

A Study on Blended Listening Teaching Model Supported by Mobile Technology

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Abstract

In today’s rapid development of information technology, the deep integration of information technology and English curriculum is the core of current English teaching reform. The paper proposed and constructed blended English listening teaching model. The teaching practice proved that blended listening teaching model supported by the mobile technology can evidently promote students’ listening ability. The model has strong operational and practical significance.

Key words: Mobile assisted language learning; Blended listening teaching model; Mobile technology

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INTRODUCTION

Language is the product of social communication needs and practice. The ultimate goal of learning a foreign language is to communicate in a foreign language. This communication includes ability of receiving information and sending information accurately. The former includes listening and speaking, and the latter includes reading and

writing. Rivers, a famous American language educator, shows the proportion of listening, speaking, reading and writing in people’s language communication: listening 45%, speaking 30%, reading 16% and writing 9%. Accordingly, English listening ability plays an important role in language communication.

Listening course is a compulsory course in the first and second year of undergraduate English majors. The nature of the curriculum is a basic course. Listening ability is an important aspect of people’s language communication ability. It is not only directly related to listening skills and proficiency, but also closely related to the listener’s language ability, cultural knowledge and thinking ability in other aspects. Therefore, it plays an important role in talent cultivation. The teaching aim of this course is to help students to carry out special listening skills training and improve students’ listening comprehension level. On the basis of understanding basic language units (such as pronunciation, letters, numbers, words, sentence patterns, etc.), teachers help students gradually enhance the comprehension ability and familiarity of the text, and improve the ability of analysis, induction, synthesis and reasoning. Teaching task of this course is mainly to help students overcome listening obstacles, understand the English speakers’ conversation in the general social occasion and understand the listening material equivalent to the listening material of moderate difficulty, understand the gist, seize the main argument or plot, analyze and understand the speaker’s attitude, emotion and formal intent, take notes in English briefly. Through this course, students should be able to understand the main content of “voice of America” (normal speed) the news program of native English speakers’ national radio and television and students can write an outline or make a conclusion about the content.

Traditional listening teaching needs to be improved. It has many disadvantages. In the listening class, teachers generally adopt the mechanical practice of playing records,

explaining words, repeating the recording to complete the exercise and comparing the answers. These traditional methods attach great importance to teachers' explanation, grammar explanation and knowledge inculcation, and neglect students' independent participation, language skills application and information acquisition and the cultivation of communicative competence, which leads to students' severe dependence on teachers, loss of motivation for independent learning and interest in learning English.

The post-90s "college students" are the generation growing up with the Internet and digital technology, living in the digital world, known as "digital natives". College students are more interested in online life, more willing to accept new things, new ideas and concepts, have stronger sense of self-value and unique personality.

According to the survey, in the digital campus, more than 90% of university students have smart phones. They surf the internet either in class or after class. Smart phone has become an important tool of students. However not many students take the advantages of the smartphone and apply it to study. As education workers of "digital migration", we should update education concept, change education mode and make students become the main body of learning by using mobile technology.

This paper intends to explore the supporting role of mobile technology in English listening teaching and use the advantages of mobile technology to build the English blended teaching mode, create beneficial listening learning environment.

1. THEORY

In this part, various theories are introduced.

1.1 Second Language Acquisition Theories

The second language acquisition theories are proposed based on the study of second language acquisition process and the rules of the second language acquisition. Although these theories can't be used directly to solve practical problems in the foreign language classroom, they have certain guiding significance to foreign language teaching. Language is a manifestation of human cognitive ability, which has become a consensus among researchers of different disciplines. Therefore, the relationship between cognition and language has become the focus of current research on second language acquisition theory.

Second language acquisition theories are divided into two schools in terms of time, which are respectively based on cognitive psychology and sociocultural theory. Theories based on cognitive psychology are composed of input hypothesis, the interaction hypothesis and the output hypothesis. They emphasize that the accumulation of knowledge is the key to the second language acquisition and believe that enough language input, interaction and language output are essential for improving listening ability. Theories based on social culture represented

by Lev Semenovich Vygotsky (1978) believe that participation is the most important aspect of second language acquisition. Students' interactive activity itself is a learning process. Therefore more meaningful interaction should be enhanced to enable students to participate in learning rather than simply to accept what is taught. Based on these two theories, it is envisaged that using education technology to encourage students to participate in communication and interaction is beneficial to improve teaching effectiveness, efficiency.

1.2 Situated Cognition and Learning Theory

Situated cognition and learning theory was first proposed by Resnik (1987) in the published paper "Learning In and Out of School." He believes that different learning group and learning environment have different effects on the formation of learning outcomes. It is her analysis that promotes the development of situated cognition.

Brent G. Wilson and Karen Madsen Myers (1993) notes in their passages "Situated cognition in theoretical and practical context" that situated cognition is a different theory from information processing theory. Through their theory, they try to correct the common mistakes people make in cognition, especially the cognition wholly dependent upon conveying facts and rules separate from contexts within which they are meaningful. They also points out that it is wrong to simply focus on conscious deduction and thinking, thus ignoring cultural and physical background. Situated cognition is a theory that posits that knowing is inseparable from doing and emphasizes that all knowledge is situated in activity bound to social, cultural and physical context. It is the result of a social process encompassing ways of thinking perceiving, problem solving, interacting and it develops in the process as well. Situated learning exists in social environments made up of actors, actions, and situations and knowledge is created or negotiated through the interactions of the learners with others and the environment.

Situated cognition emphasizes the use of knowledge as a tool and attempts to promote students' cultural adaptation through practical activities and social interactions. Situated learning believes that knowledge is an activity based on social situation, rather than an abstract and concrete object; knowledge is an interactive state constructed in the process of individual and environment interaction, not fact. Knowledge is a kind of human's ability to coordinate a series of behaviors to adapt to dynamic, changing and developing environment.

Situated cognition and learning theory emphasizes the importance of external learning environment to learning, and holds that meaningful learning is possible only when learning is embedded in the context of applying the knowledge. Therefore real and authentic situation and activities should be provided in teaching to reflect the true application of knowledge in real life and to offer chances for the interactions of understanding and experience; offer

chances to observe and simulate the process of learning, provide necessary guidance and “scaffolding” for learners at the critical moment of learning, and pay more importance to the learning of implicit knowledge. In this way, students’ learning model and learning scaffolding is established and confidence is fulfilled.

All in all, situated cognition can provide a method of solving problem when students have difficulty in memorizing and generalizing knowledge.

By summarizing, learners can facilitate the transferring of knowledge from one situation to another. Such learning environment can enable learners to repeat relevant information when needed. What students learn in school is only to prepare for exams, but not to solve practical problems. Knowledge acquired without context is often not practical. Therefore, in the process of learning at school, teachers should create certain situations and promote the transferring of knowledge to the context of daily life, so as to contribute to the learning of students’ knowledge.

1.3 Mobile Learning

Mobile language learning is a kind of learning that can take place at any time and place with the help of portable mobile equipment. The mobile terminal equipment used by mobile learning must be able to present the learning content effectively and provide two-way interaction between learners and teachers.

The biggest characteristics of language learning under the mobile environment is that learners can make full use of modern mobile technology and devices and access to education information, education resources and education service quickly and conveniently, breaking the limit of space and time in traditional classroom. Under appropriate conditions, teachers are able to apply communication technology to realize the rich teaching activities, connect the learning in class and learning after class effectively, forming student-centered learning model. Mobile language learning has the characteristics of mobility, universality, convenience, interactivity and individuality, and can be learned in formal or informal forms. Mobile learning can solve the problem of the limit of learning space and time, can enrich learning content and form, can bring the learners a new language experience, can embody the students’ learning autonomy and personalized learning methods, and can arouse strong language learning motivation and strong learning interest, thus improve the effects of language learning.

Applying mobile technology in the teaching process helps students make full use of extracurricular fragmentation time for preview and review, and strengthens the interaction between teachers and students and interaction between students and students. Applying mobile technology is beneficial to the improvement of teaching effects. Moreover, mobile technology assisted English listening teaching is also helpful to changing the negative effect of current mobile devices on college

students’ learning into a positive promotive effect, which will be more beneficial to cultivating students’ independent learning concepts and all-round skills.

1.4 Blended Learning

In December 2003, professor He Kekang proposed the concept of “blended learning” at the 7th global Chinese computer education application conference. He thinks blended learning is a combination of the advantages of traditional learning and e-learning. It emphasizes the leading role of teacher in the teaching process and cultivates students’ initiative, enthusiasm and creativity. Blended learning is based on web technology and is the combination of network technology and various teaching methods and technologies. In order to achieve the best teaching effect, it is a combination of teaching technology and specific classroom teaching. Blended learning is a learning model that meets the needs of social development and teaching. It reflects learners’ dominant position in the learning process and can mobilize learners’ enthusiasm and creativity. Meanwhile, teachers can guide and inspire students and control students’ learning process more macroscopically.

Blending teaching method is put forward based on the blended learning theory. Blended teaching method is based on cognitive development theory, social and cultural learning theory and constructivist learning theory. Blended teaching methods combine traditional face-to-face learning with pure technical environment; combine the advantage of network autonomous learning and classroom teaching, which exerts teachers’ leading role, so as to promote students’ autonomous learning ability and problem solving ability. Blended teaching mode is a form of teaching organization which is a collection of task-based teaching (TBLT), scene teaching (ST), interactive teaching, micro-course online video teaching, cooperative teaching (CL). With the help of online education resources and information technology, blended teaching combines online digital education and offline class effectively so as to achieve effective teaching effect.

The core of blended learning is the integration of various teaching methods, teaching modes, media and learning environment, which puts emphasis on the integration of e-learning and face-to-face classroom learning environment, the integration of teachers’ leading role and the students’ dominant status, integration of autonomous learning and cooperative learning, and integration of various teaching theories, such as constructivism, behaviorism and functionalism.

2. METHOD

2.1 Research Questions

To verify the effect of English listening teaching model based on blended learning supported by mobile technology, we conducted a semester-long experiment.

The experimental assumptions are as follows: compared with the traditional teaching mode, the blended-listening teaching model supported by mobile technology has more advantages in improving the listening ability of the students. Under the blended-listening teaching model supported by mobile technology, students listening ability can be promoted greatly.

2.2 Participants

We have chosen sophomores of English majors as our research subjects. They come from two classes. In experimental class, there are 50 students; all of them have smart phones, which enable them to search the internet, play audios and record sound. Among them, 48 students have their own laptops which have access to Wi-Fi. In control class, there are also 50 students. The number of students of these two classes is the same. The two classes are taught by the same teacher. The teaching hours and teaching conditions of the two classes are the same. Before experiments, English listening tests are carried out. The independent sample T-test indicates there are no obvious differences between two classes; they are basically at the same level and can be compared.

2.3 Instruments

We measure and analyze the experimental results from the quantitative and qualitative aspects.

Instruments of data collection and analysis include questionnaires, tests, interviews and the utilization of the software SPSS.

Before the experiment, students' current English listening learning situation is mastered through the questionnaire. After experiment, students' listening learning ability is investigated through the questionnaire.

Interviews are conducted with the teachers to understand the problems and solutions they encounter in the teaching process, and to explore the feasibility of popularizing the teaching mode of blended listening on a large scale. Interviews were conducted with the students to understand the adaptability of the model and provide references for the improvement and perfection of the model.

Two tests are given to the students in the process of this study. The first one was conducted at the beginning of the experiment in order to make sure the subjects selected

3.1 Analysis of Listening Scores of Experimental Class in Pretest and Posttest

Table 1
Listening Pretest Score Statistics From Experimental Class

<i>N</i>	Minimum	Maximum	Mean	Std. Deviation	Std. Error Mean
50	29.0	43.0	38.85	1.999843	0.72431

The total score of this test was 50. Experiment result indicated that before experiment the English listening level of experimental class was moderate. The average score was 38.85.

Table 2
Listening Posttest Score Statistics From Experimental Class

<i>N</i>	Minimum	Maximum	Mean	Std. Deviation	Std. Error Mean
50	35.0	46.0	43.40	2.10341	3.40916

were at the same English level before the experiment. The second one was taken at the end of the term to prove whether blended learning could improve students' listening ability. Listening questions are selected from CET-4. The total score was 50.

Statistical software SPSS is used to analyze the test results. Paired samples t-test and independent samples t-test are used to draw experimental conclusions.

2.4 Research Procedures

2.4.1 Data Collection

Prior to and throughout the test the participants were kept blind to the purpose of the appraisal. The appraisals and answer sheets were distributed among fifty participants during the class time. Detailed instructions were given beforehand both in written form and oral form. The participants were required to finish the test in forty minutes. All the fifty participants succeeded in submitting their answer sheets. The English listening test was carried out during class hours to evaluate the participants' English listening ability. The time limit was ninety minutes. In order to ensure that the participants would take the English listening test seriously, which would be beneficial to the acquiring of valid and reliable data, it was made clear to the participants prior to the test that their scores on this English listening test would account for fifty percent of their final performance of this semester. All the question items were multiple-choice questions. The participants would be given one mark for each correct answer. The total scores of their listening comprehension were fifty.

2.4.2 Data Analysis

The author employs SPSS 19.0 to build databases and conducts quantitative analysis of the data gathered from listening comprehension test. To answer the research questions.

3. RESULTS AND DISCUSSION

A data analysis of the scores collected from the tests will reveal the general characteristics of university students' listening ability. Then the author will discuss the results to reveal whether blended English listening teaching and learning can improve students' listening ability.

The total score of the test was 50. The results showed that after the experiment the students' English listening level of experimental class was good and average score was 43.40.

Table 3
Paired Sample T-Test of Listening Scores in Pretest and Posttest From the Experimental Class

	Paired			Differences		<i>t</i>	<i>df</i>	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				lower	upper			
Pair 1 Post-test-Pre-test	2.0915	.50864	.51234	0.9135	2.0209	9.98	40	.010

It can be seen from the table that the average score of experimental class increased from 38.35 to 43.40, increased 5.05 and from the paired sample test we know that there is a significant difference between the pretest and posttest.

3.2 Analysis of Listening Scores of Control Class Measured in Pretest and Posttest

Table 4
Listening Pretest Score Statistics From Control Class

<i>N</i>	Minimum	Maximum	Mean	Std. Deviation	Std. Error Mean
50	29.0	42.0	37.8	1.05873	0.41865

The total score of this test was 50. Experiment result indicated that before experiment their English listening level was moderate. The average score was 37.8.

Table 5
Listening Posttest Scores Statistics From Control Class

<i>N</i>	Minimum	Maximum	Mean	Std. Deviation	Std. Error Mean
50	32.0	44.0	40.15	2.17655	4.9278

Total score of this test was 50. It can be seen from the table after the experiment the scores of control group increased 2.35.

Table 6
Paired Sample T-Test Scores of Control Class in Pretest and Posttest

	Paired			Differences		<i>t</i>	<i>df</i>	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				lower	upper			
Pair 1 Post-test-Pre-test	1.1796	.2318	.2150	0.9955	1.6239	10.55	50	.200

It can be seen from the table that the average score of the English listening test in the control class improved a little after experiment, but there was no significant difference between the pretest and posttest scores, indicating that the English listening level of students in the traditional teaching model did not improve significantly

3.3 Comparative Analysis of Listening Scores of Experimental Class and Control Class in Posttest

Table 7
Comparative Analysis of Listening Scores of Experimental Class and Control Class in Posttest

Test	<i>N</i>	Mean	SD	<i>T</i>	Sig. (2-tailed)
Experimental class	50	43.40	.3092	5.321	.020
Control class	50	40.15	.8194		

The average scores of the posttest of the experimental class and the control class were different. Under the teaching model of blended listening, the listening level of students in the experimental class was significantly improved, while the listening level of students in the control class was not significantly improved. Therefore, the experimental assumption is verified that the blended teaching model of English supported by mobile technology has a significant advantage over the traditional teaching model in improving students' listening ability.

teaching and network teaching and is a traditional and novel teaching method, which can better meet the needs of language learners. English listening teaching based on blended learning can fully embody the leading role of the teacher and the initiative of the students. English teaching practice has proved that the blended teaching is beneficial to the cultivation of students' autonomous learning ability, can further improve the efficiency of learning. Blended learning has an incomparable advantage over other teaching methods whether it is a means of teaching or learning. It pays more attention to the creation of situations and interaction, which makes it convenient for teachers to conduct teaching management and enrich teaching methods so as to better improve English listening teaching effect.

CONCLUSION

Blended teaching theory is an improvement of learning theory, which integrates the advantages of traditional

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