Investigation on the Application of Blended Learning in the Course of *English Teaching Methodology*

Yaojing Xie^{1,a,*}

¹Guangxi University of Foreign Languages, Nanning, China ^a416381594@qq.com *Corresponding author

Abstract: Taking Guangxi University of Foreign Languages as an example, this paper introduces the model of blended learning in the course of English Teaching Methodology and then conducts an investigation on the application of this learning model through questionnaires and interviews, aiming to explore the specific implementation effects of blended learning. The main results are as follows: (1)Most students hold a favor to this blended learning model, as they believe that this learning model can largely meet their learning expectations and needs; (2) This blended learning model has an effective impact on most students' learning cognition, learning emotion and learning behaviour; (3) A majority of the students agree that the scaffolding from teachers, online platforms or media in the blended learning model are of great help, and the teaching interaction is meaningful. What's more, the achievement of the course's teaching objectives is satisfactory. Although some deficiencies still exist, positive implementation effects of blended learning in the course of English Teaching Methodology have been found, in the hope of providing enlightenment for blended learning researchers and teachers.

Keywords: blended learning; English Teaching Methodology; investigation

1. Introduction

Nowadays, with the advent of teaching concepts such as mobile learning, hybrid learning, Massive Open Online Courses (MOOCs), Small Private On line Courses (SPOCs), micro-lectures, and flipped classrooms, etc., the application of information technology in foreign language teaching has been steadily advancing, which has brought new opportunities to foreign language teaching in universities. In recent years, the teaching idea of "English + Education Module Courses" has been adopted for English majors in Guangxi University of Foreign Languages. And the course of English Teaching Methodology is one of the restricted elective courses offered to English majors who have chosen education module courses. The course aims to provide students with a systematic understanding of the findings in English classroom teaching over the past decades, as well as the latest insights and developments in language teaching theory both domestically and internationally. Students will systematically study language teaching methodologies, master the fundamental theories and methods of English classroom teaching, and establish a solid foundation for becoming competent English teachers in primary and secondary schools. However, under the traditional teaching model, the classroom teaching effectiveness of the course of English Teaching Methodology has been unsatisfactory, with insufficient classroom interaction and limited development of autonomous learning and innovative abilities. Therefore, a more effective teaching model is timely needed.

Blended learning, characterized by "technology empowerment" and "student-centeredness", has become one of the tendencies for the paradigm shift in teaching models in the new era. It is a learning mode combining online and offline learning, and has been implemented in classroom teaching across various educational stages and disciplines (Chen Jing *et al.*, 2021)^[1]. As He Kekang (2014)^[2] points out, the main development direction involves the organic combination of "online autonomous learning" and "teacher face-to-face instruction" in blended learning. Blended learning is an inevitable trend in the development of modern educational technology, compensating for the shortcomings of traditional classroom teaching. It facilitates the full engagement of students as active participants in the learning process, promoting student-centered, self-directed, and collaborative learning (Chen Juanwen *et al.*, 2017)^[3]. To serve the research purpose, blended learning has been implemented based on the students' learning needs in the course of *English Teaching Methodology*. This investigation mainly explores the implementation effects of blended learning in the course of *English Teaching Methodology*.

2. Literature Review

2.1. Research on the Definition of Blended Learning

Driscoll (2003) defines blending learning as "to combine or mix modes of web-based technology (e.g., live virtual classroom, self-paced instruction, collaborative learning, streaming video, audio, and text) to accomplish an educational goal^[4]. Clark (2003:4) claims that blended learning may include combinations such as "blending classroom instruction with online instruction, blending online instruction with access to a coach or faculty member, blending simulations with structured courses, blending on-thejob training with informal sessions, blending managerial coaching with e-learning activities."^[5] Then Garrison and Vaughan (2008) further explain what the basic principle of blended learning is that "faceto-face communication and online written communication are optimally integrated such that the strengths of each are blended into a unique learning experience congruent with the context and intended educational purpose."[6] Therefore, blended learning approaches are those that integrate online with traditional face-to-face classroom activities in a planned, pedagogically valuable manner. Blended learning, which can afford each student a more personalized learning experience, uses online technology to transform and improve the learning process but not just to supplement. It goes beyond one-to-one computers and high-tech gadgets and is not the same as technology-rich instruction. A simple overlay of online and offline components in blended learning may not necessarily achieve the optimal teaching effectiveness. Emphasis should be placed on harnessing the strengths of both online and offline elements to create a synergistic educational force (Lee et al., 2017)^[7]. Tong et al. (2020:34) suggest that blended learning should achieve an organic combination of elements such as teaching content, instructional resources, teaching strategies, teaching activities, instructional support, and assessment^[8]. Blended learning is not a mere repetition of online and offline components; it requires careful design to achieve a "1+1>2" effect. The design of blended learning content should adhere to the principle of complementarity, achieving complementary interactions between in-class and out-of-class activities, online and offline components, as well as bridging information gaps between teachers and students, and among students themselves. Blended learning "is a student-centered model that can help teachers better tap into students" potential, improve teaching efficiency, motivate students to challenge themselves, and provide students with a comprehensive learning experience" (Liz Arney, 2017)^[9].

2.2. Research on the Application of Blended Learning in Language Teaching

In the context of blended learning, actively researching and practicing intelligent foreign language teaching is of significant importance to cultivating internationalized talents who can adapt to the new pattern of "dual circulation" development. This serves the purpose of advancing the revitalization of China through science and education and building a strong nation of talents (Zhong Fuqiang, 2021)^[10]. Concerning the application of blended learning in language teaching, previous relevant research can broadly range from the establishment of blended learning model, the utilization of online learning platforms, teachers' roles, students' autonomous learning to learning engagement in blended learning, etc. Cai Jigang (2019) puts forward that a blended learning model based on constructivist ideas, combined with project-based teaching (or case-based teaching) and text analysis, is the most effective approach to cultivating students' academic English skills and literacy^[11]. Feng Lin (2019) suggests that utilizing new approaches in the course of English teaching methodology, such as pre-class preparation, in-class activities, and post-class evaluations based on Mosoteach Learning Management System could foster students' critical thinking ability^[12]. Zheng Yongyan (2019), based on the "Academic Writing in English" SPOC blended course, develops an integrated online and offline teaching model and proposes several suggestions to promote the structural reform of blended learning in foreign language education, aiming to provide new insights for the deep integration of modern information technology and foreign language teaching^[13]. Wang Zhihong and Zhang Jie (2020) establish a "Cloud Classroom" blended learning model and apply it to the teaching of English linguistics courses. The results show that blended learning achieves higher learning effectiveness compared to traditional teaching methods^[14]. Zheng Xinmin and Su Qiujun (2020) believe that teachers need to continually adjust their blended teaching strategies to adapt to evolving technology and changing real-life situations^[15]. Lai Chun and Su Yanfang (2021) point out that students' autonomous learning in the MOOC environment should take into account factors such as course format, learning resources and activities, supporting mechanisms, and the role of the teacher^[16]. Chen Jing et al. (2021) present that students demonstrate diverse behavioral engagement, deep cognitive engagement, and objective emotional engagement in the process of blended learning, and their learning engagement is influenced by both individual and environmental factors^[1]. The aforementioned studies show that the application of blended learning in language teaching is quite extensive and also provide

insightful perspectives for the design and implementation of blended learning. However, how to tailor blended learning according to the characteristics of colleges and universities and the actual needs of students remains a pressing issue to be addressed.

3. Introduction to the Model of Blended Learning in English Teaching Methodology

From a functional perspective, online and offline blended learning should have their own emphasis respectively. According to Lee *et al.* (2017:431)^[7], online learning is more focused on stimulating students' active spirit of exploration, while offline learning should place more emphasis on conducting challenging and high-yield instructional activities. To better facilitate blended learning, the course of *English Teaching Methodology* has been designed based on Bloom's taxonomy of educational objectives (Remember, Understand, Apply, Analyze, Evaluate, and Create). With the goal of "comprehensively enhancing the overall competence of foreign language teachers", on the basis of helping students build on a solid foundation of the knowledge of pedagogy, focusing on cultivating students' educational teaching skills, and exposing students to the "simulated or real teaching practice" context, the course is divided into three parts: Knowledge Driving (Remember and Understand), Skill Enhancement (Apply and Analyze), and Competence Development (Evaluate and Create), which are implemented through three platforms illustrated below in Figure 1.

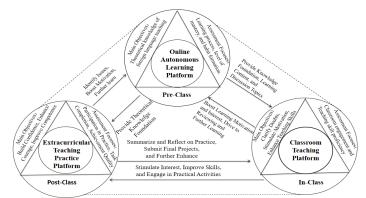


Figure 1: Blended Learning for English Teaching Methodology Based on Three Platforms

The first platform is Online Autonomous Learning Platform. In this platform, teachers use the online learning platforms, like UMU and SPOCs, to share teaching resources and design self-learning tasks based on the principles of "problem-oriented and task-driven" learning for students' pre-class online autonomous learning. These tasks include a study guide, learning tasks, difficulties and recommendations, and learning reflections. Students are encouraged to document their learning challenges or puzzles, and deepen the understanding of what they learn through peer cooperation in group work.

The second platform is Classroom Teaching Platform. During classroom teaching sessions, teachers address students' online learning inquiries and facilitate interactive discussions. Classroom activities and tasks are carefully designed to provide opportunities for students to demonstrate their teaching skills, engage in teaching case analysis, and participate in peer assessments. Through teacher guidance, skills demonstration, and peer assistance, students consolidate knowledge and improve their teaching skills.

The third platform is Extracurricular Teaching Practice Platform, where teachers assign practical extension tasks (such as designing lesson plans, recording practical teaching videos), which students upload to the UMU Learning Interaction Platform for evaluation or recreation. Students complete individual and group tasks, revise their work based on the teacher's feedback and peers' suggestions, and write reflection reports as part of their formative assessment. Additionally, each semester, students spend extra time participating in teaching observation and evaluation in Experimental School Attached to GUFL and as planned take turns to get engaged in foreign language teaching in the real classroom environment. This experience allows students to apply the theoretical knowledge they have learned to real teaching scenarios, enhancing confidence and competence while identifying areas for improvement and stimulating learning motivation. The blended learning model of "Online Autonomous Learning Platform + Classroom Teaching Platform + Extracurricular Teaching Practice Platform" was employed in the course of *English Teaching Methodology*, hopefully establishing a comprehensive teaching model of "pre-class independent exploration, in-class consolidation and development, and post-class extension and improvement". This approach integrates modern information technology with the course, trying to

create an effective learning atmosphere.

4. Research Design

The questionnaire survey was carried out in the investigation, targeting 125 English majors in education module courses taught by the author. During the questionnaire design and modification process, a pilot study with 10 students was first conducted. After the analysis of the pilot study, improper items were removed from the questionnaires, and ambiguous questions were revised. Then the author sought input from professors in this field and made the final revision based on the suggestions provided by the professors. The revised version was then used for data collection in the present research. The questionnaire was administered during class time and the response rate was 100%. The questionnaire was designed based on the effectiveness of blended learning, comprising 30 questions. The questionnaire utilized a 5-point Likert scale, ranging from negative to positive with values from 1 to 5. It explored the implementation effects of blended learning in the course of English Teaching Methodology across students' learning (learning cognition, learning emotion, learning behaviour) and teachers' teaching (teaching scaffolding, teaching interaction effects, teaching objective achievements). The author used SPSS21.0 to test the reliability and validity of the questionnaire. The Cronbach Alpha coefficient of the total scale is 0.96, indicating good internal consistency reliability. Additionally, factor analysis was employed to test the structural validity of the questionnaire. The KMO value is 0.918>0.9, and the Bartlett's Test of Sphericity is 2849.13 (df=435, p=0.000<0.01), meeting the conventional standards for validity. The purpose of conducting this questionnaire survey is to examine the specific implementation effects of blended learning.

5. Results and Discussions

Dimensions	Mean	S.D.
Learning Cognition	4.3008	.51030
Learning Emotion	4.1024	.56945
Learning Behaviour	4.0624	.55557
Teaching Scaffolding	4.3600	.58365
Teaching Interaction Effects	4.2528	.65261
Teaching Objective Achievements	4.2000	.61119
Total Mean (N=125)	4.2131	.51770

Table 1: Descriptive Statistics for Implementation Effects of Blended Learning

The implementation effects of blended learning are discussed in the following from students' learning (learning cognition, learning emotion, learning behaviour) and teachers' teaching (teaching scaffolding, teaching interaction effects, teaching objective achievements). Table 1 presents the average (mean) ratings given to each of the dimensions. It can be noticed that all the means are greater than 4, thus the six aspects reach the range of high level. Therefore, it could be concluded that the model of blended learning have positive effects on most students' learning cognition (mean=4.3008), learning emotion (mean=4.1024) and learning behaviour (mean=4.0624), and most of the students surveyed agree that the teaching scaffolding from teachers, online platforms or media in blended learning are effective and helpful (mean=4.3600). And a majority of students believe that the teaching interaction in this learning model is meaningful (mean=4.2528). What's more, many a student thinks that the achievement of the course's teaching objectives is satisfactory (mean=4.2). In general, from the total mean value (mean=4.2131), it can be noted that most students hold a favor to this blended learning model.

5.1. Learning Cognition

As shown in Table 2, with respect to the cognition of blended learning, most students have a good cognition of the impact and significance of implementing blended learning, and perceive that this learning model can meet their learning needs (mean=3.792, mean=4.248), particularly satisfying their needs to excel in English pedagogical knowledge (mean=4.48). At the same time, they frequently believe that this blended learning model is of great help for fostering comprehensive competence (mean=4.496), and plays an important role in sharing learning resources in a timely and efficient way and facilitating communication (mean=4.488).

Items	Mean	S.D.
2.I believe that using a combination of online and offline classroom teaching can meet my learning needs.	3.7920	.86412
6.I believe that implementing blended learning in this course helps broaden my knowledge and fulfill the requirements of my professional studies.	4.2480	.75835
7.I believe that implementing blended learning in this course can help better understand the relevant knowledge of English teaching methodology.	4.4800	.65501
9.I feel that the blended learning model is helpful for cultivating comprehensive abilities.	4.4960	.65530
16.I believe that this blended learning model plays a crucial role in efficiently and promptly sharing learning resources, and facilitating communication.	4.4880	.66740

Table 2: Descriptive Statistics for Questionnaire Items on Learning Cognition

5.2. Learning Emotion

As demonstrated in Table 3, regarding to the learning emotion in blending learning, most students show relatively positive emotion in the learning process. Quite a lot of the students are interested in the course and are willing to engage in blended learning (mean=4.032), accepting the blended learning model with pre-class online self-study and in-class inquiry (mean=3.712). Meanwhile, most of the students agree that they can gain a sense of respect in the blended learning model (mean=4.56), so they state that their attendance in this course is quite good (mean=4.608). Additionally, many students present that they have not felt an increased academic workload in this learning model (mean=3.6). However, it can also be found the mean value of Item 17 is smallest in this dimension, which indicates that this new learning model is likely to increase students' academic pressure. Therefore, it is necessary for the teachers to help students better understand the new learning model and make every effort to assist them in overcoming challenges encountered in their studies.

Table 3: Descriptive Statistics for Questionnaire Items on Learning Emotion

Items	Mean	S.D.
1.I accept the blended learning model with pre-class online self-study and in-class inquiry.	3.7120	.94882
5.I am very interested in this course and am willing to engage in blended learning.	4.0320	.80258
8.I do not experience any instances of arriving late, leaving early, or absence of classes during the course.	4.6080	.86971
14.I can gain a sense of respect in the blended learning model.	4.5600	.62733
17.Under the current learning model, I have not felt an increased academic workload.	3.6000	.90696

5.3. Learning Behaviour

Table 4: Descriptive Statistics for Questionnaire Items on Learning Behaviour

Items	Mean	S.D.
3.I complete the learning tasks on online Learning Platform on time and diligently study the learning resources provided by instructors.	3.8880	.84449
4.I actively participate in discussions during the class and engage in exchanging ideas and questions with the teachers and classmates.	3.8720	.78263
12.Based on the learning task sheet, I proactively complete relevant learning tasks and practical projects.	4.1680	.73765
13.Before class, I prepare relevant knowledge based on the resources shared by the teacher.	4.2320	.68552
20. To better complete shared tasks, group members hold individual accountability, form pairs or groups to work together and create positive interdependence.	4.1520	.79368

Table 4 demonstrates the students' learning behaviour in the blending learning process. A number of students show a great individual and group accountability in shared tasks (mean=4.152). Most of them proactively complete relevant learning tasks and practical projects based on the learning task sheet (mean=4.168) and prepare the lesson based on the learning resources shared by the teacher before or after class (mean=4.232, mean=3.888). In addition, many of them actively participate in discussions during the class and engage in exchanging ideas and questions with teachers and classmates (mean=3.872). That means classroom engagement and interaction tend to be more frequent in blended learning. Whereas, we can also see that the two mean ratings of Items 3 and 4 are lower than others in

this dimension, reflecting that students are a bit less satisfied with their own classroom participation and the task completion of online learning platform, compared to other aspects in this dimension.

5.4. Teaching Scaffolding

According to Table 5, it can be found that all the mean values of the items are larger than 4, which indicates that as for teaching scaffolding, most students agree that during the implementation of blended learning, learning resources and guidance teachers provide (mean=4.472, mean=4.448, mean=4.424), online autonomous learning platform (mean=4.104) and various online communication media (mean=4.352) can meet their learning needs, which can solve the problem of sharing learning resources timely in foreign language teaching, provide an accessible and effective English learning environment, and promote students' self-regulated learning and communication, etc.

Table 5: Descriptive	Statistics for Questionnaire	Items on Teaching Scaffolding

Items	Mean	S.D.
10. The learning resources shared by the instructor have enabled me to easily find the content I need.	4.4720	.65471
15.Online autonomous learning platform is capable of meeting the needs for sharing pre-class learning resources, self-directed learning, and communication.	4.1040	.83109
21. Teachers can provide guidance in class for the issues that students encounter in their practical experiences.	4.4480	.66546
23. Teachers use various online communication media (such as QQ, Wechat) outside of class to help me solve problems encountered during pre-class learning.	4.3520	.73238
28. The main teaching content and relevant literature materials shared by the teacher after class have been helpful for my review.	4.4240	.66313

5.5. Teaching Interaction Effect

Table 6: Descriptive Statistics for Questionnaire Items on Teaching Interaction Effects

Items	Mean	S.D.
18. The face-to-face communication in class enhance my problem-solving abilities.	4.1840	.80707
19.In this course, I have a deeper insight into the importance of peer assistance, negotiation, and cooperation.	4.1120	.82517
22. The difficulties I encounter can be promptly addressed through peer interaction.	4.2640	.78436
24.Group discussions in class along with further guidance from the teacher help me grasp the knowledge.	4.3600	.67680
25. The interaction with classmates and the teacher during class is very beneficial for me, which can improve my learning abilities.	4.3440	.75246

As can be found in Table 6, with regard to the teaching interaction effects in blending learning, most students believe that the interaction in class is exactly effective, which can help them grasp knowledge (mean=4.36), improve learning abilities (mean=4.344), enhance problem-solving abilities (mean=4.184) and overcome difficulties (mean=4.264). Furthermore, a lot of students agree that they have a deeper insight into the importance of peer assistance, negotiation, and cooperation (mean=4.112).

5.6. Teaching Objective Achievements

From Table 7, in terms of the teaching objective achievements, it can be observed that all the means of the items are greater than 4, which can suggest that the achievement of the teaching objectives in this course is relatively good. Specifically, most students consider that their ability to solve practical problems (mean=4.056), their teaching skills and teacher comprehensive competence (mean=4.24) have improved after implementing blended learning. And a great amount of them believe that they have gained a solid understanding of the relevant theories of English teaching methodology (mean=4.104) and have got a further understanding of the basic requirements and related aspects of lesson plan design (mean=4.312). Besides, a majority of students have grasped the basic methods of literature retrieval and am able to analyze specific teaching cases with relevant theories (mean=4.288).

Items	Mean	S.D.
11. Through blended learning, my teaching skills and teacher comprehensive competence have improved.	4.2400	.74487
26.After blended learning, I have gained a solid understanding of the relevant theories of English teaching methodology.	4.1040	.76014
27.After blended learning, I feel that my ability to solve practical problems has improved.	4.0560	.80627
29. Through blended learning, I have got a further understanding of the basic requirements and related aspects of lesson plan design.	4.3120	.65274
30. Through blended learning, I have grasped the basic methods of literature retrieval and am able to analyze specific teaching cases with relevant theories.	4.2880	.70501

5.7. Suggestions on this Blended Learning Model

Based on the questionnaire survey results, it can be found that most students have positive feedback on the implementation of the blended learning model. In order to further refine this learning model in the course of *English Teaching Methodology* and identify its current shortcomings, we have randomly selected eight students for individual interviews, aiming to allow students to express their views on the deficiencies of this learning model and provide relevant suggestions.

Suggestions on this blended learning model from the students interviewed can be summarized as follows: First, the online platform learning places a high demand on students' self-directed learning abilities. Students' understanding of online platforms and blended learning model significantly influences the learning outcomes. For example, Students A and C have mentioned difficulties in self-regulation during blended learning, in which they sometimes fail to complete online learning tasks on time. Therefore, teachers' introduction and guidance of the learning model and course syllabus must be thorough enough to prevent students from getting lost in the vast amount of online learning resources. Guidance should be provided to students on setting learning goals, planning learning strategies, and managing time effectively for self-directed learning. Second, some classroom discussions tend to require a high level of language proficiency from students. This might have a negative impact on the participation of some students. It's suggested that teachers should make great efforts to reduce the level of anxiety caused by weak language proficiency during classroom activities. Teachers should also pay attention to observing and understanding students' actual difficulties and needs, and provide timely guidance in areas such as cognition, emotion, and collaboration, aiming to enhance their problem-solving skills for reallife situations. For instance, Student B and F have stated that they have experienced much anxiety because of their poor English proficiency and Student E has said that "I hope to receive more guidance and feedback from teachers, which makes me feel more reliable". Third, teachers are suggested to create a more harmonious learning environment, help students form a learning community, reduce feelings of isolation in learning, and foster the sense of achievement in learning. Since the tasks on the extracurricular teaching practice platform demand students to possess theoretical knowledge and teaching skills, students should proactively address real problems encountered in real-life teaching practice to gain authentic experiences beneficial for their personal development. Students D and G believe that they lack theoretical knowledge in instructional design and extensive practice is needed to enhance their teaching skills. Additionally, Student H expresses the desire for teachers to pay more attention to the students' emotion in learning.

6. Conclusion

Online and offline learning both have their own strengths, which can play respective roles for various purposes, tasks, and environments, and serve to enhance the quality of teaching. In this paper, the implementation effects of blended learning is explored in the course of *English Teaching Methodology*, based on the application of the blended learning model of "Online Autonomous Learning Platform + Classroom Teaching Platform + Extracurricular Teaching Practice Platform". This learning model involves online theoretical knowledge learning, group collaboration, the careful design of teaching activities, tasks, and projects, etc, actively guiding students towards inquiry-based and personalized learning, in which both formative and summative assessments have been included in the process. Generally speaking, as enhancing students' knowledge of English teaching methodologies, this blended learning model to a certain extent has facilitated the organic integration of knowledge, skills, and competencies. According to the investigated data, most students responded positively to the blended

learning model in this course. They believe that this learning model can largely meet their learning expectations and needs, having a positive impact on their learning cognition, learning emotion and learning behaviour. Additionally, the scaffolding from teachers, online platforms or media in the blended learning model is helpful, and the teaching interaction is meaningful. What's more, the achievement of the course's teaching objectives is satisfactory. However, there are still some issues worth noticing, such as teachers' guidance and feedback, students' learning emotion and actual difficulties, which should be attached great importance to. For future researchers, studies can be explored further in more comprehensive and systematic approaches to evaluate the effectiveness of blended learning, with a view to provide valuable insights for the better construction of blended learning.

Acknowledgements

This research is supported by Guangxi Higher Education Undergraduate Teaching Reform Project in 2020: *Research and Practice of the Online and Offline Blended Learning Model in English Education Module Courses* (Project Number: 2020JGA360).

References

[1] Chen Jing, Chen Jiying, and Guo Kai. (2021) Investigating Student Engagement in a Blended Academic English Writing Classroom [J]. Foreign Language World, 1, 28-36.

[2] He Kekang. (2004) New Developments in Educational Technology Theories from the Perspective of Blended Learning [J]. E-Education Research, 3, 1-6.

[3] Chen Juanwen, Wang Na and Li Jinyu. (2017) Exploration of a Community of Practice Based on Blended Teaching Model in College English [J]. Modern Educational Technology, 9, 79-84.

[4] Driscoll M. (2003) Blended learning: Let's get beyond the hype [M/OL]. 1-3[2004-2-16]. http://www-07.ibm.com/services/pdf/blended learning.

[5] Clark D. (2003) Blended Learning: An epic white paper [DB/OL]. http://www.scribd.Com/doc/ 84278560/ Chark-D-Blended-Learning.

[6] Garrison D. R. and Vaughan N. D. (2008) Blended learning in higher education: Framework, principles, and guidelines [J]. Journal of physical therapy education, 25(1):135-137.

[7] Lee J., Lim C. and Kim H. (2017) Development of an instructional design model for flipped learning in higher education [J]. Educational Technology Research and Development, 65 (2):427-453.

[8] Tong Y., Kinshuk and Xie X. (2020) Teaching design and practice of a project-based blended learning model [J]. International Journal of Mobile and Blended Learning, 12(1):33-50.

[9] Liz Arney. (2017) Go blended! : A Handbook for Blending Technology in Schools [M]. Beijing: China Youth Press, 2017.

[10] Zhong Fuqiang. (2021)Research on the Path and System Construction of Smart Foreign Language Teaching Reform [J]. Technology Enhanced Foreign Language Education, 1, 85-91+14.

[11] Cai Jigang. (2019) Constructing a Project-Driven Blended Learning Model for Academic English [J]. Journal of PLA University of Foreign Languages, 3, 39-47.

[12] Feng Lin. (2019) Cultivating English Major Students' Critical Thinking Ability under Blended Learning: A Case Study of English Teaching Methodology [J]. Survey of Education, 16, 91-93.

[13] Zheng Yongyan. (2019) Research on Promoting Learning Effects of SPOC Blended Teaching in English Academic Writing Classrooms [J]. Technology Enhanced Foreign Language Education, 189, 50-55.

[14] Wang Zhihong and Zhang Jie. (2020) Research on Construction of the "Cloud Classroom" Blended Learning Model: A Case Study of English Linguistics [J]. China Educational Technology, 3, 100-105.

[15] Zheng Xinmin and Su Qiujun. (2020) Exploration of Blended Teaching Strategies and Beliefs Among College English Instructors in the Post-MOOC Era [J]. Technology Enhanced Foreign Language Education, 2, 15-21.

[16] Lai Chun and Su Yanfang. (2021) Self-regulated Learning in Language MOOCs: Research Review and Pedagogical Implications [J]. Foreign Language World, 1, 2-10.