Integrating Information Technology and Teaching Modes to Innovate College English Teaching

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Abstract: The integration of information technology and teaching is a hot research topic in college English education. The purpose of this study is to explore how to use information technology to improve the effectiveness and quality of college English teaching. Firstly, through literature review, the researchers found that information technology has a wide range of applications in the field of education. It can provide students with more resources and interaction opportunities, stimulate students' learning interest and initiative. Secondly, the researchers concluded from teaching practice that information technology helps to increase teacher-student interaction and promote cooperative learning. Most students thought that this kind of teaching improved their learning results. At the same time, the teaching observation also shows that the use of information technology and the integration of teaching methods can improve the teaching effects. Finally, the researchers summarized several key points of the integration of information technology and teaching in innovative teaching, emphasizing that the integration of information technology and teaching in innovative teaching, as a potential teaching method, can improve the effectiveness and quality of college English teaching, but it also needs teachers to overcome the relevant challenges in teaching through curriculum design.

Keywords: Information Technology, Construction of Online Course, Online Resource, Offline Interaction

1. Introduction

In April 2015, the Ministry of Education issued the document "On Strengthening the Application and Management of online open Course construction in colleges and Universities". We should take advantage of the development of information technology to promote the reform and innovation of education, build an education system of "network, digital, personalized and lifelong", and take the shape of a learning society where "everyone can learn, can learn everywhere and can always learn" so that we can cultivate a large number of innovative talents which is a major issue facing mankind. On April 9, 2019, the China MOOCS Conference was held in Beijing, with the theme of "Recognizing Change and Adapting to Change". In December 2020, the World MOOCs Alliance was officially established and the Beijing Declaration on the Development of MOOCs was issued. Mooc, the full name of Massive Open Online courses, brings the construction of online open courses in the world up to a higher standard of development so that "Internet + education" take root. Against this background, it is worthy of further study how to play the function of educating students and promote the quality of education through the integration of information technology and teaching methods. Information technology and education can be highly integrated to bring great changes to College English teaching.

Many universities in the world have achieved remarkable results on the integration of information technology and teaching. Stanford University; The Teaching Center not only helps teachers develop, but also provides students with learning resources, tutoring courses, study skills and tutoring programs, and postgraduate teaching development. University of Maryland; In the new context of the continuous change of teaching technology, the "Teaching Center" has been upgraded to "academic innovation Center" to support the application of technology in teaching and learning. Duke University is thinking how to make educational technology a potential tool that can be used to help achieve desired outcomes. They guide teachers to think about how to improve teaching quality through educational technology when trying new teaching technology. University of Texas at Austin established a "Science of Learning Center" dedicating to helping teachers set teaching goals through effective teaching practices and data-driven assessment, helping students achieve learning goals, learning design, digital tools for emerging technologies, and learning analytics. The survey on the use of teaching information

technology in the classroom of American universities shows that the original emphasis was only on how to use ICT in teachers' "teaching", but now special attention is paid to whether ICT has an impact on students' "learning".

In the winter of 2020, the epidemic was raging and classes were not suspended and online education has been validated in China. Hundreds of millions of students study online at home. What is the effect of online teaching that lasts for such a long time and on such a large scale? What problems need to be solved? "Since the official launch of the national network cloud platform and the China Education Television Aerial Classroom on February 17, a total of 17.75 million college students participated in online learning and totaling 2.3 billion visits." For a long time, our teaching mainly adopted the form of face-to-face teaching, and the possibility and advantage of online teaching were not fully recognized. In the context of education information construction, many schools have actually had a better platform and technology, but there was no "use". In addition to breaking the time and space restrictions of face-to-face teaching during the epidemic, online teaching proved that the biggest highlight brought by online teaching was the sharing of high-quality resources, and the teaching content was no longer limited to textbook knowledge.

2. The Deep Integration of Information Technology and Teaching Modes Makes It Possible to Communicate and Interact Deeply between Teachers and Students in Class

Information technology promotes educational reform. The network platform extends learning time and space. In the construction of intelligence system, the network platform is also an indispensable link in the construction of first-class universities in higher education and the construction of a learning society in which everyone can learn, can learn everywhere, and can learn from time to time. With the development of The Times, the emergence of "Internet + education" has made teaching reform and innovation a new proposition of The Times. Today's education has become A web + a mobile terminal + million students. The requirement of The Times is that the teaching application covers all teachers. The learning application covers all students. Digital campus construction covers all schools^[1].

The revolutionary change in teaching caused by information technology begins with the provision of high-quality educational resources online^[2]. Hybrid teaching is the use of online resources to provide students with sharing of rich resources and offline resources used by teachers and students to interact efficiently. One of the important contents of quality education is to cultivate students' lifelong learning ability. As new to The Times, college students should learn autonomous learning, innovate learning and challenge learning after experiencing large-scale "online learning" during the epidemic. Today's learners are millennials. As digital natives, the interest of online resources and the visualization of offline teaching are the inevitable requirements to attract them.

Another change that information technology has brought to education is a fundamental shift in the way instruction is delivered. Blended teaching is not simply moving offline to online. Teachers try to build a learning community, explore cooperative learning methods, deepen the innovation of teaching ideas and reform teaching methods. Mixed teaching covers the whole process of teaching-the whole process of teaching design, the whole field of data acquisition, the whole process of assessment and the presentation of the full range of classroom effects. In blended teaching, project learning, case learning and discussion learning are carried out and students' learning output is oriented. The deep integration of information technology and teaching makes it possible to deeply communicate and interact with teachers and students in class ^[3].

3. Information Technology is Utilized to Flip the Classroom

3.1. It Is of Great Importance to Change Teachers' Belief First

Teachers can design and carry out teaching based on curriculum objectives, combine information technology with teaching methods, and innovate teaching modes. And based on English subjects ideological and political elements will be explored to stimulate students' ideological collision and emotional resonance^[4]. Teachers utilize the "5P" teaching method to guide students to actively participate in learning, help students to complete the application and transfer of knowledge in language practice, and realize the leap from "low level" to "high level" of language. Continuous improvement of teaching based on student learning outcomes.

3.2. The Online and Offline Contents Are Distributed According to the Cognitive Level of Students and Students Are Guided to Participate in Learning Actively

The methods classified according to Bloom's educational goals, such as vocabulary memorization methods, listening skills, practical English videos and other basic knowledge, conceptual knowledge and simple content, are put into online courses through video, so that students can directly watch and learn by themselves. We created online chapters corresponding to the course on the Super Star platform. According to the different English levels of students, some requirements were replaced, different contents and focuses were selected, and the teaching content was simplified, expanded and added. At the same time, we use homework, unit tests, process assessment and discussion to effectively supervise the process of students' learning, so that students can experience the learning challenge of "jumping to get", and enhance the sense of achievement of students' ability and quality improvement through hard learning. Online chapters corresponding to the course can be created on the platform. According to the different English levels of students, some requirements can be replaced, different contents and focuses can be selected, and the teaching content can be simplified, expanded and added.

3.2.1. Video "Word Learning"-Using Technology to Develop Teaching Resources to Solve English Learning Pain Points Online Chapters in Vocabulary Memory Skills

In view of these learning conditions, we begin to build online teaching resources to meet the needs of students in our school. Through the reconstruction and integration of teaching content, supplemented by open and shared teaching resources, students are guided to learn independently by means of segmented learning, task-driven, project-guided teaching, and online discussion, online Q&A, and online assessment. We transferred knowledge in the form of recording and broadcasting, to achieve asynchronous interaction, with the powerful function of the super star platform to achieve, mark the layout of tasks, push resources. We selected different contents and emphases, simplified, expanded and added teaching content, and supplemented word learning of vocabulary skills video. The video was made by the teachers to summarize his own efficient method of memorizing English words, and we used mind mapping to express the interconnections of words to build a deep and long-term memory. Teachers made micro-class videos, used mind mapping, mask, animation and other technologies to present teaching content, and established connections between new and old vocabulary. With this innovative method, students could generate visual images in their minds, rapidly expand vocabulary and solve the vocabulary memory problems of students that cannot be solved due to the shortage of class hours. Students used this innovative method to quickly generate visual images in their minds to expand vocabulary, solving the vocabulary memory problem that could not be solved due to the shortage of class hours.

3.2.2. Fostering Students' Thinking Quality in the Online Course- "Telling Chinese Stories in English"

The content of ideological and political education should keep close to reality, follow up China's development achievements in science and technology, and spread traditional Chinese culture. English humanism and instrumentality can be utilized in the English videos introduced into the cause to reflect China's cutting-edge achievements in science and technology development, traditional culture and outstanding figures. For example, "Chinese hero" on the anti-epidemic theme, "Beidou navigation satellite launch", "One Belt and One Road" and other English videos with relevant vocabulary were provided to help students to discuss, improve students' English thinking and language expression ability. The three episodes of "People's Feelings", "Great Power governance" and "Win-win cooperation" were edited into 12 10-minute videos and inserted into online chapters according to the relevant content of the textbook. In the course preparation, we chose representative and focused language materials, repeatedly taught and researched, discussed, and carefully designed the course. In the actual teaching, we timely integrated the "Belt and Road" initiative, Momba-inner Mongolia Railway, China-Europe train and other stories, and used time-effective language materials to immerse students in the experience and stimulate their inner resonance. In addition to teaching English language knowledge, unsolidified curriculum content was added to properly integrate the stories of China's targeted poverty alleviation, medical reform, education, high-speed rail construction and other areas of people's livelihood, the content of "carefully selected, processed and simplified", and the characteristics and advantages of the General Secretary's "State Strategy" in ideological and political education were used to guide values into language practice.

3.2.3. To Meet the English Learning Needs of Students, Create a "Four-Level High-Frequency Word Lecture" Online

In order to help students to improve their vocabulary, expand their English vocabulary and improve their language level, we created an online "fourth-level high-frequency vocabulary lecture" in the online chapter to systematically explain the meaning, usage and example sentences of fourth-level high-frequency vocabulary, explain the meaning and usage of each high-frequency vocabulary in detail, and show the application scenarios of high-frequency vocabulary through example sentences to provide students with a community space for communication and discussion. Online interaction is used to provide students with questions and answers and discussion opportunities, which is convenient for students to participate in learning anytime and anywhere. Learning materials such as courseware and notes are provided for students to download, and lecture content is recorded into videos for students to watch and study repeatedly. By learning high-frequency words, students expand their vocabulary, because the mastery of high-frequency words also increases the comprehension ability of articles and materials, and improves the accuracy and fluency of writing expression.

3.2.4. Introduce Cross-School Curriculum to Transfer and Apply Knowledge Learned in the Course to Solve Practical Problems

The cross-school courses "Applied College English" was introduced to form an open, constructive, interactive teacher-student education community, strictly exam the learning process and evaluate the learning results, so that students can experience the learning challenge of "jumping to get". And that enhanced students' sense of achievement in gaining ability and improved their learning quality through hard work. That solved the problem that the course cannot be extended to the depth and breadth due to the lack of class hours, so as to form personalized and differentiated learning.

3.3. According to the Teaching Objective, Learning Situation and Teaching Content, Choose the Teaching Method

Before, during and after class-the whole learning process of memorization, comprehensionapplication, analysis, evaluation and creation can be run through to solve problems in real situations with English language knowledge, to talk about thinking with English, to tell Chinese stories in English, and to explore the content of students' life experience. Case, inquiry, experience, interactive and other teaching methods can be adopted actively to narrow the distance between the teacher and students. And the communication and interaction between teachers and students can be promoted to share resource, generate knowledge and emotional resonance ^[5].

3.3.1. Integrating Information Technology with 5P Teaching Methods to Create Teaching Situation, Adjust Teaching Design

Preview before class-Teachers publish task notices through the platform to give students assignments to learn the vocabulary in the chapter content of this unit, conduct listening training, and participate in the discussion of the topic of this unit in the discussion area ^[6]. In the class, mind mapping, mask technology and animation are used to create language environment, transmit auxiliary content and carry out interaction. Meanwhile, task-driven teaching methods such as Participate, Practice and Present are adopted. Produce-students should complete creative writing assignments after class and submit writing assignments online. At the same time, students are guided to participate in various English competitions to promote learning and integration of competition and teaching ^[7].

3.3.2. Improve the Students' Critical Thinking Ability

The combination of various teaching methods in offline classroom creates a sense of cognitive presence in order to improve students' attendance rate, head-up rate and listening rate. Activities for listening and speaking skills can be designed. In translation exercises and discussion tasks, speculative questions are set to discuss the clarity, authenticity, accuracy, importance, relevance, logic, fairness, depth and breadth of language expression in terms of purpose, problem, perspective, presupposition, information, concept, reasoning and revelation. In language practice, teachers use 5P teaching method to build a ladder, which makes discussion, cooperation and reasoning activities possible. An outline of the English vocabulary needed for the activity can be provided to demonstrate how to carry out effective exploratory conversation or thinking. The structure of the article can be analyzed so that students can understand the theoretical thinking and value judgment behind the problems and knowledge in the process of solving problems so as to achieve the goal of high price.

3.3.3. Based on the Characteristics of English Language Subject, Teaching Methods Are Selected

Based on the humanistic and tool nature of English combined with the unit theme, thoughts and politics can be integrated into the four teaching processes of text theme, vocabulary example sentences, text understanding, writing practice. Concerning the development of China, through the perspective of foreigners and the statements of ordinary people, students can be led to think, interpret with the method of cross-cultural comparison. And students can be guided to feel the differences and commonalities of different cultures from different angles. Teachers raise questions, trigger students to explore meaning, seek reasons and evidence, promote in-depth thinking, encouraging students, stimulating students' collision of ideas and emotional resonance, and guiding students to use English orally to describe problems, discuss, analyze problems, express positions and state reasons. In the language activities of listening, speaking, reading, writing and translating, students are guided to realize recognition at the cognitive level and internalization at the emotional level so as to achieve ideological and political content, realizing the comprehensive integration of value dimension, knowledge field and language skills, and complete the transformation of students' behavior level.

3.3.4. "Three-In-One" Assessment Can Be Adopted to Improve the Challenge Degree. Continuous Improvement of Teaching Design Can Be Done According to the Assessment Results

The mastery of knowledge, the improvement of ability and the formation of value are the three in one. In the test and task, the teacher uses the combination of scoring, evaluation and self-evaluation. The combination of thinking, wisdom and political belief can consolidate students' language ability to write answers to exam content, answer open questions, and participate in debates, improving their critical thinking ability, professional quality and forming correct values and outlook on life. Pre-class, in-class and after-class are run through by pre-class preview and discussion, group presentation, evaluation, voting and other interactive teaching in class, online unit simultaneous tests and interactive writing or discussion after class ^[8].

4. Conclusion

To sum up, blended teaching can provide a more flexible learning style, where students can arrange their learning according to their own time and place. The online learning platform provides a wealth of learning resources, such as instructional videos, interactive exercises and online discussion boards, which can help students better understand and master the knowledge of English. At the same time, blended teaching can also improve student participation and interaction. Online learning platforms can facilitate communication and collaboration among students through various interactive tools, such as online discussions and group collaborative projects. This interactivity can enhance students' motivation and interest in learning and improve their learning results. The combination of online and offline college English teaching has a broad prospect. As technology continues to evolve, many universities have begun to adopt blended teaching models that combine traditional face-to-face teaching with online learning. The mixed online and offline college English teaching has a broad prospect and rich learning has a broad prospect, which can provide a more flexible, interactive and rich learning experience to help students better master English knowledge.

The integration of information technology and teaching is a promising teaching method, which can improve the effect and quality of college English teaching. However, the implementation of this teaching style still faces some challenges that need to be overcome by the joint efforts of teachers and schools. First of all, teachers should have certain information technology application ability, and be able to flexibly use information technology to design and implement teaching activities. Secondly, teachers should choose and use information technology tools reasonably according to the needs and characteristics of students to ensure the effectiveness of teaching activities. Finally, teachers should timely adjust teaching strategies to improve students' learning effect on the feedback of students' learning situation. Therefore, the integration of information technology and teaching can bring more possibilities to college English teaching.

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