Research on College English Blended Teaching Design and Strategy under the Framework of Inquiry Community Theory

Wenbo Zhao, Xiaolu Wu

Jilin Engineering Normal University, Changchun 130052, Jilin Province, China

Key words: Inquiry Community, College English, Blended Teaching

Abstract: With the advent of the era of "networking + education", the hybrid teaching model has been paid more and more attention and recognized by the educational circles, but how to effectively integrate face-to-face teaching and online teaching is an urgent problem to be solved in the educational circles. Since the theoretical framework of inquiry community was put forward in 1999, it has been widely used to guide the design and implementation of hybrid teaching courses. It is a dynamic and process-oriented teaching theoretical model of online learning and hybrid learning. Under the guidance of this theoretical framework, this paper designs College English mixed teaching according to its constituent elements of social existence, teaching existence and cognitive existence, cultivates students' English application and cooperative learning ability, and explores practical and effective strategies of College English mixed teaching, in order to achieve the objectives of College English teaching reform and the cultivation of students' English autonomous learning ability.

1. Introduction

With the increasing application of information technology in education, the advantages of e-learning and mobile learning are becoming more and more obvious. It is not limited by time and space, and many online courses came into being. However, with its rapid development, its disadvantages also appear, such as the rising dropout rate of online courses, learners feel the loneliness of individual learning, and cannot get timely teachers' learning guidance and feedback. The above problems show that online learning cannot completely replace face-to-face teaching. The hybrid teaching combining online learning and traditional face-to-face teaching has attracted more and more attention in the educational field. The Ministry of Education issued the action plan for educational informatization 2.0 in April 2018, which proposes to comprehensively improve the application level of informatization and the information literacy of teachers and students by 2022 (Zou Ping, 2019).

The era of "Internet plus education" has come to the forefront. This has aroused the interest of the community in the blended teaching and hopes to create a truly highly participatory personalized

learning experience for students. However, with the rapid development of mixed teaching, practitioners and researchers of mixed teaching do not have a clear and sufficient understanding of this new teaching model. They still have a half understanding of a series of problems such as what is mixed learning and how to mix effectively. Inefficient and ineffective mixed teaching is not uncommon. As a new field of practice and research, blended teaching urgently needs an effective theoretical framework to guide its design and implementation. At present, in the field of hybrid teaching, the most influential theoretical framework is the community of inquiry framework (COI) proposed by garrison, Anderson and Archer (1999). It is a dynamic and process-oriented teaching theoretical model in the field of online learning and hybrid learning.

This paper attempts to redesign the mixed teaching of College English according to the theoretical framework of inquiry community. Through practical teaching, this paper puts forward corresponding teaching strategies for mixed teaching in stages, to provide learners with more learning experience, improve the ability of interactive and cooperative learning, let students participate in critical thinking and discussion, and produce in-depth learning, finally improve academic performance.

2. Explore the Theory and Constituent Elements of Community

Exploring community theory originated from a humanities and social science project "the characteristics and quality of text-based computer conference in the field of education" funded by the Canadian government from 1997 to 2001. Garrison, Anderson and Archer (1999) jointly published text-based critical inquiry - Network Teaching in higher education through the research on this project. They created the theoretical framework of network inquiry community (COI). Based on Dewey's Book Community and inquiry and its critical reflection theory, the framework extends it to online learning and blended learning (Yang Jie, 2016). By July 2021, the literature has been cited 6988 times (reported by Google academic search in July 2021), becoming a highly cited paper in the field of online learning and blended learning.

Exploring the theoretical framework of community (see Figure 1) includes three interdependent elements: social presence (SP), teaching presence (TP) and cognitive presence (CP). They jointly create a process of deep-seated and meaningful learning experience (educational experience) (garrison, et al. 1999) . this is a dynamic and circular model, in which each core element supports each other, and the three kinds of existence overlap. Meaningful learning and deep learning may occur at their intersection and overlap (garrison, et al., 1999). Effective learning will occur only when the three kinds of existence reach a high level (LAN Guoshuai, 2018).

Among them, social existence refers to students' "real" themselves in social and emotional aspects by using communication media in the inquiry community (Rourke, et al., 2001) In an environment of emotional security, they can express without risk, respect the opinions of others, have close contact with others, and have a sense of belonging, to carry out purposeful discussion and cooperation smoothly. The contents include emotional response, interactive response, and cohesive response (Rourke, et al., 2007) Teaching existence refers to the provision of design, facilities and guidance for meaningful educational experience. Learners need teachers to design and manage the curriculum in the learning process, and timely interact and discuss with students through diagnosing needs, adjust teaching design and provide direct guidance. This is a process of gradual development rather than static (garrison, 2019). Dixson and colleagues (2006) It is found that teachers' leadership is related to students' success. Students will clearly attribute the successful learning experience to teachers' teaching. Teaching plays a key role in the framework. The content includes teaching (Curriculum) Design and organization, promote dialogue and direct guidance.

Cognitive existence is the basis of the inquiry process. It starts from experience, and forms further experience through continuous reflection, conceptualization, and then action (garrison, et al. 1999) It is a step-by-step educational experience process, which reflects the acquisition and application of high-level knowledge, and is related to critical thinking. It includes four parts: trigger event, exploration, integration, and solution.

3. Research on Teaching Design and strategy of College English Mixed Curriculum under the Framework of Inquiry Community Theory

This study takes the content of social existence, teaching existence and cognitive existence in the framework of community theory as the guidance of hybrid teaching design and builds an e-learning platform in Cloud Class. It takes the "practical inquiry model (PI) developed by garrison et al. (1999) The practical route is designed for mixed teaching. The specific operation is to propose learning tasks, trigger students to participate in learning activities, generate the driving force of exploring knowledge, combine their previous learning knowledge, cooperate with students to explore problems, jointly integrate knowledge content, participate in critical thinking and discussion, output learning results, generate in-depth learning and improve the sense of learning experience. The research cycle is 12 months During the study week, 74 freshmen of Non-English Majors in grade 19 of Jilin Normal University of engineering and technology were selected as the research objects. This paper takes the first unit of the new version of advanced college English comprehensive course 1 as an example.

(1) Research on pre class mixed teaching design and strategy

Firstly, the instructor will release the learning resources of this unit to the students through the Cloud Class online learning platform, including text, video and audio resources, arrange preview tasks and release ice breaking activities, interpret the preview contents and classroom rules to the students through light live broadcasting activities, and provide English sentence patterns and model texts for the development activities. The students and their peers will practice English with each other online Action and communication. Social presence plays a very important role in this stage. Group members gradually get familiar with each other through online discussion, build group cohesion, communicate in an environment of mutual trust, and communicate in an online environment. They can express their views and emotions through group videos, micro expressions and words, politely respond to the problems in the discussion area, and formulate internal communication plans Speaking rules and respecting each other's views. Teaching is mainly about teachers designing problems that can trigger students to explore and providing resource scaffolds to solve problems. At the same time, teachers need to answer the operation problems of learning platform app or computer to students, assist the group to complete the activity content, remind students to complete the learning tasks according to the time node, and praise the activities at the same time Students with outstanding performance in learning should set a learning example. Cognitive existence mainly focuses on triggering learning motivation and inquiry learning process at this stage, and online inquiry provides students with sufficient powerful conditions to process information and construct meaning. (garrison, 2019) cognitive existence is directly related to obtaining deep learning and critical thinking and operates through the process of practical inquiry (LAN Guoshuai, 2018).

(2) Research on mixed teaching design and strategy in class

In face-to-face class, teachers share the students' performance of ice breaking activities released by students on the online learning platform, appreciate the students with excellent performance, analyze the English diseases of students when expressing, give modification suggestions, and

answer the students' online message questions. Introduce the learning theme of this unit in humorous language, and guide students to explore together with teachers based on the text preview Study the context of the text and the key points of knowledge. By sharing students' bullet screens and documents on the teaching screen, urge students to participate in classroom discussions in real time, express their personal views and assign network homework tasks at any time. At this stage, the social existence is reflected in the face-to-face environment between teachers and students. Teachers and students can see each other, which helps to enhance the feelings of teachers and students and peers, and students can Communicate with teachers and students at will and in time to generate trust. In terms of teaching existence, teachers can explain homework tasks face-to-face, formulate expected goals and responsibilities with students, and face-to-face teacher guidance is more important for learning tasks that need cooperation and knowledge sharing. Cognitive existence can produce more trust in face-to-face learning between teachers and students However, due to the limitation of teaching time, teachers' direct teaching intervention can often make students obtain a sense of successful learning experience.

(3) Research on mixed teaching design and strategy in class

The instructors practice the exercises after class. Through online Q & A and video explanation, the teachers cooperate with the students to review and consolidate the learned knowledge. The students log in to the online learning platform for autonomous learning, realize personalized learning according to their own knowledge base and learning habits, and check and make up for deficiencies. Supplemented by the online text synchronous exercise library, the teachers set learning tasks, and the students complete their self-learning before the time node In the test, teachers can master the students' learning results in real time, summarize the students' error prone knowledge points, and deepen the learning of error prone knowledge again in the face-to-face class. On the network platform, students can exchange their learning experience here and answer questions and doubts for others. The evaluation method of group task results is to form the final results through joint evaluation by groups, groups and teachers, and the scoring rules between groups and groups are determined by students Participate in the formulation and enhance students' sense of participation experience. At this stage of social existence, students can answer questions and solve doubts for students in the form of posts through the network communication platform in the aspects of knowledge point practice and group tasks, which enhances the interaction between students and outputs students' learning ability. Students complete group tasks through network discussion and cooperation, and the team cohesion increases step by step Step by step. The existence of teaching is reflected in Teachers' recording and broadcasting courses and problem-solving links, as well as rapid and timely reply to students' information, guide, help and urge students to complete learning tasks at time nodes, master students' learning through network tests, and be able to consolidate and explain knowledge more pertinently in face-to-face classes. At this stage, students integrate their own ideas, carry out in-depth discussion and speculation, so as to put forward solutions and finally complete the learning task. The new exploration practice cycle starts again in the next unit learning.

4. Exploring the Teaching Effect of College English Mixed Curriculum under the Framework of Community Theory

Before the mixed College English teaching, the teachers issued a questionnaire to the students in the experimental class to collect the basic information of the students and the English score data of the college entrance examination. The data showed that 64.9% of the students had no online learning experience before entering the teaching experiment, and the average score of the English

college entrance examination was 93.84. After the teaching experiment, the subjects were tested in English, the selected test paper is the simulated test paper of the college entrance examination. The score data obtained are analyzed by SPSS software. The results show that the average score of the post test paper of the students in the experimental class is 105.61, which is significantly different from the pre-test English score, indicating that the mixed College English teaching can significantly improve the academic performance and the teaching effect is obvious (Table 1).

Table 1: mixed College English teaching can significantly improve the academic performance

Group	Test	Variable	M	SD	t
Experimental class	Pre-test	College entrance Englishi examination	93.84	21.407	-14.479***
	Pro-test		105.61	19.192	

Since the theoretical framework of inquiry community was put forward, it has become a theoretical framework widely used to guide the design and implementation of hybrid teaching courses in the world (Feng, et al., 2019). Vaughan (2015) based on this theoretical framework, summarized that the key strategy of hybrid teaching lies in "consciously integrating real-time and non-real-time learning and creating meaningful connections in learning." This paper attempts to embed the basic principles and guiding principles of blended learning into the theoretical framework of inquiry community and adopt blended teaching design according to the content of the framework and different teaching stages, to better blend face-to-face learning and online learning.

5. Conclusion

The results show that social existence plays a great role in the early stage of teaching experiment, and the cohesion of inquiry group plays a great role in completing group tasks. In blended learning, teachers give students more time to think, carry out critical discussion and maintain academic output. Teaching existence always plays a very key role in face-to-face teaching and online learning platform, which is closely related to students The sense of learning experience has the most direct connection, and teachers are the key to ensure the quality of learning experience. Teachers make decisions on teaching design according to the framework guidance, the potential of technology can be brought into play, and the methods of face-to-face and online learning can be effectively combined. Cognitive existence can be reflected by students in the process of mixed teaching practice, cooperative tasks and group items Objective to encourage students to take responsibility, formulate their own learning strategies and cultivate their ability of autonomous learning. Responsibility and self-orientation can enhance students' metacognitive awareness, and improve their speculative ability, cooperative ability, in-depth learning ability and academic achievement.

References

[1] Zou Ping. Construction and effectiveness analysis of College Students' e-learning community for deep learning [D]. Nanchang University, 2019
[2] Garrison D R, Anderson T, Archer W. Critical inquiry in a text-based environment: Compute
[3] Rourke L, Anderson T, Garrison D R, et al. Assessing social presence in asynchronous text-based computer conferencing[J]. The Journal of Distance Education, 1999, 14(2): 50-71.
[4] Dixon J, Crooks H, Henry K. Breaking the ice: Supporting collaboration and the development of community online[J]. Canadian Journal of Learning and Technology, 2006, 32(2).
[5] Feng X, Xie J, Liu Y. Using the community of inquiry framework to scaffold online tutoring[J]. International Review of Research in Open and Distributed Learning, 2017, 18(2): 162-188.

[6] Vaughan N. Designing for an inquiry based approach to blended and online learning[J]. Revista Eletrônica de Educação, 2015, 9(3): 30-47.