

An Empirical Study of College English Major Students' Mobile-based Listening Autonomous Learning

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Abstract: *Autonomous learning, proposed by many researchers, teachers and learners, has become an important way of language learning. This paper adopts an empirical approach to investigate the role of mobile-based autonomous learning in English listening learning. This research has proved that mobile-based autonomous learning can effectively improve students' listening level, and has a positive role in improving students' learning interest and motivation, so that they won't rely on teachers but learn autonomously.*

Keywords: *autonomous learning; mobile platforms; English listening*

1. Introduction

Listening is a basic skill to learn a foreign language, yet has long been neglected. English major students in the researcher's institute only have English listening course for twice a week, even reduced once a week in the fourth term in their sophomore year. Students could get very little progress if they study listening at such limited class time. The contradiction of its importance and the reduction of listening course has been perplexing teachers and students^[1]. The researcher believes that in addition to the limit of time for English listening class, there are the following problems:

(1)The problem of language environment and the lack of necessary language and culture infiltration. English belongs to Indo European language family and was born in industrial and commercial civilization. It is different in cultural origin from Chinese produced in agricultural civilization. There great differences between eastern and western language environments. This difference is the main for hindering English learning. "Listening" is the basis of communication. The improvement of its is most affected by the language environment. Examination-oriented education that does not pay attention to the construction of language environment often leads to the phenomenon that students can read and write, but can't understand or speak.

(2)The problem of teaching methods, ignoring personalized teaching. The usual teaching mode adopted in listening class is: "Teachers play listening materials, students do exercises while listening, finally teachers explain the important and difficult parts of listening materials".^[2]Pointed out that this method is a test rather than teaching. This teaching mode has no interactive communication between teachers and students. Single dimension voice input makes learning monotonous and boring, difficult to improve students' interest in learning. The form of classroom activities is single and students' participation is not high. Listening exercises are only designed for listening comprehension, and the listening materials are not rich enough. Plain and tasteless recording materials also cause students' fatigue and even get defensive.

(3)Lack of practical application allows few opportunities for students to practice English. After the communication between students adopts the mother tongue, and the communication in the is rarely carried out in English. The English listening ability test is only making choices, resulting in lack of application of knowledge.^[3] Believes that such an atmosphere is not only unhelpful to expand students' English learning ability, but also easily leads to misunderstandings in English learning, students think that as long as they can get high marks in tests, it doesn't matter whether they can apply English to practice.

Students' autonomous learning through mobile platforms is supposed to be the best way to solve the above problems.

2. Autonomous learning and mobile learning

The generation of autonomous learning has both theoretical and practical basis. Firstly, in theory, influenced by humanism, foreign language teaching transformed from teacher-centered to student-centered in the 1980s. With this shift, personalized learning has become increasingly important, and learner autonomy gradually becomes the goal of foreign language teaching. Secondly, in practice, the rapid development of science and technology makes information and knowledge update with each passing day, and lifelong learning is becoming more and more essential. Autonomous learning is the main way of lifelong learning. To realize lifelong learning, we must develop autonomous learning ability. The emergence of autonomous learning is obviously based on the problems, needs and practice of lifelong learning of learners or learning groups. So the reduced listening course just requires students to be trained to equipped with autonomous learning ability, with the principles and strategies proposed by Pang Weiguo (2003).

The development of modern information technology and the emergence of mobile terminals have provided sufficient objective conditions for College EFL students to learn English listening autonomously. As an information-based learning mode that can transcend the limitations of time and place, mobile learning can not only develop personalized learning plans for learners, but also extend traditional classroom teaching into daily life and give timely feedback to learners, which plays a positive role in improving the learning effect of learners. Because mobile language learning has so many characteristics in line with language learning, it is regarded as the best way to assist English listening autonomous learning.

In this research, Keke English and Zhongyuzhahui are the main apps proposed to students for their listening autonomous learning because Keke English that offers rich materials is suitable for extensive listening, and Zhongyuzhahui that provides different listening exercises and tests is good for their intensive listening.

3. Research design

3.1 Research participants and sample

The research was conducted among English major sophomores of grade 2020, in the researcher's college, four classes altogether, two of the researcher's teaching classes are for the research, one as the experimental class, which is required to do extracurricular autonomous English studying with their mobile devices, and the other class as the controlling classes, doing spontaneously as usual.

English-major sophomores are selected for the research because they have had one-year college learning experience, having been used to the college life and learning style, able to make learning plans according to their own situations, no longer too aimless as in the first year, when they were required to have evening self-study courses too. As sophomores, they have only 4 classes on average on a workday, no class in the evening and weekends, so they have plenty of time in doing their autonomous learning after class. According to our survey, each student has a smartphone, about half of them have personal computers or iPads, which equip them to do autonomous learning with their mobile devices. Smartphones are what college students are welded to, so it will be of great help if we make best use of smartphones for English listening autonomous learning. Use smartphones to create a good language learning environment, listening to English in any form (English movies, news, speeches, stories, novels or articles from their textbooks, etc.) anywhere they go as soon as their ears and brains are free.

3.2 Research questions

This research mainly investigate the role of mobile-based autonomous listening learning, that is, whether autonomous learning through mobile devices can improve students' listening level without increasing the burden of teachers.

Questions are exactly equivalent to the above objectives:

(1)What's the current situation of English major students' English listening autonomous learning with MALL? (2) What's the role of autonomous learning through mobile platforms in improving students' English listening?

3.3 Research instruments

To investigate the importance of autonomous learning through mobile platforms on college EFL students' English listening, this paper uses tests to prove it.

In order to test the effectiveness of autonomous learning on English listening, we could compare the listening scores of their CET-4 (the National College English Test Band 4) as the pre-test and post-test. CET-4 is state-level English test taken twice a year in China for both English major students and non-English major students, including writing (15% of score in 30 minutes), listening comprehension (35% in 30 minutes), reading comprehension (35% in 40 minutes) and translating (15% in 30 minutes). In listening part, there are three pieces of short news in a total of 450-500 words for 7 multiple choice questions occupying 7% of scores, 2 long conversations in 240-280 words for 8 multiple choice questions occupying 8% and 3 passages in 220-240 words for 10 multiple choice questions occupying 20%.

3.4 Research steps

This study is mainly divided into three steps.

- (1) Pre-test before the experiment. Take the result of CET 4 in December 2021 for pre-test analysis.
- (2) During the experiment

The experiment lasted for one semester, a total of 16 weeks. Students complete two class hours of classroom learning and the autonomous listening task arranged by the teacher every week. The total length of autonomous listening after class is not less than 120 minutes per week, with corresponding exercises given by the teacher for at least 1 hour, and the rest of their free time for whatever they like to listen in English.

The experimental classes are consciously fostered with autonomous learning awareness and motivation. ELAL theories and strategies are gradually introduced to these students. When these students are aware of their learning aims, plans, strategies, and specific learning materials, the experiment will move forward step by step.

During the whole experiment period, the experimental classes are required to do ELAL through mobile platforms, keeping the habit to listen every day, using odd time to do extensive listening, and a fixed time for intensive listening. Keke English's function of reminding learning, keeping learning record combined with weekly classroom teaching can perfectly move their autonomous learning forward with best supervision way.

The researcher divided each of the experimental class into 7 groups at random, so that they can do group work, cooperate, help and supervise each other, making use of different members' advantage such as hobbies, learning styles or English levels, etc. Wechat group including all students in the experimental class was set for sharing learning materials and ideas, as well as forming competition and mutual supervision system among the groups.

The control class are not required to do any autonomous learning except the given assignment by the teacher if any after each class, instead, they have complete freedom to arrange their extracurricular time. While in the experimental group, according to our survey, we fixed Keke English as the main APP for students to do autonomous extensive listening after class, and Zhongyuzhahui for intensive listening such as test training or listening exercise. Students are required to install both the two ELAL apps on their mobile phones.

Before formally using the APPs, each student is required to submit their learning goals and plans in this semester, so that all of them are clear of their own goals and plans to do the autonomous listening. Before making their plans, according to the metacognitive strategy, students should first make self-assessment on themselves and find out their own weak points in English learning -- pronunciation, grammar, vocabulary, discourse understanding, listening, speaking, reading, writing and translation, with listening part in detail, make sure of their own listening levels, and then choose appropriate mobile network resources for targeted training and improvement.

During the experiment, the teacher uploads the weekly extracurricular listening assignment to the server on the APPs through the teacher's side, and the students can access it anytime, anywhere and complete the relevant assignment online. They can check their grades and correct answers at any time after they have finished all, and can play back the wrong questions. Since the system has automatically

recorded the completion of students, teachers will no longer "check" in class, but will set aside a certain time to answer students' questions, and focus on the topics with high error rate according to the background records.

Besides the assignments for intensive listening, students in the experimental classes also do a lot of extensive listening on Keke English, listening to any English material in Keke English as they like. There is a rank for their daily study time length, those who rank the first five at the end of each week will be praised and awarded with little presents. Since the students are divided into seven groups in the experimental class, supervision and encouragement within each group or between groups are suggested.

(3) After the experiment

At the end of the semester, the two classes conducted a unified test again, and the composition and difficulty of the test paper is consistent with the pre-test.

3.5 Data collection and analysis

This research has been conducted since January, 2022. The records of students' English listening learning have been kept and would be kept until the end of the research. The data of different stages were collected and analyzed for making assessment of English listening learning effectiveness in each stage.

Data from the tests were input into computer, and statistical analysis was performed using the social science statistical software Spss27.

First, data analysis of pretest results in the experiment of the equal group is made. Look at table 1:

Table 1: Independent samples T-test on listening pretest results of the experimental class and control class

Group Statistics					
	pretest	N	Mean	Std. Deviation	Std. Error Mean
pretest	Experimental class	34	165.18	34.176	5.861
	Control class	35	167.42	44.346	7.496

In the pretest, after the treatment of missing values, the average scores of the experimental group and the control group were 165.18 and 167.42, respectively, and in the Levene's Test for Equality of Variances, $F=2.781$, Sig. value/ $P=0.100 > 0.05$ (Value of significance level), so the variance is homogeneous. According to the Equal variances assumed, $T=-0.235$, Sig.(2-tailed)/ $P=0.815$, which was much greater than 0.05, indicating that there was no significant difference in the pretest of the two groups, and the students in the control group and the experimental group had the same level.

After a semester of study, the students' scores of the experimental group and the control group have improved significantly. As shown in table 2, the average post-test scores of the two groups have reached 195.03 and 176.97 respectively, and Sig. value/ $P=0.000 < 0.01$, which shows significant difference in the post-test of the two groups, therefore, English listening autonomous learning through mobile platforms is generally effective and has achieved the expected effect.

Table 2: Independent samples T-test on listening post-test results of the experimental class and control class

Group Statistics					
	classes	N	Mean	Std. Deviation	Std. Error Mean
posttest	Experimental class	34	195.03	27.242	4.540
	Control class	35	176.97	20.878	3.634

4. Discussion and conclusion

During the research, the researcher found that mobile-based autonomous listening learning can increase students' learning awareness, stimulate their learning potential, and improve their learning ability. During this process, students can develop their interests and habits of autonomous learning in English listening in their spare time, which can improve the quality of teaching, reduce the difficulty of teaching in the limited teaching because teachers can find what students' weak points in their

extra-curriculum autonomous listening learning and strengthen the relative teaching. What's more, using mobile platforms to carry out English listening teaching can make the English class more vivid and rich, enrich the listening content, so that students can increase their interest in listening course and get more interested in extra-curriculum autonomous listening learning, which forms a virtuous circle.

The final aim of this research is to improve students' effectiveness on English listening learning by developing students' autonomous learning ability in mobile-based environment and benefit their lifetime by forming and using the ability of autonomous learning.

This research is limited to English major but serves as the previous study for all Chinese college EFL learners in their autonomous learning from listening course.

References

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