Design and Application of Teaching Mode of English Reading and Writing Course for Postgraduate Based on Smart Classroom

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Abstract

The rapid development of the society puts higher and higher requirements on the English proficiency of graduate students, which also brings great pressure and challenges to the English teaching of graduate students. Compared with the English teaching at the undergraduate stage, the English learning of graduate students is more difficult and lacking in learning motivation. The wide application of information technology in the field of education has opened up a new perspective for the reform of postgraduate English teaching. Taking the postgraduate English reading and writing course as an example, this paper discusses the design of the intelligent teaching mode of postgraduate English course, which has practical significance for improving the teaching effects of postgraduate English course.

Key words: Information technology; Intelligent classroom; Graduate English; Teaching model

Graduate education represents the highest level of higher education in China. It is an important way to cultivate high-level talents, the foundation of think tank construction, and the urgent need of national innovation and development. In recent years, China's graduate education has developed rapidly, the scale and scope of enrollment has been expanding, and the number of graduate students has been increasing year by year. At the same time, the training mode and quality of graduate education are also facing great challenges.

English teaching is an organic part of graduate education, public college English course is a compulsory course of non-English major graduate students. English teaching for graduate students takes teaching materials as the carrier, English language knowledge and applied skills, learning strategies and intercultural communication as the main content, foreign language teaching theories as the guidance. With various teaching modes and methods, English teaching for graduate students aim to cultivate senior talents who can master English and use English as a communicative tool for professional research and work. However, public college English courses for postgraduates still adhere to the traditional teacher-centered teaching mode, students can only passively accept classroom knowledge and lack enthusiasm and initiative in English learning. Therefore, the teaching effects are not satisfactory.

With the development of cloud computing, big data, artificial intelligence and other information technologies, education informatization has gradually entered a new stage of smart education. Based on the information technology platform, the smart classroom treats the student-centered concept as the center. The design of smart classroom mobilizes students' autonomous learning ability, extends English learning from in-class to extra-curricular, effectively prolongs the learning time, improves learning efficiency, and promotes the intellectual growth of students. Therefore, exploring the smart teaching model of postgraduate English has become a new direction of postgraduate English teaching reform.

1. DEFINITION OF SMART CLASSROOM

With the advent of the era of "Internet +", the influence of

new technologies on the education cause the widespread attention of many researchers at home and abroad, and in-depth research has been conducted on the theory and practice of "Internet + education", the objects of study covering primary, secondary and higher education, and the study subjects including English, math, politics, music, etc. Research institutions also range from school education to social training. Intelligent classroom is the practice of "Internet + Education" model, and a new classroom teaching model that introduces the Internet into the classroom.

The study of smart classroom started earlier in foreign countries, starting from the time when the concept of "Smart-Classroom" first proposed by Ronald Rescigno (1988). In the course of decades of development, the research on intelligent classroom mainly covers four aspects: theoretical research, design research, application research and evaluation research. Timms and Michael (2016) believe that the application of artificial intelligence in education is gradually mature. It participates in students' learning in a new way and helps teachers improve teaching efficiency. Gina and Kumar (2016) studied and analyzed the teaching effectiveness of the smart classroom and found that the smart classroom teaching was more effective than the traditional teaching model. Carter and Bobbie (2016) believe that the use of information technology in the classroom has become the norm of higher education. Information technology is considered to be a way to improve students' learning effects, and schools can maintain competitiveness by using information technology. Murphy and Cathy (2002) describe the issues involved in the transition from traditional classrooms to smart classrooms, focusing on teacher pre-service training, flexibility, design considerations, technical support, etc.

Domestic study of smart classroom starts late, but since 2008, the related research is increasing year by year, the domestic research mainly revolves around three aspects: the first is the study of the theory of the teaching strategies, teaching mode and method derived from smart classroom, for example, Xia Shiwu (2016) believes that the organic combination of traditional physical classroom and intelligent classroom supported by the Internet can give full play to the advantages of the new teaching model and solve the crisis of the lack of motivation of current college students in classroom learning. The second is the research on information technology, learning process, big data, smart environment and other technical aspects. For example, Professor Huang Ronghuai(2012) of Beijing Normal University believes that smart classrooms are an inevitable choice for the development of smart classroom teaching. Information technology should be fully utilized and presented from the content, environmental management, resource acquisition, timely interaction and situational awareness to reconstruct and upgrade the

classroom environment to provide a foundation for the implementation of smart classroom teaching. Finally, the research on educational reform, development strategy, teaching philosophy, future education and other trends, for example, Guo Xiaoshan (2014) from Jiangsu Normal University believes that the construction of intelligent learning model can provide guidance for the effective implementation of intelligent teaching, which is the inevitable trend of education development.

Though the research of "smart classroom" has made a lot of achievements, for the definition of "smart classroom", domestic and foreign scholars do not have a unified standard, while many well-known domestic scholars have made in-depth discussions on this. For example, Professor Zhu Zhiting (2017) of East China Normal University proposed that smart classrooms are based on powerful information technology, it can create a smart environment for students to grow up wisely, so as to realize the comprehensive, coordinated and sustainable development of wisdom for students. Liu Bangqi (2016) believes that smart classrooms are the full use of big data, mobile Internet, cloud computing and other information technology support in the new era. It is divided into three stages to build an efficient and intelligent classroom teaching model: before class, during class and after class. Its essence is based on modern information technology to build a smart learning environment with data-based decision-making, intelligent resources, three-dimensional communication, and instant feedback to promote the individualized and intelligent growth of students.

According to the general view of academic circles, intelligent classroom cannot be separated from the support of information technology. Its realization is based on intelligent teaching environment, and its core is student-centered teaching mode design. Compared with traditional classrooms, smart classrooms can set learning tasks, push learning resources, customize learning goals and track learning results according to students' individual abilities, so as to carry out innovative and personalized smart learning. Smart classroom not only changes the traditional teaching mode, breaks the limitation of time and space in the traditional classroom, makes ubiquitous learning mode possible, but also changes the role and relationship between teachers and students, and transforms a teacher-led classroom into a teacher-led classroom.With the student-led and teacher-guided new-style classroom, teachers and students can communicate with each other through the Internet without barriers, which Makes the relationship between teachers and students closer.In summary, smart classrooms use smart services, mobile terminal devices, and a new generation of information technology to tailor a personalized, intelligent, and adapted open, democratic, and efficient classroom learning model for students.

2. THE TEACHING STATUS OF POSTGRADUATE ENGLISH READING AND WRITING COURSES

Postgraduate education is the deepening of undergraduate education. The goal of postgraduate education is to cultivate senior specialized talents who master the solid basic theories and systematic professional knowledge of the subject, have the spirit of innovation and the ability to engage in scientific research, teaching, management or independently undertake specialized technical work. The English proficiency of postgraduate students not only reflects the learning ability and communication ability of the scientific research staff, but also reflects the international level and international vision of the scientific research team. At present, most non-English major postgraduate students in universities offer English listening and speaking course and English reading and writing courses in the first year, but the teaching situation is not satisfactory.

First of all, due to the separation of listening and speaking courses and reading and writing courses, it is difficult to effectively combine the two courses. Since the textual difficulty of postgraduate reading and writing courses is much greater than that of undergraduates, teachers of reading and writing courses tend to spend a large amount of class time in analyzing teaching material, thus the interpretation of the vocabulary, phrases, and the complex and difficult sentences takes up a lot of time in class, and It is difficult for students to get the opportunity to speak English. At the same time, teachers still use the traditional teacher-centered teaching mode, in this kind of teaching mode, students can only passively accept knowledge, and the learning materials are boring and difficult to learn, as a result, there seems to be an invisible barrier between teachers and students. Students' enthusiasm for classroom participation is low, and there are even phenomena of distraction and absent-mindedness in class. In addition, the traditional teaching mode restricts English learning in the classroom, and students often put English textbooks on the shelf after leaving the classroom. The limited classroom time makes it difficult for students to improve their English proficiency. The above factors ultimately lead to the poor teaching effects of postgraduate English reading and writing courses.

Secondly, students lack the internal and external motivation to learn English. Since students spend a lot of time and energy in English learning when taking the postgraduate entrance examination, and after obtaining the admission qualifications, they no longer have any competition and pressure in English learning, which leads to students' mental tiredness in English learning. In fact, although many students have achieved the required English scores in the postgraduate entrance examination, they have also accumulated a certain English foundation before the postgraduate stage, but their English listening, speaking, reading and writing skills cannot meet the requirements of cross-cultural communication. Reading the English literature required for scientific research is also very laborious.

In addition, factors such as assessment methods also have an impact on the English learning enthusiasm of postgraduate students. As the model of postgraduate exam-oriented education still exists, students often focus on English test scores, thus ignoring practical application ability, and even neglect the cultural nature of English as a language. Language is the carrier of culture and language ability. The lack of language skills even directly led to the loss of some of the students' comprehensive cultural quality.

3. Construction of the Teaching Model of Postgraduate English Reading and Writing Courses Based on Smart Classrooms

With the arrival of "Internet +" era, smart education based on network information technology has become an inevitable trend of education development, which also brings inspiration to postgraduate English teaching. First of all, smart classroom enriches the teaching methods of English reading and writing courses. Based on massive network information resources, it provides students Secondly, smart classrooms can understand the learning status of students through evaluation and analysis, and provide targeted individual guidance or push personalized learning materials, which is beneficial to students of different English foundations, thus realizing student-centered personalized teaching. At the same time, smart classroom can also combine online teaching with offline teaching by designing teaching tasks before, during and after class, so that English learning can break the time and space limitations of traditional classrooms, which can inject new vitality into the traditional teaching of postgraduate English reading and writing courses.

3.1 Preparation Stage before Class

The pre-class preparation stage refers to the process in which teachers will make pre-class preparation materials, release pre-class resources, guide students to pre-class preparation and conduct pre-class evaluation according to the specific teaching contents and teaching purposes. The preparation of preview materials is the basis of the implementation of pre-class preview. Teachers can make videos, micro-lessons, and courseware or select existing MOOCs or open courses on network platforms as students' pre-class preview materials according to the actual teaching contents and teaching objects.

"Micro-class" refers to a short and complete teaching activity that uses video as a carrier to provide a short and complete display around a certain knowledge point or a certain teaching link in the teaching content after careful teaching design in order to assist students in their independent learning. Compared with traditional

classrooms with complex information content, "micro-classes" are specifically aimed at interpreting a specific knowledge point or teaching link in the teaching process, the theme is more prominent and the purpose is clearer. "Micro-class" can reflect unit teaching topic, and it can also reflect the text content and cultural background, vocabulary, syntax and related knowledge of the key content and difficulty. Although concise, it integrates teaching purposes, teaching objects, teaching design, teaching reflection and other materials in the form of streaming media, and creates "micro-teaching resources" in a vivid and concise way. The total capacity of videos and auxiliary resources of "micro class" is only about tens of megabytes, and the time is limited to 10 minutes. The video format can be downloaded and saved to mobile terminal devices such as smart phones, tablet computers, laptops, etc., which is convenient for students to watch, study, reflect and research anytime and anywhere.

"MOOC", short for Massive Open Online Courses, is an online education method that has emerged in recent years. It covers online courses created by well-known universities and excellent teaching teams at home and abroad and its content covers almost all majors and fields. Therefore, it has the characteristics of openness and sociality. In addition to their own professional courses, students who have extensive study interests can also choose other types of courses they like, and are not limited by time and place. Compared with "micro-classes", MOOCs have a larger scale, a wider audience, and greater interactivity. At present, the most influential MOOC platforms in China include China University's MOOC, Cool Learning, and the "MOOC Network" launched by the Beijing MOOC Technology Center.

Teachers can push the prepared preview materials based on the students' individual English proficiency on the smart teaching platform t. For example, teachers can push preview materials about cultural knowledge introduction, theme understanding and critical thinking ability cultivation for students with good English foundation. For students with poor English foundation, teachers need to push basic preview materials about word usage, sentence pattern analysis, text structure and so on. Teachers can also set deadlines for preview tasks or provide corresponding exercises.

3. INTERACTIVE STAGE IN CLASS

The classroom interaction of the smart classroom starts from the collaborative learning of group members. Based on the data feedback of the pre-class preview, teachers can organize study groups to carry out various cooperative learning activities. For example, group members can start discussions based on difficult issues such as the understanding of the subject of the text during the pre-class preparation process, report display according to the pre-class preparation tasks, or use descriptive pictures,

games such as "you play I guess" to show the mastery of the words, enhance collaborative learning between groups, increase effective interaction between teachers and students and cultivate students' thinking and expression skills.

The teacher combines the preview feedback data, the completion of the preview exercises, the class group discussion and the report display situation to supplement the knowledge content that everyone generally has a poor grasp. At the same time, they can also use mobile terminal devices to push relevant in-class tests to test the effects of supplemental explanation in class. According to students' different levels of mastery, teachers can also issue homework of different levels of difficulty, answer questions and provide personalized guidance.

4. SUMMARY STAGE AFTER CLASS

The post-class summary stage can include specific steps such as online tutoring, resource supplementation, review consolidation, and teaching reflection. Teachers can record small videos of error-prone knowledge points for supplementary tutoring according to the specific situation of classroom learning. They can also arrange promotional homework to expand students' cultural literacy and require students to upload audio or video to the intelligent learning platform. Teachers can also upload supplementary resources to the smart learning platform, online tutoring students to review important knowledge points and reflect on sublimation. The effect of classroom teaching can be evaluated by means of mutual evaluation of students and teacher evaluation.

CONCLUSION

The teaching mode of the smart classroom deeply integrates modern information technology and traditional classroom teaching, and combines the advantages of online and offline teaching methods. It effectively extends students' English learning time from inside class to outside class, breaking the time and space limitations of traditional class. At the same time, the student-centered smart education model truly returns the classroom to the students, which not only cultivates students' autonomous learning ability, but also gives full play to the student's classroom ownership spirit, mobilizes their learning enthusiasm and initiative to improve the teaching quality of English courses and promote the reform of research English teaching.

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