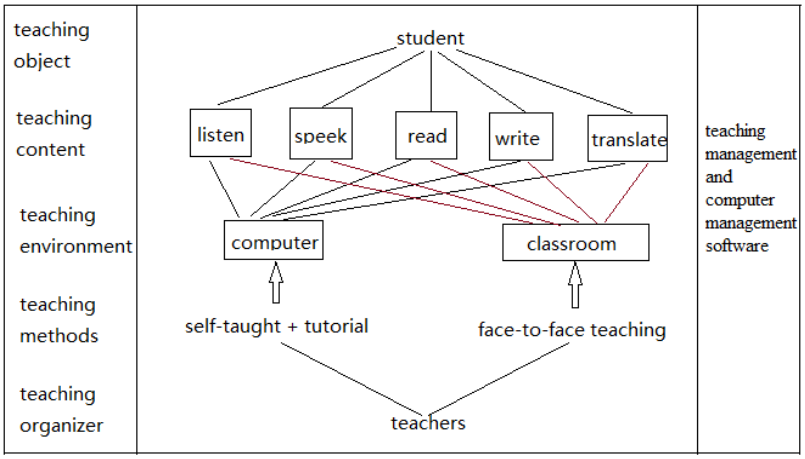

Figure 2-1. New Mode of English Teaching Based on Computer and Classroom

Whenever talking about the relationship between the computer and foreign language teaching, there will always be very natural to think of Computer Assisted Language Learning (CALL), and computer ability is always prominent. However, with the rapid development of computer science, we should have a new understanding on the role of computers in the foreign languages teaching. In fact, the learner can now have multiple microcomputers, which anyone can obtain any required learning material anywhere and any time through the network and everyone can learn the knowledge according to their needs. The foreign language teaching mode computer-led has taken shape, as shown in Figure 2-2.

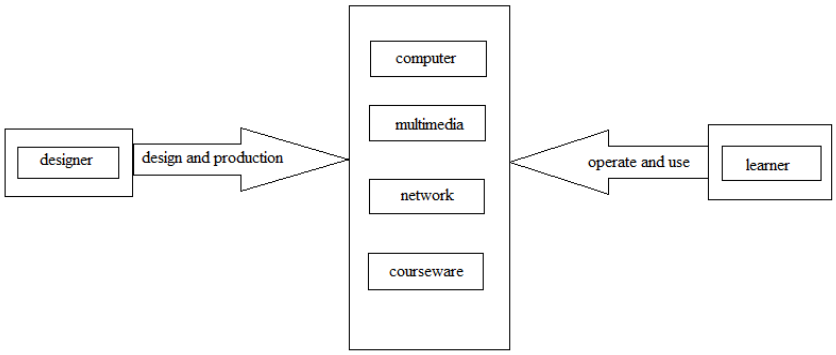

Figure 2-2. New Mode of College English Teaching Lead on Computer

2.2. The Change on Traditional Teaching Model to a New Model

This new mode of computer assisted teaching is joined the computer platform in the traditional "classroom and textbook" teaching mode, where teachers impart knowledge to students by computer presentation and textbook explain [3]. Unlike the traditional mode of English teaching is that teachers are no longer leading teaching which students become the object of instilling knowledge, but students also began to dominate their own learning. Therefore computer platform multimedia assisted teaching changes the traditional teaching situation, and makes teaching framework fundamental change. New framework of college English teaching based on computer platform is shown in Figure 2-3.

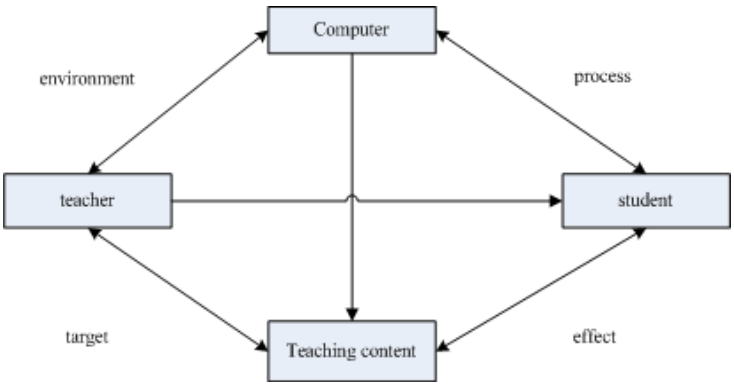

Figure 2-3. New Framework of College English Teaching Based on Computer Platform

On teaching elements, the relationship between teachers, students, computers and teaching content is not unidirectional, but bidirectional interrelated, interaction, interdependence and mutual transformation relationship.

In the framework integrated in English teaching and computer platform, a fundamental change occurred in the role of teacher, where they are no longer the center of classroom, and students used passive recipients of knowledge are now Independent learning. The sources of students' knowledge followed by a single text book paper are now expanded for numerous media [4]. Throughout the learning process, students' knowledge accessible far beyond the scope of textbooks, there are many ways they can learn knowledge, which will provide students with a wider variety of comprehensive development. Student knowledge sources are shown as the Figure 2-4.

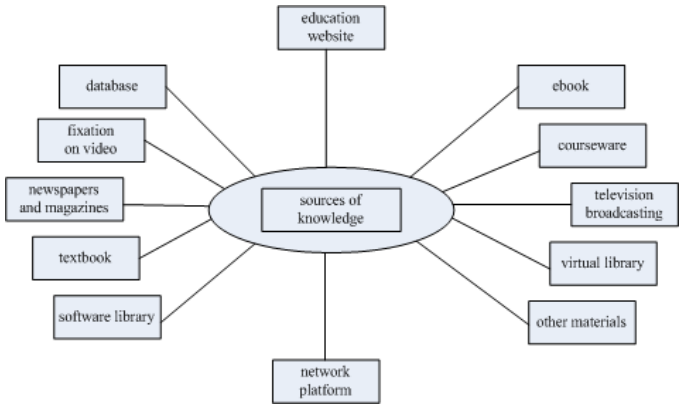

Figure 2-4. Student Knowledge Sources

Computer assisted platform and integration of foreign language teaching can not only create the ideal teaching environment, but also teaching becomes more important that the architecture has been a fundamental change [5]. The structure of teaching changes from the traditional mode “teaching” centered to the new mode “study and education” paid equal attention, which is teaching structure with teacher-led and student-core. The specific structure is shown in Figure 2-5.

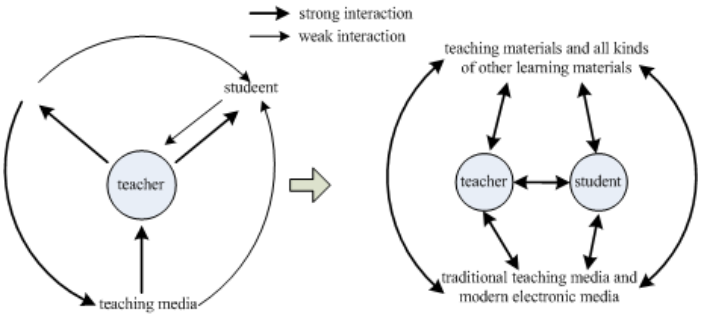

Figure 2-5. Teaching Structure Changing

In this teaching structure, teachers should change their role in the traditional sense and must have a new understanding on the change of the teaching structure. To do this, we first need to experience the teacher how to use the computer's advantage to acquire new knowledge. As we all know, in our country for many years, our foreign language teaching is carried out in the traditional classroom. In such an environment, teachers always impart while students listening or taking notes. Classroom activity is nothing more than questions, the point exercises, examination and other tests. However, the new teaching structure requires a computer as an integral part of the integration of our foreign language teaching and our teacher usually have no experience to refer. In the new structure of teaching, teachers and students must be allowed to use a computer network to construct or acquire new knowledge, so they have their own experience of this process of learning first. This experience not only help teachers understand the advantages of computers as well as the problems and frustrations in the learning activities of students might encounter, but also help teachers do targeted, reasonable structure designed work. Teachers need to use the knowledge they know about student learning and knowledge of computer functions to design, manage and maintain the learning environment student-centered and multi-dimensional. With computer and curriculum integration teaching experience, teachers can take advantage of computers to design and create integrated curriculum learning environment combined with the characteristics of students. Teachers play a role of the designer and give careful consideration and arrangements on every aspect of the course to support students and promote meaningful learning. At the same time, teachers also need to play the role of facilitator of learning. In the traditional classroom, teachers provide students with the learning content with the form of teachers telling students to listen [6]. However, the learning facilitator is completely unlike this. Teachers are no longer a simple explanation person, and provide a resource to enrich students' learning environment, where students enter the learning activities. In this learning environment, students learn or solve problems cooperatively. As a facilitator of learning, teachers can keep abreast of progress in learning in the learning process, and stimulate students to think and make decisions by thinking.

The new teaching mode is mainly reflected in the "student-centered" approach to learning. In the new structure of teaching, students’ image as "infused" will be changed and become more and more active in the learning activities. First, students will be more actively engaged in learning activities. In the specific teaching, students are no longer always listen to teachers on the side of doing notes, and it is no longer always had

limitations to answer questions on the textbook. In this structure, what students need to do is that they will go into the learning environment, and use the real-life resources (usually provided by a computer network) trying to solve a problem or task in small groups. This study process emphasizes that students should apply knowledge into practice through collaboration with peers and actively engaged in the discussion, so that the knowledge can be fully and effectively deepened. Second, students assume the role of researchers. The Inquiry-based learning mode based on computer and teaching integration needs students to play a role in researchers. This structure provides to the students not only the information we need to study, but also need to investigate and research scenarios with problems and tasks. During the investigation and research, students construct meaningful knowledge and learn relevant knowledge, such as language structure, cultural background, communicative function and application capabilities. At last, students need to become a skilled operator with computer technology. Because when the students 'ability can mach the computer function, the computer can achieve the effect of extending students' abilities. So that students have more time and energy to discover and create new meaningful and constructive knowledge. Therefore, only forming the new teaching structures student-centered, computer networks can truly become an essential integral part to the process of learning.

3. College English Teaching Mode Based on B/S Framework

B/S architecture is the browser and server architecture, and this architecture is with the gradual rise of the Internet technology is a change and improvement of the C/S structure with the gradual rise of the Internet technology. B/S architecture has three layers of architecture where the user can complete the required work through the browser [7]. The three tier architecture is the client tier, middle tier and database tier as shown in Figure 3-1. Usually the database layer is mainly composed of the DBMS management and the database contains the data which user can create, delete, modify and query. In the above of database layer is the middle layer complex which contains most of the application logic and data communication between the other two layers. The top layer is the customer layer, and usually is the Web browser software interacted with the application. The three layer system mentioned here is not a physical three layer, and it also is not simply placed three machines. Three-tier architecture is also not only in B/S application, and the three layers are the three in logic, even if these three layers are placed on one machine.

The application of the three tier system puts most work into the middle layer for processing, such as the business rules, data access, the legitimacy of the check and others. Typically, the client does not interact directly with the database, but establishes a connection with the middle layer through the COM/DCOM communication and then interacts with the database by the middle layer.

3.1. Client Layer

The customer layer is a part of the application or a system that will be presented to the user input. The client also called front, it does not perform the function of the data, but request to the database server through the input data, and the results are displayed in a certain format. Client layer is used to achieve the operating interface and display interface of enterprise application system. In addition, some client programs can also implement business logic. And it can be divided into two cases include Web based and non Web based. In the case of Web based, it mainly uses as an enterprise Web server browser. Non Web-based client layer is a separate application that can complete the task the thin client can not. For example if the client layer is the Web browser, the Web browser software will process and display HTML resources, and release of resources HTTP requests and handle the HTTP response. Use Web browser as a thin client layer has a wider platform support.

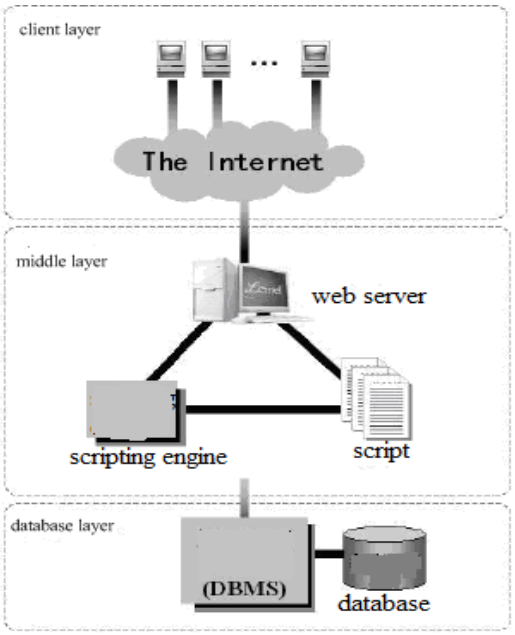

Figure 3-1. The B/S Model of Three Layer Structure

For now, there are a lot of available browsers, such as Internet Explorer, Netscape, Google Chrome and Firefox. Although these browsers have their own characteristics, they have their common characteristics. The browser is the web user agent. And the user agent is client software who request resource to the Web server. It displays the requested Web page, and provides a large number of navigation and configuration characteristics. Web browser also implements the HTTP client, so it provides an interface to the user after the browser start and the process also send and receive messages through a socket. All Web browsers are HTTP clients that send requests and show the response from the Web server. And all the pages presented by the browser are interpreted by the HTML tag. Most of the school teaching computers are installed Internet Explorer browser, so the client layer of the project for the Web browser we chose Internet Explorer.

3.2. Middle Layer

The middle layer is also called the application server or application service layer. It is the logical layer between the user interface or the Web client and the database, which integrates the client layer and the database layer [8]. The application framework the middle tier components is the Web server and Web scripting programming language.

Web server refers to providing Web file storage space, and is responsible for the transfer and management of Web files and Web programs server. It mainly has the following functions: provide storage space for Web files; allow Internet users to access these Web files; provide support for Web programs; build Web server allowed users to build their own Web site via HTTP protocol. Its basic mission is to listen for HTTP requests on the network, then receive a HTTP proxy request issued by the user and returns an HTTP response containing the requested resource.

Web scripting language is now currently popular like ASP, PHP and JSP. Each of these three programming languages has their own advantages [9]. ASP has the features of simple, efficient and practical function, whose core technology is full support of components and object, but it cannot easily achieve web server cross platform, and ASP can only run on Microsoft server products. Compared with ASP, JSP is written in Java and its function is more powerful and easier to use. JSP can run on all platforms, and is

not required to be recompiled when porting across platforms. JSP has been popular in foreign countries and mainly used in e-commerce sites at present. PHP is completely free and it can be unrestricted access to source code. PHP can be running on most platforms and do not need modify any of the code while cross platform. It supports almost all of the current popular databases, but it is not have a unified interface for each database like JSP and ASP and has almost a different interface for each database. The cycle performance test and access to the Oracle database test are done in these three languages, and the result obtained is that the access speed of PHP is the first, JSP is the second and ASP is the last. For relatively large web sites such as transaction processing and load balancing requirements are relatively high, JSP and ASP are more suitable. And more economical site using PHP should be the best choice.

3.3. Database Layer

Database layer is the base of the Web database application. The database layer is mainly responsible for the management of data. Data management usually includes data storage and retrieval, management and update, data integrity and data backup and other support services. In order to ensure that the data stored in database safety and consistency, there must be a set of software to complete the corresponding management tasks. This group of software is the database management system, referred to as DBMS. DBMS varies with the system, but in general, it should include the following aspects:

Database description function: Define the global logical structure, local logical structure and other database objects of the database.

Database management function: Include system configuration and management, data access and update management, data integrity management and data security management.

Database query and manipulation: This feature includes database retrieval and modification

Database maintenance function: Include data import and export management, database structure maintenance, data recovery function and performance monitoring. For practical application in the classroom, the English teaching system database is designed as follows shown in Figure 3.2.

The data table of the whole database is divided into three parts according to the curriculum system, including evaluation form part, group work upload part and voting part. In addition, the data table admin is stored in the manager's user name and password. Only when the user enters the correct user name and password can the user get the authority of the manager.

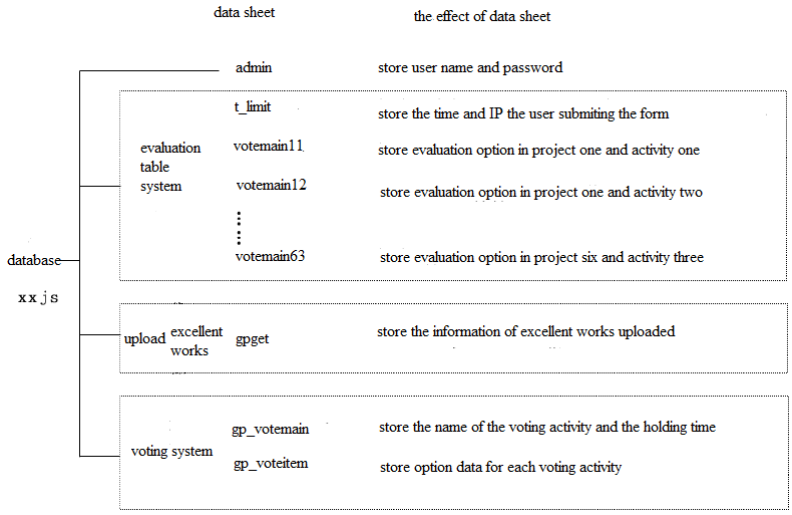

Figure 3.2. Database Design

4. A New Mode of English Teaching in Computer Network Environment

In the understanding of the relationship between computer and foreign language teaching and college English teaching mode based on B/S architecture, we now discuss the new teaching mode under the environment of computer network. The mode of the traditional English teaching based in reading comprehension and teachers saying while students are listening changes to a new teaching mode which is mainly emphasizing to students as the center of the independent study.

Under the computer network environment, the information foreign language teaching mode arises at the historic moment. The so-called information teaching is a new type of teaching based on the modern information technology [10]. Information teaching mode will bring many significant changes or reforms in foreign language learning. In the information age, the learning demands change from traditional maintenance learning to innovative learning. Innovative learning itself has three important characteristics: First is how to quickly and fully and effectively choose to store and obtain the required information. Second is how to use it to solve the problem. The third is how to break the normal and regroup. There are many kinds of information teaching mode and the teaching modes will be focused on in this section based on problem, network inquiry and group cooperative.

4.1 Teaching Mode Based on Problem

The so-called teaching mode based problem refers to Problem-Based Learning. It is used to place the teaching / learning in the complex and meaningful problem scenarios by letting students (usually in the form of group cooperation) to solve the complex, the actual or real authentic problems to learn language points, cultural background and language skills hidden in the question [11]. This can develop students' active construction of knowledge and ability to solve the problem.

The teaching mode based on the problem usually consists of five parts: identify problems (tasks), analyze problems, solve problems, result presentation, and study evaluation. In this process, the teacher only plays the role of guidance and help. Information technology is fully integrated into the whole process of teaching and learning, and the specific performance is shown in Figure 4.1.

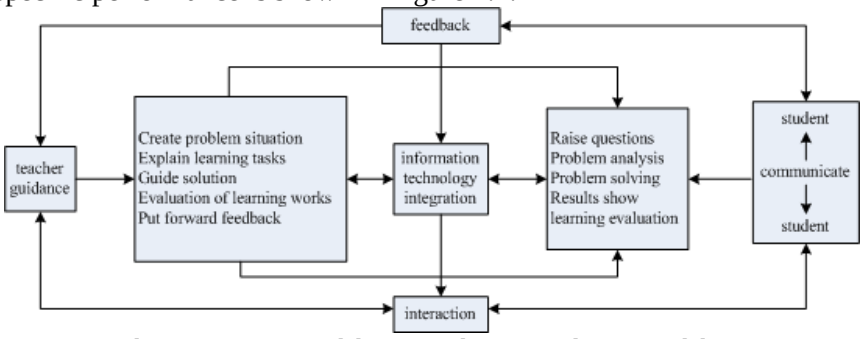

Figure 4.1. Teaching Mode Based on Problem

4.2. Teaching Mode Based Network Inquiry

Network inquiry, as a kind of concrete form of inquiry learning activities, is mainly based on the powerful information resources of the Internet and trains the students' ability to explore. In the network inquiry, learners can maximize the use of network resources and take initiative to discover unknown problems in the field of foreign language. In this teaching mode they can explore ways to solve the problem, construct knowledge and learn foreign language.

4.3 Teaching Mode Based Group Cooperation

Teaching mode based group cooperation, also known as Computer-supported Collaborative Learning is different from the traditional computer aided individualized teaching mode. Individual teaching modes focus on human computer interaction in learning, and collaborative learning emphasizes that use computer to support the interactive activities among peers. Group collaborative learning organizes students to collaborate on a given learning task teaching form in a group or team.

5. Conclusion

Compared with the traditional teaching mode in this paper, the computer teaching mode reforms and optimizes the structure of computer teaching and enhances the intuitive and interactive in computer teaching content. It also facilitates the teaching resources of teachers and students to store and download and improves the monitoring ability of teaching process. The computer teaching has achieved very good teaching results through a large number of teachers adopting, which can strengthen the interaction between teachers and students, cultivate students' innovative ability of computer application, and stimulate the students' interest in learning. Practice shows that the construction of English teaching platform based on computer network is a beneficial elevation to the traditional teaching method of computer. The teaching mode reform of the computer has a good reference to the computer teaching in the same kind of colleges and universities.

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