# The Construction and Application of College English Blended Teaching Model Based on Mobile APP*

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*Abstract*—The college English blended teaching model based on mobile APP transforms students from passive recipients of knowledge to active inquirers of knowledge, and transforms teachers from the center of the classroom to the supervisors, organizers and guiders of the classroom. Through the combination of online self-learning before and after class and face-to-face teaching in class, this model effectively embodies "flip classroom" teaching. Moreover, this model enhances the interactivity and sociality of English teaching, helps to track students' learning behaviors, and makes college English teaching diversified and three-dimensional. It has significant theoretical and practical value for the reform of college English teaching.

*Keywords: mobile APP, college English, blended teaching model, IT-based teaching ability*

## I. INTRODUCTION

With the development of communication technology and mobile Internet, various mobile APPs emerge as the times require, providing powerful technical support for informatization teaching and changing the traditional teaching paradigm. Mobile APPs are multi-dimensional, interactive and accessible. At present, many researchers focus on how to combine mobile APP with traditional classroom face-to-face teaching to implement blended teaching and improve teaching effect.

## II. MOBILE LEARNING AND BLENDED TEACHING THEORY

### A. Mobile learning

As a new way of learning, mobile learning has not yet had a unified and clear definition. Many scholars (e.g. Quinn, 2000; Dye et al., 2001; Hummel et al., 2003; Huang Dequn, 2005; Yu Shengquan, 2007) have defined mobile learning, with slightly different expressions, but their definitions have one thing in common: they emphasize learning anytime and anywhere [1].

The current modes of mobile learning mainly include: mobile learning based on short message; mobile learning based on multimedia mail; mobile learning based on mobile learning software; mobile learning based on online browsing; and mobile learning based on real-time interactive software [1]. This paper mainly adopts the third mode to explore the effects of various mobile APPs on students' autonomous learning and college English teaching.

### B. Blended teaching

Professor He Kekang proposes that blended learning is to combine the advantages of traditional learning methods with the advantages of e-learning (that is, digital or networked learning). In other words, teachers should not only play a leading role in guiding, inspiring and monitoring the teaching process, but also fully reflect the initiative, enthusiasm and creativity of students as the main participants of the learning process [2]. The "blended teaching" adopted in this paper is consistent with the connotation defined by professor He Kekang, that is, this teaching method is a combination of classroom face-to-face teaching and learners' active learning in the online environment supported by information technology.

Most of the researches on college English blended teaching by Chinese scholars are qualitative, but a few are empirical. Qualitative studies are as follows: Meng Yanli (2011), and Zhen Rong (2013) studied the cultivation of self-efficacy in college English writing based on blended teaching [3] [4]; Huang Tian'e and Li Lanyi (2014) explored the blended teaching mode of college English based on blackboard network teaching platform [5]; He Fang, Xia Wenhong, and He Yun (2016) explored the construction of college English mixed teaching model based on cMOOC [6]; Yang Fang, Wei Xing, and Zhang Wenxia (2017) probed into the implementation and effect of blended teaching mode in the course *English Communication in Daily Life*, and summarized the characteristics of blended teaching mode on this basis[7].

Empirical studies are as follows: The research of Qi Hong and Fu Zhuqin (2007) showed that the combination of online autonomous learning based on Blackboard platform and face-to-face teaching in class was conducive to improving students' English application ability [8]; Hou Jianjun (2010) explored the practical application and effect

of college English blended teaching model, and put forward some countermeasures and suggestions [9]. In this paper, qualitative research and quantitative research will be combined to explore the construction and application of college English blended teaching model based on mobile APP, providing a beneficial supplement for college English blended teaching theory and practice.

III. CONSTRUCTION AND PRACTICE OF COLLEGE ENGLISH BLENDED TEACHING MODEL BASED ON MOBILE APP

*A. The basis of college English blended teaching model*

The era of big data has put forward new requirements for foreign language teaching in Chinese colleges and universities. Foreign language teaching must adopt information technology. There are three national policies and regulations that have the greatest influence on the informatization of foreign language education in Chinese universities: *College English Course Teaching Requirement (2007)*, *The Outline of National Medium- and Long-Term Education Reform and Development Plan (2010-2020)*, and *Ten-year Development Plan for Educational Informatization (2011-2020)*[10]. *College English Course Teaching Requirement* clearly states that "colleges and universities should make full use of modern information technology, adopt computer-based and classroom-based English teaching mode, and improve the single teaching mode dominated by teacher teaching." Chapter 19 *The acceleration on the process of education informatization* of *The Outline of the National Medium- and Long-Term Education Reform and Development Plan* states that it is necessary to accelerate the construction of educational informatization infrastructure, strengthen the development and application of high-quality educational resources, and build a national education management information system. Chapter Six *Promoting the deep integration of information technology and higher education to create innovative talent training models* of *Ten-year Development Plan for Educational Informatization*

proposes to strengthen the construction and application of digital campus and promote the innovation of talent training mode. However, there are still some problems in the informatization teaching of public English in higher vocational colleges in China, such as the unsatisfactory effect of informatization teaching, teachers' deficient informatization teaching ability, and students' insufficient attention to informatization teaching [11]. The national policy and the present situation of English informatization teaching in higher vocational colleges provide the basis for the implementation of the blended teaching model of college English.

*B. Construction of college English blended teaching model based on mobile APP*

The textbooks used in college English course in Guangzhou Civil Aviation College are: *Civil Aviation College English Comprehensive Course*, *Audiovisual Course*, *Reading and Writing Course*. The teaching hours are 4 periods per week. It is face-to-face teaching in class. Among them, the teaching of the comprehensive course includes the core vocabulary of the text, grammar points, explanation of long difficult sentences and the translation of the text. The *Audiovisual Course* focuses on the training of students' listening and speaking skills. The *Reading and Writing Course* focuses on broadening students' horizon and improving students' writing ability. At the same time, the college English teaching gives full play to the advantages of computer-aided teaching and provides abundant learning resources, examination database and item bank on the network learning platform for students to learn independently, extending learning to extracurricular activities and complementing classroom teaching.

The overall framework of the blended college English teaching model in the author's college is shown in "Fig. 1":
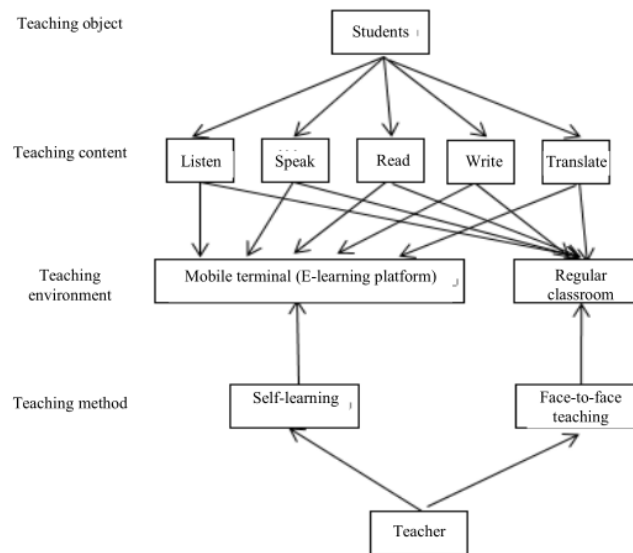


Fig. 1. College English blended teaching model based on mobile APP.

This teaching model embodies the connotation of blended learning. Students can choose the contents suitable for their own level according to their individual learning needs, regardless of time and space. Teachers can realize the integration of online and offline teaching and guide and monitor students' learning behavior through the face-to-face teaching in multimedia classroom and the auxiliary teaching in online learning platform.

### C. Practice of college English blended teaching model based on mobile APP

Next, the author will take Unit 7 *Career Planning* of *Civil Aviation College English Comprehensive Course* (Book I), as a case study to explain how to use various mobile APPs to carry out college English blended teaching. Mobile APPs used in this unit are: vocabulary learning software, Mosotech (Lanmo online class), Writing Correction Network (www.pigai.org) and so on.

*1) Pre-class preparation:* First of all, the teacher creates college English course with Mosotech, issues course notices, upload course information, and let students register in Mosotech, providing training guidance for the use of Mosotech online teaching platform. Then, the teacher creates the online course of this unit in Mosotech, uploads the learning objectives, multimedia PPT, teaching plan, micro-lesson videos, audio materials and related links and other course resources, and establishes the exercise bank. By realizing the optimized combination of curriculum resources, the teacher creates an immersive language learning environment for students, so that learning is not limited by time and space. Next, the teacher issues a course notice to ask the students to complete the autonomous learning task before class. Students log on to Mosotech before class, view and complete the pre-class tasks. The preparation before class is divided into three parts: vocabulary preview, pre-class reading and English micro-video shooting. *Vocabulary preview*: The vocabulary of this unit can be divided into three parts: general vocabulary, specific terminology and jargon, and proper names. Students choose and download a vocabulary learning APP, such as Lingoes, Youdao Dict, BaiCiZhan, etc., to preview the new words in this unit. Vocabulary learning APP can provide the pronunciation of the word, and so on. *Pre-class reading*: Students log on to Mosotech and read relevant materials uploaded by the teacher to pave the way for the study of the text. *English Micro-video shooting*: Students are divided into groups to shoot English micro-videos of professional interviews, with 3-5 people in each group. One of them plays the role of interviewer, one is responsible for shooting, and the others act as interviewees. The team members can interview the graduating seniors about their choices among employment, further study and entrepreneurship, as well as the career planning of successful people in related industries, etc. The interview time is 5-10 minutes, and the location can be selected in the classroom, dormitory, teaching building,

etc. Video recording tools are not limited. After recording the video, each group uploads the video to Mosotech for sharing. At the pre-class autonomous learning stage, the teacher mainly plays the role of supervisor.

*2) Classroom teaching:* Classroom teaching is mainly divided into introduction of the topic, teacher guidance, achievement presentation, text explanation, summary and evaluation. *Introduction of the topic*: The teacher shows the picture of "huge crowds at the job fair" to the students, which leads to the topic of employment difficulties, and then introduces the theme that "college students must make good career planning". *Teacher guidance*: The teacher comments on the English micro-lesson video uploaded to Mosotech and gives suggestions on career planning. *Achievement presentation*: Before class, the teacher selects the three groups whose micro-videos are best made, and asks them to share the contents and recording process of the videos in class respectively. Then, each group is asked to evaluate their own performance. Other students participate in the evaluation. Finally, the teacher comments on each group's presentation. *Text explanation*: Students are asked to skim and scan the text, divide the text structure, summarize the main idea of each part, analyze the writing method adopted by the author, etc. Then, the teacher paraphrases and translates the long and difficult sentences in the text, and explains the usage of key words and phrases with examples. In the process of explaining vocabulary, phrases and sentence patterns, the teacher can make full use of Mosotech's functions of "raising hands", "answering questions" and "selecting students", so that students can take the initiative to answer questions and the teacher gives corresponding "experience value" as rewards. This can not only cultivate students' thinking ability, but also stimulate students' sense of competition and activate the classroom atmosphere, thereby internalizing the knowledge learned by students and enhancing the teaching effect. *Summary and evaluation*: It mainly summarizes students' preparation before class, students' achievement presentation in class, the text's key points and students' exercise completion. The teacher gives an overall evaluation of students' learning by combining students' self-evaluation and peer evaluation.

*3) Post-class exercises:* The exercises include vocabulary test, extracurricular reading and writing. The teacher can make use of many functions of Mosotech to monitor students' learning: an online test to see how well students know the key vocabulary of the unit; a forum for students to discuss and share their reading experiences or learning achievements, so that teachers can thumb up students' constructive opinions and give corresponding "experience value" as rewards; a Q&A area that collects students' learning puzzles for the teacher to give guidance and answers. In addition, the teacher posts the topic of essay on Writing Correction Network (www.pigai.org) and asks students to complete online writing after class. This essay is

a writing test of CET4 in December 2016: For this part, you are allowed 30 minutes to write an essay. Suppose you have two options upon graduation: one is to find a job somewhere and the other to start a business of your own. You are to make a decision. Write an essay to explain the reasons for your decision. You should write at least 120 words but no more than 180 words. The topic is "should college students choose employment or entrepreneurship after graduation", which is close to the theme of career planning in this unit. After students complete and submit the online writing, the APP can automatically grade students' essays from four aspects: vocabulary, sentence pattern, structure and content, and analyze the deficiencies in each sentence. The teacher also comments on students' essays online. Students revise their essays and upload them to Mosotech, where they are also graded by the teacher.

*4) Teaching evaluation and feedback:* The author's college mainly adopts the combination of formative evaluation and summative evaluation to evaluate the college English blended teaching and students' learning process and learning effect. The evaluation of learning process is a formative evaluation, which is mainly based on the records of students' resource learning, homework completion and independent testing in the networked learning platform. The evaluation of learning effect is the summative evaluation, that is, the students' final exam results are taken as the evaluation basis of learning effect. Students' final scores are composed of formative evaluation and summative evaluation, and provide reference for the evaluation and feedback of teaching effect.

*5) Teaching effect:* In order to verify the effectiveness of the mobile APP-based college English blended teaching model, after a semester of teaching practice, the author conducted a questionnaire survey on 96 students in the experimental class (co-class teaching). Before issuing the questionnaires, the author explained to the students the concept of "blended teaching" involved in the questionnaires. Each questionnaire was made up of 10 questions and adopted the five-level scale: from 1 to 5, which respectively represented "totally disagree", "disagree", "not sure", "agree" and " totally agree". 96 questionnaires were handed out and 94 valid ones were returned, with an effective return rate of 98%. After the questionnaire was collected, the ratio of students who chose "agree" and "fully agree" was calculated. A higher ratio means a higher degree of students' recognition of the blended teaching model. The statistical results are shown in "Table 1":

TABLE I. THE EFFECTS OF COLLEGE ENGLISH BLENDED TEACHING MODEL BASED ON MOBILE APP

| Content | The ratio of "agree" to "completely agree" |
| --- | --- |
| The use of Mosotech can enhance the English learning atmosphere. | 82% |
| Mosotech saves the class time and makes the class teaching more targeted. | 77% |
| The Writing Correction Network (www.pigai.org) can help correct some mistakes in compositions and improve writing ability effectively. | 86% |
| The use of various mobile APPs makes English learning more personalized and diversified. | 81% |
| Blended teaching has stimulated my interest in learning English. | 79% |
| The blended teaching has enhanced my confidence in learning English. | 70% |
| Blended teaching has improved my ability to learn English independently. | 82% |
| Blended teaching has improved my English learning efficiency. | 76% |
| Blended teaching enhances the sense of achievement in English learning. | 81% |
| I like blended teaching. | 76% |

It can be seen from the survey results that through the integration of online and offline teaching, college English blended teaching based on mobile APP has realized the effective utilization of teaching resources, enhanced interaction between teachers and students, stimulated students' learning motivation and interest, cultivated students' independent learning ability, teamwork ability and problem-solving ability, and enhanced the effect of teaching. It breaks the restriction of the traditional summative evaluation method, and achieves the diversification of evaluation mechanism through the combination of automatic system scoring, peer evaluation, teacher evaluation and other evaluation methods.

## IV. TEACHING IMPLICATION

The college English blended teaching model based on mobile APP has put forward new requirements on the informatization teaching methods of foreign languages and teachers' informatization teaching ability. To be specific, the reform of college English informatization teaching can be promoted through the following three aspects to improve teachers' informatization teaching ability.

### A. Guarantee of national policy

In April 2018, the Ministry of Education promulgated the *Action Plan for Educational Informatization 2.0*, proposing to "actively promote 'Internet + education' and adhere to the core concept of deep integration of information technology and education and teaching". The importance of information technology in education is obvious. Local governments and local education departments should reasonably invest in foreign language informatization teaching and promote the balanced development of education informatization in each region. On the other hand, due to different foreign language

teaching materials used in different regions, the required informatization resources also vary. Therefore, local governments should also make clear plans for the construction of foreign language informatization resources, so as to ensure the adaptability of informatization resources to the actual teaching in different regions. Secondly, the IT literacy of foreign language teachers should be emphasized. "Educational authorities at all levels and institutions of higher education should include IT literacy in the scope of teachers' basic quality and ability, and add dimensions of IT literacy, ability and behavior to the evaluation of teaching competitions, application for teaching and scientific research projects, and promotion of academic degrees and professional titles"[10]. Thirdly, students' IT literacy and ability should be valued. "National and local authorities in charge of education at all levels should consider including IT literacy and competence in students' foreign language proficiency assessment system reflected in *China Standards of English* (CSE) " [10].

### B. Support at college level

Firstly, colleges and universities should strengthen the construction of informatization facilities such as multimedia classrooms, language laboratories, network independent learning centers, foreign language learning software, electronic reading rooms, network libraries and other hardware facilities, promote the application of digital teaching resources such as micro-courses and MOOCs, create a good external environment for college English teaching, and make the integration of information technology and college English courses become regular. Secondly, colleges and universities can carry out informatization teaching training to improve the IT literacy and teaching ability of English teachers. Through investigation and research, it is found that "the majority of college English teachers in China only receive pre-job training but rarely receive post-job training and special educational and technical training, and the training contents are more theoretical than practical. This leads to the weak technical knowledge of college English teachers" [12]. Therefore, colleges and universities should provide financial support for the training of information technology competence to college English teachers, and organize specific on-campus or off-campus training for English teachers. Thirdly, colleges and universities can encourage English teachers to participate in the teaching ability competition, and integrate the informatization-based teaching ability into the evaluation system, and give corresponding rewards to teachers who win prizes in the competition.

### C. Personal growth of teachers

First, college English teachers should change their teaching philosophy, strengthen their faith in integrating information technology with college English teaching, and make full use of modern educational technology, such as mobile intelligent terminal, networked teaching platform, QQ group, WeChat group and other informatization means, to record and track students' learning behavior in and out of class, and dynamically evaluate students' learning effect.

Secondly, college English teachers can use the concept of "peer support" to set up teaching teams, form a learning community, share technical knowledge with each other, and conduct collaborative teaching researches to solve problems in teaching. Thirdly, college English teachers can carry out discussion and observation of informatization teaching, and take the initiative to realize their own role transformation and improve the ability of informatization teaching.

## V.    CONCLUSION

Taking the teaching of *Career Planning* unit as a case, this paper discusses how to use mobile APPs such as Mosotech and Writing Correction Network to carry out college English blended teaching, and verifies the effect of this teaching model through questionnaires. Practice has proved that this teaching model is helpful in improving the teaching efficiency of college English and enhancing students' independent learning ability. College English teachers should make full use of modern information technology, enhance informatization-based teaching quality, improve informatization-based teaching ability, promote the development and application of high-quality digital resources, and promote the reform of college English teaching.

The mobile APP-based college English blended teaching model discussed in this paper needs to be practiced and promoted in a wider range. Further researches can be carried out to verify the effectiveness of the mobile APP-based blended teaching model for college English writing and translation teaching through empirical researches, so as to improve the explanatory power of researches and deepen the understanding of blended teaching of college English.

## REFERENCES

[1] Wang Li, Dai Jianchun. The Construction and Application of the WeChat-Based Mobile Interactive Translation Teaching Model [J]. Technology Enhanced Foreign Language Education, 2015 (2): 35-41. (in Chinese)

[2] He Kekang. On New Development of Theory for Educational Technology from Blending Learning [J]. E-education Research, 2004 (3): 1-6. (in Chinese)

[3] Meng Yanli. Research on the Cultivation of Self-efficacy in College English Writing Based on Blended Teaching [J]. E-education Research, 2011 (5): 96-101. (in Chinese)

[4] Zhen Rong. A New Teaching Mode of English Writing Based on Blended Learning [J]. Foreign Language and Literature, 2013 (4): 142-144. (in Chinese)

[5] Huang Tian'e, Li Langao. A Probe into Blended Teaching Mode of College English Based on Blackboard Network Teaching Platform [J]. Theory and Practice of Education, 2014 (6): 55-57. (in Chinese)

[6] He Fang, Xia Wenhong, He Yun. Research on the Construction of College English Mixed Teaching Model Based on cMOOC [J]. Theory and Practice of Education, 2016 (18): 55-56. (in Chinese)

[7] Yang Fang, Wei Xing, Zhang Wenxia. An Exploration of Blended English Teaching Model [J]. Technology Enhanced Foreign Language Education, 2017 (1): 21-28. (in Chinese)

[8] Qi Hong, Fu Zhuqin. An Empirical Study on the Mixed Teaching Model of College English Supported by Blackboard Platform [J]. Journal of Xi'an International Studies University, 2007 (3): 84-87. (in Chinese)

[9] Hou Jianjun. Practice and Research of College English Teaching Based on Blended Learning [J]. E-education Research, 2010 (5): 108-111. (in Chinese)

[10] Fang Xiucai, Chen Jianlin. Status Quo and Planning Suggestions of Informatization of Foreign Language Education in Chinese Universities [J]. Foreign Language Education, 2018 (2): 57-62. (in Chinese)

[11] Mao Hehua. Current Situation Analysis and Countermeasure Research of Public English informatization Teaching in Higher Vocational Colleges [J]. Journal of Kaifeng Institute of Education, 2017 (8): 139-140. (in Chinese)

[12] Wang Xuemei, Xiong Yiwen. Research on the Influence Factors of College English Teachers' TPACK under the Background of"Internet +" [J]. Shandong Foreign Language Teaching, 2018 (6): 40-51. (in Chinese)