

Construction and Application of the Blended Mobile Learning Mode for Oral English Teaching in Higher Vocational Colleges*

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Abstract—Based on a mobile learning system, a blended mobile learning mode has been established here, which has integrated the mobile technology into oral English teaching. To investigate its impact on students' learning in vocational colleges and to explore students' attitude towards it, four classes participated in an experiment, and a questionnaire and interviews were conducted to collect the quantitative and qualitative data. Findings revealed that the mode is promising to enhance students' motivation and efficacy of learning as it can make up a learning community between the teacher and students which encourages the students-centered learning. Furthermore, most students held positive attitude towards it because they can build on their English skills and achieve comprehensive development.

Keywords—the blended mobile learning mode; oral English teaching; higher vocational colleges

I. INTRODUCTION

The last two decades has witnessed the rapid development of information technology which has greatly changed people's life. According to the report of China Internet Information Center (CIIC, 2018), by the end of 2018, the scale of mobile netizens in China was 817 million, with the proportion of Internet users accessing the Internet through mobile phones as high as 98.6%. The widespread use of mobile devices has brought about so-called digital native, the generation born in the past twenty years. They are adept users of mobile technology, which has also shaped their learning habits and preference. As they have intrinsic addiction to mobile devices, usage of mobile devices becomes the major distraction of learning which is always complained by teachers. However, it is impossible to ban these devices from classroom, because it will result in dissatisfaction of students as mobile devices are part of their life. Therefore, teachers have to find more positive and active ways to take advantage of them. It seems that to integrate mobile technology into in-class teaching and online learning is a good choice.

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Combined the advantages of mobile learning and other technologies such as computer and e-learning, blended mobile learning promises great potential to enhance efficacy of EFL in vocational education. This study wants to explore the construction of a blended mobile learning mode based on a mobile learning system and investigate the impact of its application on oral English teaching in vocational colleges.

II. LITERATURE REVIEW

A. Blended Learning

Taking its form until the late 1990s, blended learning, or hybrid learning, is a new term in education sector. However, the concepts behind it have existed for a long time, which developed in 1960s. Blended learning was regarded as a thoughtful integration of classroom face-to-face learning experiences with online learning experiences that has the proven potential to enhance both the effectiveness and efficiency of meaningful learning experience [1]. It combines the advantages of conventional learning and e-learning to achieve the optimal outcomes. In blended learning activities, teachers are required to play a leading role in inspiring and monitoring teaching process, while students to present their initiative, motivation and creativity.

B. Mobile Learning

Mobile learning, also known as m-learning, is a new way for learners to get access to educational content through mobile devices anywhere, anytime and on the move. As a relatively new phenomenon, mobile learning has got much attention from academic and professional community, but there is no consensus on its definition. In his book *The Future of Learning: From eLearning to mLearning*, Keegan (2002) categorized the development of education and distance learning into three stage: the evolution from distance learning (d-Learning) to electronic learning (e-Learning) and then to mobile learning (mobile learning). He claimed that mobile learning is the new stage of development of distance learning [2]. Traxler (2010) believes mobile learning is sometimes seen as an extension of e-learning (Internet-based distance education); in other words, it is seen

as an e-learning initiative accomplished through the use of mobile devices [3].

However, mobile learning is distinct from e-learning in terms of learning across contexts (mobility) and with mobile technologies [4]. Hence, it is not just a replacement, or an alternative of existing education or learning method, but represents a powerful shift in the way education is delivered and received. The same idea is shared by Sharples, Taylor and Vavoula (2007), who stated mobile learning is the processes of coming to know through conversations across multiple contexts among people and personal interactive technologies [5]. Therefore, a commonly accepted definition of mobile learning is “using mobile technology to facilitate learning” [6].

III. THE CONSTRUCTION OF BLENDED MOBILE LEARNING IN ORAL ENGLISH TEACHING

A. *The Characteristics of Blended Mobile Learning*

As mobile devices have also gradually been introduced into the educational context over the past two decades, there is great potential to carry out the blended learning based on mobile terminals which are more accessible and more convenient to carry. Combining the advantages of blended learning and mobile learning, blended mobile learning is a kind of mobile-assisted learning integrated into the English in-class teaching. It promotes the seamless connection of O2O (online to offline), and appeals to students who are addicted to mobile devices.

The characteristics of blended mobile learning can be categorized as: 1) teaching activities blended with mobile technology; 2) online learning blended with offline learning; 3) teacher-directed learning blended with learner-centered learning; 4) autonomous learning blended with socialized learning.

B. *The Advantages of Blended Mobile Learning for Oral English Learning*

Supported by mobile technology, blended mobile learning based on mobile learning system links real classroom and virtual classroom, realizes the seamless connection between online learning and offline learning. Compared with the traditional teaching, blended mobile learning has many unparalleled advantages for oral English learning.

1) Diversifying the learning methods: With the support of mobile learning, learners can easily get access to various resources without being restricted by time and location, which means they can take control of their learning. When individual needs and personalities are taken into account, the personalized and self-paced learning has been achieved, and students will have the flexibility to choose what to learn and how to learn aligned with their learning styles, habits, abilities and preferences as well.

2) Promoting the learning efficiency: Language is the tool for communication, and language competence determines one’s communicative ability, which can be

cultivated through effective communication. Mobile learning can support the interactive communication by allowing students to get so-called peer coaching from fellow students and instruction from the teacher with the constant connectivity to them through mobile devices. Therefore, multidimensional communication and interaction in learning community made up by the teacher and students creates an encouraging environment which can help students solve problems, acquire the target language and develop communicative ability in group cooperative learning.

3) Developing students’ autonomous learning ability: The massive, individualized learning resources and timely intelligent feedback system embedded in mobile learning system provide a convenient and manageable measurement and analysis tool for teaching design and research, which can help students carry out self-monitoring, self-testing, self-reflection. It represents the learner-centered teaching theory, and is conducive to developing students’ autonomous learning ability and improving their learning motivation.

4) Creating authentic and situated learning contexts: Second language acquisition theory emphasizes that language learning should be situated in the real and meaningful surroundings. However, in traditional English teaching mode, students can hardly use the foreign language in the authentic contexts outside the classroom. The multiple functions provided by mobile learning platform can allow learners to access to many kinds of learning resources, such as text, pictures, video, and create a personalized learning experience by creating video/audio, taking photographs, receive or send text message etc.. Their interactive communication with classmates and the teacher will help them complete the construction of knowledge and develop the language skills in the process of collaborative and contextualized learning.

C. *The Design of Blended Mobile Learning Based on Mobile Learning System*

The blended mobile learning mode based on mobile learning system highlights learners’ central position, contributes to the cultivation of students’ autonomous learning ability and comprehensive quality; it can also help teachers to play the leading role in following up the whole process of students’ learning in real time, and providing active and effective supervision and guidance. As it is shown in Figure 1, the mode can be divided into three stages of pre-class, in-class and after-class which can realize construction, internalization and extension of knowledge separately, forming a teacher-directed and learner-centered learning mode.

1) Pre-class: knowledge construction: Based on the questionnaires issued in the system, the teacher can analyze the learning situation of students and know their needs, then set initial learning goals and plans. Subsequently, learning tasks and resources such as videos, tests and websites are pushed to students through the platform to help students

acquire basic knowledge. At the same time, the teacher can know their problems and difficulties in autonomous learning according to the feedback from the system, such as learning records, test results, etc., and then make detailed teaching plans to achieve learning-based teaching. On the other hand, students can arrange their own learning time and place and collaborate online with their classmates in a variety of ways with mobile terminals.

2) *In-class knowledge internalization*: The focus of in-class activities is knowledge internalization. By creating situations and typical tasks, students are guided to apply what they have learned into practice through inquiry learning and cooperative learning. During this process, the teacher is playing the role of scaffolding to monitor students' learning situation and provide on-time help. After students make oral production in the class, the teacher will make immediate comments and summaries on their output so as to promote the knowledge internalization. Besides, the application of mobile learning system can promote interactions and collaboration, and form a learning

community. Such an encouraging learning environment which emphasizes participation and responsibility surely influences the motivational orientation [7], hence to improve the teaching efficiency. For example, using the system to carry out various forms of teaching activities, such as check-in, voting, random roll call, live broadcast, can activate the in-class atmosphere; online in-class tests can help teachers know the real-time learning situation of students; online peer assessment can help students learn how to appreciate and evaluate others' works.

3) *After class: extension of knowledge*: After-class learning aims at knowledge expansion. The teacher will provide personalized guidance and assignment to students based on their pre-class and in-class learning situation. Students have to finish their assignments and share their works with fellow classmates. They also make comment on others' works. The teacher will give the feedback to students. Based on the assessment from the teacher and classmates, students can make reflection on themselves so as to consolidate the acquired knowledge.

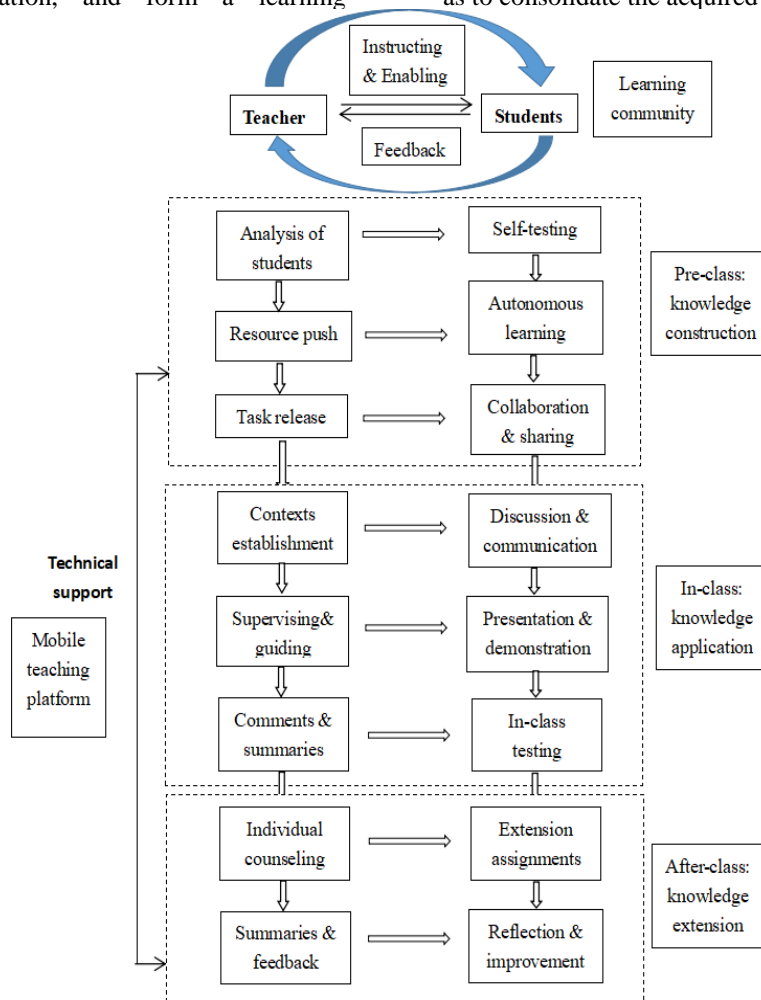


Fig. 1. The Blended mobile learning mode.

IV. THE APPLICATION OF BLENDED MOBILE LEARNING IN ORAL ENGLISH TEACHING

Based on Superstar learning system, a mobile learning platform which can be operated both on the mobile devices and computers with the same login ID, the blended mobile learning mode has been applied into oral English teaching. To investigate students' perception to this new mode as well as its impact on oral English teaching, an experiment has been conducted for 16 weeks with one 45-minute oral English class each week. 158 freshmen in four intact classes from four different majors were selected randomly in a vocational college. They all had smart phones or cellphones, and some even had iPads or computers. Their scores in National Matriculation English Test (the officially acknowledged authorized standardized examination in China) showed they were at the same level with regard to their English proficiency and learning ability. After the experiment, a questionnaire survey of 24 questions was administered to those students to explore their learning

attitude, ability, efficacy and satisfactions of the mobile learning system. A five-point Likert scale from "strongly disagree" to "strongly agree" was utilized here, and the value of Cronbach's alpha was 0.978, which demonstrated a satisfactory level of the items' reliability. A total of 148 valid answer sheets to the questionnaire were obtained from 158 students in those four classes. Table 1 presents the means and standard deviations of the scores of the questionnaire. Moreover, a one-to-one semi-structured interview with three open-ended questions was given to twenty students who were randomly selected from those classes. Therefore, the research team can further understand students' perceptions towards blended mobile learning and their experiences with the learning system.

It is clearly shown that most of the participants held the positive attitude towards blended mobile learning and the mobile learning system as the total score reached 78.71%, 94.452 out of the maximum of 120, and similar level of appreciation was found in each aspect of the questionnaire.

TABLE I. DESCRIPTIVE STATISTICS OF QUESTIONNAIRE

Items (maximum)	EG				
	Minimum	Maximum	M	SD	Med.
Learning attitude (30)	1	5	23.906	5.075	3
Learning ability (25)	1	5	19.777	4.302	3
Learning efficacy (35)	1	5	27.425	6.348	3
Satisfaction (30)	1	5	23.344	5.201	3
Total (120)	1	5	94.452	20.926	3

As to the Learning Attitude aspect, the highest mean score ($M=4.054$, $SD=0.772$) was obtained for item 5 (I can finish the test in the learning system on time). Most students (more than 70%) agreed that blended mobile learning enhanced their motivation for oral English learning as it helped them to become more self-reliant. They were pushed to spend enough time finishing online tasks such as learning the mini-lecture, watching videos, taking the tests and quizzes, etc.. Furthermore, it fostered peer coaching and collaborative learning as students used it to discuss content and share opinions with classmates and the teacher. And the multiple functions offered by the mobile learning system spurred more active engagement of students in learning activities.

The results for Learning Ability aspect indicated that the highest mean score ($M=3.993$, $SD=0.837$) was obtained for item 8 (I can plan the learning progress according to the learning objectives and content). Most students (more than 72%) agreed that they learned how to make schedules to finish the autonomous learning with appropriate learning strategies. Moreover, they have built on their ability to discover and solve problems and to evaluate others and themselves as well.

As to the Learning Efficacy aspect, the highest mean score ($M=3.966$, $SD=0.868$) was obtained for item 12 (My pronunciation is improved greatly). Most students (more than 71%) agreed that they have acquired more vocabulary

words, and their language skills, interpersonal communication ability and ability to analyze and solve problems all have been improved. Moreover, their interest for English learning has been aroused and learning efficiency improved too.

Finally, the results for Satisfaction of the learning system indicated their appreciation for it as the highest mean score ($M=3.966$, $SD=0.868$) was obtained for item 22 (I like to carry out blended mobile learning through this mobile learning system). Most students (more than 68%) agreed that it was easy to use the mobile learning system, and its designs and functions appealed to them. They like to continue to use it in the future.

As students' responses were reconfirmed in the interview, we can give our explanations from the following two aspects: motivation and efficacy.

Blended mobile learning encourages the shift from the teacher-centered learning to the student-centered learning in which students can control their learning with the help of mobile devices. As they are allowed to personalize their learning to meet the educational goals based on their needs and abilities, they are motivated to carry out learning aligning with their competence, cognition ability and preferences as well. Furthermore, the implementation of the mobile learning system put fun into English learning as it can support a variety of activities in online and offline learning. For example, the teacher could use the quick response to

encourage students to answer questions rather than to force students to be volunteers. As winners in the competition can get additional scores, students will become active. The system also created an encouraging environment which provided more opportunities for students to practice their spoken English and reduce their anxiety about speaking English. A student said in her interview that she felt relaxed to speak English by using the system. As she could do it alone at anytime and anywhere as long as there was WI-FI, she didn't need to worry about the embarrassment and ridicule even if she made some mistakes. "Actually," she said, "I always practice it for several times until I can do my best before I upload my works onto the system. And now, I find my pronunciation is really improved a lot."

Accordingly, enhanced motivation has promoted learning efficiency of students. More engagement in English learning has improved their English competence and skills; more collaborative learning fostered by the blended mobile learning has enhanced their interpersonal communication skills; authentic and situated learning has trained their abilities to apply theory into practice and to analyze and solve problems in English. Besides, the rich resources presented in the system has also broadened students' vision, trained their abilities to collect and analyze the information, and fostered their divergent thinking so as to benefit them a lot. As a student stated, "I've learned a lot in this semester, and the most important gain is that I know how to learn and my learning ability has been improved. I can do the learning independently, and I can make my personal learning plan, which I have never done before."

V. CONCLUSION

Based on the mobile learning system, this paper has established a blended mobile learning mode for oral English teaching in higher vocational colleges. In this learner-centered learning mode, the role of the teacher is transformed from the initiator and supervisor into the promoter and guide of students. As the teacher is engaged in students' learning activities, they can make up a learning community which encourages students to experience the meaningful learning and achieve comprehensive development. The application of the new mode has verified that it is really beneficial to enhance students' motivation and efficacy of learning, and has exerted positive efforts on their learning attitude and ability.

However, this study also has limitations. First, only a small group of participants was used here, which limits the generalization of the results. Second, the findings are limited by self-report data and interviews. Therefore, further studies can be conducted to find out the how effective the mode is to improve the speaking skills of students in vocational colleges and which specific speaking skills can be improved by it.

REFERENCES

[1] Garrison, D. R., and Kanuka, H. "Blended learning: Uncovering its transformative potential in higher education," *Internet and Higher Education*, July 2004, pp.95-105.

[2] Keegan, D. *The Future of Learning: From ELearning to Mlearning*. Hagen, North Rhine-Westphalia: FernUniversitat in Hagen, 2002.

[3] Traxler, J. "Distance education and mobile learning: Catch up, taking stock," *Distance Education*, vol. 31, no.2, pp.129-138. July 2010.

[4] Lam, J., J. Yau, and S. K. Cheung. "A review of mobile learning in the mobile age," *International Conference on Hybrid Learning*, Beijing: Springer Berlin Heidelberg, August 2010, pp. 306-315.

[5] Sharples, M., Taylor, J., and Vavoula, G. "A theory of learning for the mobile age," In R. Andrews & C. Haythornthwaite (Eds.), *The Sage handbook of Elearning research*. pp. 221-247. London: Sage. 2007..

[6] Hwang, G. J., and Tsai, C.C. "Research trends in mobile and ubiquitous learning: A review of publications in selected journals from 2001 to 2010," *British Journal of Educational Technology*, vol. 42, no. 4, pp. 65-70. April 2011.

[7] Ames, C. "Classrooms: goals, structures, and student motivation," *Journal of Educational Psychology*, vol. 84, no. 3. pp. 261-271. September 1992.