Research on Smart Education Model for College English Teaching

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Abstract. Following the concept of the integration of modern information technology and curriculum teaching, this research aims to build a smart education model for college English teaching which can better facilitate students' acquisition of language knowledge, development of language skills, enhancement of self-learning abilities, and improvement of creative, critical thinking as well as problem-solving abilities. With the support of smart learning platforms and online learning environment, the teaching practice is carried out to explore innovative approaches to improve the efficiency of teaching and learning.

Keywords: smart education · college English teaching

1 Introduction

Language learning is a dynamic, nonlinear and long-term process. It is difficult to develop language skills and achieve multiple goals of language learning in limited classroom learning hours. Therefore, out of class self-learning plays a significant role in the process of language learning. To promote the efficiency of both classroom learning and non-classroom learning, modern educational technology is urgently needed. With the informatization of education, information technology has become an important impetus to promote innovation of classroom teaching, therefore, exploring the transformation of classroom teaching with the support of the information technology, optimizing the classroom ecosystem and promoting the teaching reform and innovation have important theoretical significance and practical value [1].

The latest edition of the Guide to College English Teaching points out that "information age has provided new learning methods and unprecedented rich resources for foreign language teaching. Therefore, college English should vigorously promote the integration of information technology and language teaching, and make good use of modern educational technology, especially information technology, in foreign language teaching." [2].

2   Problems of Smart Education in College English Teaching

2.1   Problems in the Integration of Information Technology and Language Teaching

Smart classroom teaching is not simple application of technology or the use of abundant network resources, but a new way for teachers to construct a space for students' individual inquiry, discovery learning and the development of collective wisdom, and at the same time integrate and optimize online and offline teaching resources, and guide students to carry out efficient blended learning [3]. Without systematic design and collaborative application, desirable results cannot be achieved. To integrate information technology successfully and effectively in language teaching, teachers need to learn to select and use network resources and tools wisely to bring their strengths into full play; to design learning objectives according to learners' psychological characteristics in the network environment; to create meaningful collaborative learning tasks in online environment; and to make timely diagnosis on students' learning with the help of information technology.

2.2   Problem of Digitalized Version of Traditional Classroom

A common misconception about smart education is to equate it with the use of technology. What many teachers do is to move the content of teaching from blackboard and textbook to PPT, and put preview and homework that are previously offline online. Their offline teaching still focuses on the teaching of knowledge, and online teaching keeps giving quantitative evaluation instead of diagnostic and developmental evaluation. Such teaching simply changes in form, but fail to achieve optimized management of teaching processes with the help of Internet, big data, cloud computing and other technologies.

2.3   Failure in Bringing the Strengths of Smart Education into Full Play

Some of the most important advantages of smart education are easy access to abundant online resources, visualized learning which develops interest among students, and realization of personalized learning. However, these strengths have not been brought into full play in current smart education due to lack of wise selection of learning resources, overuse of multimedia resources which on the contrary distract students' attention from what needs to be focused on and insufficient knowledge and skills in using smart learning platforms which hinder the realization of personalized learning.

3   Design of Smart Education Model for College English Teaching

With the use of Unipus, Rain Classroom, Tencent Meeting, UMoocs and other smart learning platforms, we designed a smart English teaching model in which we can facilitate students' communication and self-learning before class, get first-hand information about students' learning and give immediate feedback in class, and help them with their revision, guide them for further learning and promote deeper understanding of the
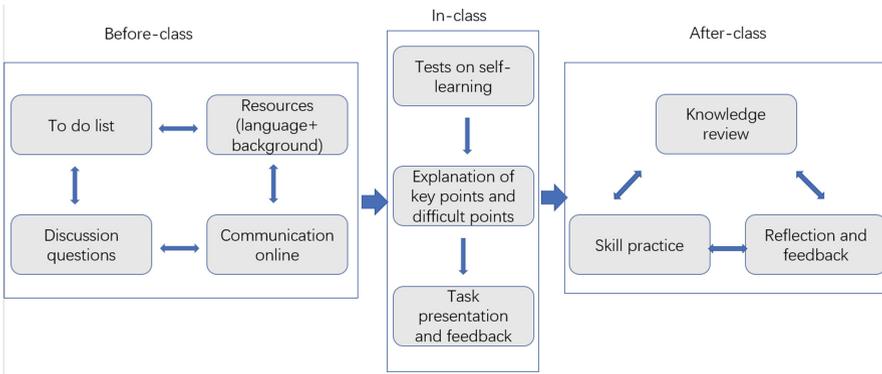
Fig. 1. Smart education model for college English teaching. Photo credit: Original

topic after class. With blended teaching method adopted throughout the whole teaching process, this model aims to enable learners to maximize language interaction and communication in the form of text, pictures, audio and video through an intelligent learning environment. At the same time, with the openness, connectivity and interactivity of the smart learning environment, this model also aims to break through the limitations of learning time, learning space and learning pace to meet the personalized needs of learners (Fig. 1).

4   Implementation of the Model

4.1   Before-Class

First, a to-do-list is sent to students by Rain classroom notice for each unit. Then, language knowledge and background information are sent to students for self-learning on smart learning platforms. With the To-do-list, students are made clear what needs to be achieved before and after learning the unit, the focus of the unit, and how to further absorb the knowledge, develop the skills and competence through self-learning. With the knowledge-related learning resources on smart learning platforms, teachers can get a wholistic view of students learning and adjust in-class teaching accordingly. Meanwhile students can get feedback on their phonetics performance, use of words and grammar, and understanding of background information from both their teachers and their fellow classmates.

4.2   In-Class

Smart education is to enable learning by associating, reflecting, communicating, creating and other different levels of learning activities [4]. The focus of in-class teaching is put on the achievement of higher-level objectives such as analysis, evaluation, creation [5], and interactions between teacher and students. First, tests will be given on Unipus to check students' self-learning before class. Then, in the process of dealing with the key

points and difficult points of the unit, different forms of exercises such as multiple choice questions, blank filling, asking questions at random and bullet screen on Rain Classroom are used to check students' real time understanding of the text and thoughts about the topic. With the help of big data analysis on this platform, the teacher can easily find students' weak points in learning and give encouragement or further explanation on confusing points accordingly. At the same time, bullet screen and subjective questions are used to arouse students' interest in taking part in discussion and develop independent and critical thinking abilities. Finally, adequate time will be given for students to perform their output tasks. After individual and group presentations, peer-evaluation and teacher-evaluation will be given to help them get better understanding of their performance and get a clear direction in further improvement. With the use of network, multimedia, and cloud computing technology in classroom teaching, the interaction between students and teachers switches from one-on-one interaction in the traditional classroom to one-to-many and many-to-many interaction patterns, this transformation greatly enhances the interactive efficiency, helps teachers to better understand students' real-time learning, and make adjustment to the follow-up teaching.

4.3 After-Class

The smart education model for college English teaching can effectively complements offline in-class teaching by the use of high-quality learning platforms such as Unipus, UMoocs, and IWrite. With skill training lectures and exercises on UMoocs and Unipus, students' use of cognitive strategies in processing and transferring knowledge can be improved so that they can make inferences from examples and summarize rules in language usage on their own. With unit learning reports produced by smart learning platform such as Unipus, students' awareness of metacognitive strategies can be enhanced so that they can effectively plan and adjust their learning process, and constantly reflect and evaluate the achievement of their stage goals. Therefore, students' autonomous learning ability and learning efficiency can be improved. With smart system review, peer review and teacher evaluation of students' translation and writing tasks on Iwrite system, students get quantitative as well as qualitative feedbacks on their performance so that they can better understand their strengths and weaknesses on both language level and content level.

5 Conclusion

Compared with traditional teaching, the smart education model for college English teaching is more conducive to students' personalized learning since in out-of-class learning students can study according to their own learning style and preferred pace online so that their in-class learning can better focus on the key and difficult points of the unit. In this model students can learn the language by actually using it in meaningful tasks and get diagnostic feedback for further development. Besides the cultivation of objectives on language level and skill level, this model also put emphasis on competence level and moral education. Through the design of a series of comparison, induction, analysis, evaluation teaching activities, students' focus is drawn on the elevation of innovative,

critical thinking and problem-solving abilities. Through communicative task output and selective culture input, correct values and social sense of responsibility are established. Through the comparison and integration of Chinese and Western cultures, students' international vision and national feelings are cultivated. All in all, this model provides new ideas and approaches to facilitate college English teaching and better achieves teaching objectives on different levels.

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