Research on the Construction of College English Mixed Teaching Model Based on Modern Educational Technology and Computer Technology

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Abstract. Without computer Internet technology, there would be no modern educational technology. Thanks to the Internet and server terminals, education extends beyond the classroom. People use computers, tablets and even smart phones to search materials and communicate with teachers and students outside class. With the gradual popularization of Web2.0 technology, students can take the initiative to learn and build personal knowledge network. With research showing that 80 percent of knowledge is acquired outside the classroom, technology’s contribution to education goes well beyond classroom projections and megaphones. Therefore, the integration of such technology in college education will be a major direction of future teaching. Based on this, this paper discusses the construction of college English mixed teaching mode based on modern educational technology and computer technology.

Keywords: Modern Educational Technology, Teaching Reform, Construction of New English Teaching Model

1. Introduction

Over the past few months, we’ve seen the epidemic push education online and digital, and the way we teach it has gone through a sea change that is now firmly ingrained in the minds of students and teachers when it comes to online education. As the main body of teaching, the teacher will completely move the offline classroom to the online, the road of becoming the "knowledge anchor" is not plain sailing, and problems such as the lack of information teaching level gradually appear. The rapid development of science and technology has profoundly changed the channels and methods of knowledge acquisition. The deep integration of information technology and education and teaching has subverted the traditional learning process. Among all industries, education is an industry that is almost not affected by cycle and
has rigid demand. No matter how the economy and society change in the future, education will always be a basic market, which deserves the confidence of all education practitioners to overcome the temporary difficulties [1]. In order to live well after the epidemic, it is necessary to meet the market demand, adapt to the trend of the industry, and timely adjust strategies and tactics; Post-education era is the era of metabolism, the era of light products, the era of real evolution of education industry, but also the era of rebirth.

2. To establish the mode of college English teaching using modern educational technology

In 1994, the American Association of Educational Communication and Technology defined educational technology as the theory and practice of educational technology about the design, development, utilization, management and evaluation of learning resources and learning processes. It is an organic system composed of hardware, software and latent parts of education. Teaching mode refers to the stable structure form of teaching activity process under the guidance of certain educational thought, teaching theory and learning theory, which is the reflection of teaching thought and teaching law. The theory and practice of college English teaching mode with modern educational technology and equipment are developing and showing strong superiority step by step.

2.1. The disadvantages of traditional English teaching mode and the advantages of modern educational technology

With the deepening of college English teaching reform, the disadvantages of traditional college English teaching in China continue to appear: the teaching thought lags behind the teaching mode, teaching methods and means lack of diversity; the construction of teachers lags behind the development of the times; the phenomenon of examination-oriented teaching still exists. Some school teachers focus on the one-sided pursuit of passing rate and coping with examinations, ignoring the improvement of students' practical English ability in teaching, resulting in the result that students' comprehensive practical application ability is not strong.

Modern educational information technology has brought deeper influence to foreign language teaching and learning. The concept, principle, method, structure and process of traditional foreign language teaching and learning will change greatly. And it is beneficial to broaden the knowledge of learning, shorten the teaching links, improve the quality of teaching and learning, cultivate students' scientific spirit and creative ability, and improve the [2] of students' practical ability

2.2. History of modern educational technology in foreign language teaching

The first stage was the late 1980s and early 1990s, accompanied by new English textbooks. At this stage, the main hardware tools are tape recorder, TV, projector, voice room. With its software support for audio and video tapes. Its main advantage is to make up for the lack of students to learn dumb English, listening in the phonetic room, students can hear the original English, should be said that the technology has a milestone role. The second stage is to the mid-1990s, with the development of computer multimedia technology, computer technology as the core of educational technology has attracted wide attention. With the application of various operating systems and software, multimedia technology assisted teaching began to enter the classroom. Its main tools are large screen projection TV and computer and its supporting teaching courseware. The third stage is by the end of the 20th century, with the wide
application of computer network and the rapid development of modern communication technology, optical fiber, microwave communication and satellite transmission make the global computer network become the largest resource network in the world. A new teaching model-network teaching began to be noticed by educators in the late 20th century [3-5]. In a word, with the development of computer multimedia technology and network technology, educational technology with computer technology as the core has attracted wide attention in many schools.

3. Construction of hybrid cooperative learning model based on modern educational technology

Based on the hybrid theory, computer as the teaching media, multimedia classroom, wide area network, campus network teaching platform and WeChat public number and micro community as the hardware and software, English learning is integrated into a multi-modal learning practice community by integrating "independent cooperation" and "presentation discussion" before class. There are 11 multimedia classrooms available in this model, each with 2 teachers' computers and more than 60 students' computers in the language autonomous learning platform; the autonomous learning platform relies on the network teaching platform running by the campus network of Shenyang University of Chemical Technology, which integrates autonomous learning, resource base, question bank, excellent video library, examination and marking, and has the functions of teachers and students answering questions, forums, and mutual evaluation of announcement assignments [6,7]; The main teaching functions of the WeChat public number "Foreign language Star" micro-community applied for opening by the Department of Foreign languages include multi-to-many communication, learning resource sharing, picture resource sharing, learning topic discussion, learning experience exchange and so on. The mixed learning mode of "autonomy, cooperation and innovation" is a learning mode characterized by students' autonomous learning, cooperative exploration and strengthening of innovative consciousness. Its core goal is to complete the simple knowledge point learning task independently before class, mainly to complete the independent inquiry activity. In this activity, stimulate students' interest in active learning, cultivate the ability of cooperative research, fully show the students' thinking process, and cultivate students' innovative consciousness, creative thinking and innovative ability. With the completion of modern educational technology and abundant learning resources, foreign language teachers' explanation of vocabulary, grammar and pronunciation in the teaching text can be completed by students through self-study by means of technical means. This frees students and teachers from limited classroom time. Valuable classroom face-to-face teaching time can play a greater role in cultivating students' innovative ability [8-11].

4. Application of modern educational technology to reform the model of college English teaching and testing

According to modern educational thought, constructivist teaching theory and constructivist learning theory, we can generalize the teaching mode which is suitable to the learning environment under constructivist learning theory as follows:” taking students as the center in the whole teaching process, teachers assume the role of organizer, mentor, helper and facilitator, make full use of computer multimedia, network technology to create situation, cooperation, conversation and other elements of foreign language learning environment, give full play to students' initiative, enthusiasm and creativity, and finally help students to improve their comprehensive English application ability effectively.
In accordance with the requirements of the Ministry of Education for College English Curriculum Teaching, the teaching system of college English teaching courses in accordance with the characteristics of our college is determined to guide the teaching practice and improve the students' comprehensive English application ability. In the teaching methods and means as follows: classroom teaching should use tape recorder, multimedia and other modern teaching equipment to listen, speak, practice combined way to practice.

Changing the mode of teaching and learning, changing the single form of teacher speaking and student listening to the individualized and active learning mode of comprehensive application, changing the traditional teaching mode based only on textbooks, chalk and blackboard to the teaching mode based on computer (network), teaching software and classroom teaching, so that students can have time for listening and speaking training and testing in the online autonomous learning classroom [12,13]. Among them, the time for listening and speaking (teaching in phonetic room) and online self-study is 5 hours per week, and the time for reading, translation and writing is 3 hours per week. In this mode, students are active builders of language application ability, teachers are organizers, guides, helpers, promoters of teaching process, and media are tools for creating language environment, collaborative learning and collaborative exploration.

To reform the evaluation method of college English course achievement, and to combine formative evaluation with summative evaluation. The evaluation is based on the record of classroom activities, online self-study records, learning records, final course examination results and performance records of extracurricular quality education activities [14]. Students' final grades are shown in figure 1 below.

![Figure 1. Composition of students' final grades](image)

4.1. Formative evaluation (40 percent)

Students' performance in teaching activities (10%): based on students' personal attendance (3%), classroom performance, answering questions and group activities (3%) and completion of homework (4%); Stage test results (10% based on four stage college test results; Oral ability evaluation results (10%): based on two stages of oral ability evaluation results [15]; Online self-study results (10%): based on students' progress, oral performance, listening performance and computer time completed by using
online learning: checking classes (15% of the educational administration departments do random checks on students' attendance, Students who are absent without reason deduct 5 points from the final grade.

4.2. Final evaluation (100 points, 60%)

Final test with traditional test questions, according to the classification of teaching questions. The test questions are composed of subjective questions and objective questions, accounting for 25% and 75% respectively. Subjective questions include writing (15%) and translation (10%), objective questions Baowei listening (20%), reading (40%), vocabulary and grammatical structure (15%).

4.3. Bonus for quality education activities

According to the students in all quality education activities (speech contest, translation contest, composition contest, college students English contest and English song contest, etc.) score points. Use the wireless playback system every morning, noon, evening (a total of 3 hours) to play listening. Content, students can listen according to their own circumstances. Make full use of weekend time, play foreign language movies for teachers and students, play foreign language movies for teachers and students to watch, and can talk freely with the tutoring English teacher.

5. Effect of teaching model reform practice

The teaching mode based on network multimedia is gradually accepted and popularized by teachers. From 12 teachers using networked classrooms in 2005 to 28 today, The number of students using networked classrooms has also increased from an initial 30 per cent to more than 50 per cent, From 380 to 4,800, Among them, 2006 students have the opportunity to attend classes in networked classrooms. After testing, The comprehensive English application ability of the students in the pilot class, In particular, the ability to hear and hear has been greatly improved. Heilongjiang Institute of Science and Technology 2005 has 66 college English courses, When we get into school, There is no obvious difference between the students' test scores, And in the two semesters of the final exam, All eight classes scored higher than the grade average, Five of these classes have improved significantly, In the September 2007 assessment of college English teaching [16,17], Experts are very satisfied with the students' English application ability test. Develop and improve the college English learning website, To enable students to make full use of campus network resources for autonomous and collaborative learning, For the whole school students to provide English learning resources. The technical ability of college English teachers' information education has been cultivated and improved. The experimental class teachers can master the use of network classrooms to teach, Most teachers often make their own courseware, Supported the construction of the college's English teaching resources, It also saves teaching expenses.

6. Reflections on the use of modern educational technology in college English teaching
Students' autonomous learning ability

Change and Promotion of Teacher's Teaching Concept

Design and development of teaching courseware

Sudden Obstacles to Networks and Software

Figure 2. Reflections on the use of modern educational technology

6.1. Students' autonomous learning ability

English multimedia teaching based on campus network platform, multi-type and hierarchical learning content, teaching and learning resources are effectively integrated, through the form of network, students can learn independently after class. These multimedia courseware can help students to better digest and consolidate what they have learned in class; to provide advanced learning opportunities for those who have learned well; and to provide supplementary classes for those who have studied hard. Strengthen and improve students' language application ability, help students develop good study habits and autonomous learning ability.

6.2. Change and promotion of teacher's teaching concept

The integration of information technology into curriculum teaching has become a hot issue in college English teaching reform. The key to successful integration is teachers' own information education technology ability and its cultivation. The more advanced the technology, the more and more teachers become the core of modern teaching, because only after all aspects of teachers have reached a certain level, all kinds of information technology can enter the teaching [7]. How to effectively strengthen the information awareness of college English teachers, improve their information ability, so that they can widely, organically and creatively use information technology in teaching is a problem that needs to be studied and solved by the college English community at present. The solution of this problem first needs to have a correct understanding of teachers' information education technical ability. English teachers should not only consciously, actively, actively and rationally realize the importance of classroom teaching, but also reflect on themselves and even deny that they persist in the teaching mode for many years, re-establish new educational concepts, and implement them to everyone's classroom teaching. The school should provide teachers with real and authentic opportunities for intensive training, so that teachers can experience and feel the benefits of teaching reform brought by information technology, and thus experience an essential change from psychology, thought, attitude and behavior.
6.3. Design and development of teaching courseware

English teaching under the environment of modern educational technology requires teachers not only to be able to use modern equipment, but also to actively participate in the construction of teaching resources, to participate in the production of various multimedia and network courseware to meet the teaching needs. Maximize the utilization of teaching resources, thereby improving teaching results.

6.4. Sudden obstacles to networks and software

In class, problems such as network or software system may occur, sometimes they can not be solved in time, which can interrupt the classroom teaching. Therefore, measures should be taken to ensure the normal conduct of teaching.

7. Conclusion

China's educational technology can solve a lot of problems, or fields. Although the fundamental reason for improving teaching efficiency is absolutely not what technology is used, modern educational technology can at least help and contribute to improving teaching efficiency and benefit from the perspective of technology. For example, some domestic primary and secondary school teachers lack the consciousness, conditions and skills of professional growth, and teaching design mostly relies on instinct. The mastery of computer-aided teaching takes the use of PPT animation as the ultimate goal. The electronic white board is equal to the color-changing blackboard, and effective teaching AIDS are also very effective. Adding modern educational technology and computer network technology into English mixed teaching will undoubtedly inject vitality into English teaching when the epidemic has not yet ended.

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