# Effects of Improving College Freshmen's English Listening Comprehension via LINE App

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*Abstract*—Due to the rapid development and revolution of smart phones and social media, the mobile assisted language learning (MALL) has been widespread studied recently. The purpose of this study aimed to explore the effects of improving College freshmen's English listening comprehension via LINE App as an assisting learning tool after school. The quasi-experimental design was employed in the 18-week course with a total of 23 food science majored students (8 males, 15 females) participated in the 18-week class. The research tools included the pre-and post-tests, quizzes, audio tracks, LINE App group, interviews, and the satisfactory questionnaire survey. Paired-t test and descriptive statistics were administered to analyze the collected data. The major findings show that the freshmen's English listening comprehension has significantly improved thru LINE App assisted learning. In addition, the students' learning motivation and confidence are enhanced via LINE App assisted learning. Finally, LINE App enables the students to learn English ubiquitously.

*Keywords*—college freshmen, English listening comprehension, LINE App, mobile-assisted language learning (MALL), second language learning

## I. Introduction

Nowadays, due to the rapid development and popularization of emerging technologies and social media, language learning has become more diverse and interesting. Among a plenty of language learning technologies and devices have created abundant possibilities for the field of language education, especially for mobile-assisted language learning (MALL) and technology enhanced language learning (TELL). Learning English has become a national sport nowadays. Tons of learning materials and media are available in Taiwan. Many scholars and professors also obtained national grants to design and create various kinds of technology-enhanced or assisted language devices for all ages of language learners. For technological university students in Taiwan, their English proficiency level is way behind the students in the comprehensive universities. Thus, it is important to enhance technological students' English learning desire and motivation for language teachers of these universities. The purpose of this study aimed to explore the effects of integrating LINE App into the general English listening course.

## II. Literature Review

Chinnery pointed out a decade ago, mobile learning will become a trend and fashion for teachers and students in language learning. Current advanced mobile technologies clearly offer numerous practical uses in language learning [1]. Mobile technologies clearly offer numerous practical uses in language learning. In many cases, they are readily available on iPhone and Android apps. [2]. Many prior studies show that innovations in technologies have brought abundant possibilities for language learners, particularly the advent of smart phones, which have changed the learning behavior and outcomes of the learners in 21st century The findings also suggest that using Apps in the smart phone can enhance learners' learning motivation, attitudes, and performance [3] [4] [5] [6]. Scholars also pointed out that learners can learn various subjects through Apps on smart phone easily and ubiquitously when the internet access is available [7]. Nowadays, due to the rapid development of information technologies and smart phones, many apps not only become the communication tools but also provide tremendous learning materials and channels synchronously and asynchronously for language learners [8].

## III. Research Method

A quasi-experimental approach was employed in this study. From the 2$^{nd}$ week class to the 17 week class, the researcher divided these 16 weeks into 2 sessions for conducting the research. In the first 6 week of class sessions, the class was solely lectures and related class activities without any LINE app messages and audio tracks. The LINE audio tracks and the class highlights were sent to students in second part of the 6 week class. In the two 6-week sessions, quizzes were employed and weekly listening audio tracks were sent to students' LINE App group after class. Student were advised to review the lesson at home with sent audio tracks to assist them in their English listening comprehension.

The research instruments included the pretest and posttest, two quizzes during the two 6-week sessions, survey questionnaires, and interviews. The survey questionnaire includes two parts, one is the basic information, such as sex, hours of studying English per week, and the reaction when receiving LINE messages from the instructor. The second part of survey questionnaire contains 16 questions in 5-point Likert Scale followed by two open-ended questions, concerning about the use of LINE App assisted English listening learning. This survey questionnaire was adapted from the researcher's own developed instrument in the previous related studies. All collected data were analyzed by SPSS, including t-test, descriptive statistics, and paired t-test. Finally, four volunteer students were interviewed by the researcher.

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## IV.  RESULTS

All collected data were analyzed by SPSS, including descriptive statistics and paired t test followed by the summary of interviews.

Table 1 shows the reliability of the survey questionnaire. The questionnaire obtained a .919 of Cronbach Alpha reliability test, which can be explained that the questionnaire has high reliability.

TABLE I RELIABILITY STATISTICS OF THE SURVEY QUESTIONNAIRES

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
|---|---|---|
| .919 | | 16 |

Table 2 shows the results of descriptive analysis on the survey questionnaires. All students were highly satisfied and motivated with means ranging from 3.5217 to 4.7391 after using LINE App to practice their English listening and strengthen their learning after class. Among the 16 questions, Q11 "I think the instructor is very professional" obtained the highest mean of 4.7391. Q10 "I can open and study the supplementary materials stored in LINE app ubiquitously" obtained the second highest mean of 4.6087. The results indicate that all students are satisfied with the instructor's professional knowledge and teaching skills as well as the use of LINE App as a teaching assisted media. In contrast, Q8 "I only review the supplementary materials from LINE App" obtained the lowest mean of 3.5217, indicating that students not only review supplementary materials on LINE app group but also study the materials given by the teacher in class. Q9 "I will download the supplementary materials from LINE App and save them to my computer to review them" obtained the second lowest mean of 3.7391, indicating most students did not download materials and saved them to their home computers for study. That is, students preferred reading or reviewing the supplementary materials on LINE App in their mobile phones.

TABLE II DESCRIPTIVE STATISTICS OF THE 16 QUESTIONS

| | N | Min. | Max. | Mean | SD |
|---|---|---|---|---|---|
| Q1 | 23 | 2.00 | 5.00 | 4.1739 | .88688 |
| Q2 | 23 | 3.00 | 5.00 | 3.9130 | .79275 |
| Q3 | 23 | 4.00 | 5.00 | 4.5652 | .50687 |
| Q4 | 23 | 3.00 | 5.00 | 4.0000 | .79772 |
| Q5 | 23 | 3.00 | 5.00 | 4.2609 | .61919 |
| Q6 | 23 | 3.00 | 5.00 | 4.0870 | .73318 |
| Q7 | 23 | 4.00 | 5.00 | 4.3913 | .49901 |
| Q8 | 23 | 2.00 | 5.00 | 3.5217 | .94722 |
| Q9 | 23 | 3.00 | 5.00 | 3.7391 | .75181 |
| Q10 | 23 | 3.00 | 5.00 | 4.6087 | .58303 |
| Q11 | 23 | 4.00 | 5.00 | 4.7391 | .44898 |
| Q12 | 23 | 4.00 | 5.00 | 4.5652 | .50687 |
| Q13 | 23 | 3.00 | 5.00 | 4.4348 | .66237 |
| Q14 | 23 | 3.00 | 5.00 | 4.1739 | .77765 |
| Q15 | 23 | 3.00 | 5.00 | 4.3043 | .63495 |
| Q16 | 23 | 4.00 | 5.00 | 4.4783 | .51075 |

Table 3 shows the results of paired t-test of the survey questionnaires. The statistical result of the paired t test shows that there is a significant difference (t= .002<.05) between the pretest and posttest, indicating students' English listening performance has been improved significantly after the 18 week LINE assisted instruction.

TABLE III RESULTS OF PAIRED T TEST

| | Paired difference | | | | | | | Sig. (2 tailed) |
|---|---|---|---|---|---|---|---|---|
| | Mean | SD | Std error mean | 95% confidence interval of the difference | | t | df | |
| | | | | Lower | Upper | | | |
| Pair 1-2 | -17.65 | 24.34 | 5.075 | -28.17 | -7.12 | -3.47 | 22 | .002 |

The results of interviews with 4 voluntary students suggest that using LINE App to assist in learning English listening is effective and enables them to review and improve their English listening skills ubiquitously. The summary of interviews are translated as follows:

"I don't have to worry about not bringing computer with me when I want to review my English listening lessons or class notes." (SF1)

"Supplementary materials on LINE App let me review or check what I don't understand or not clear about the class instruction…" (SM1)

"I can learn English listening anytime I want when I open my LINE App on my smart phone…I like use it ." (SF2)

"My English is not good and I think I can learn English after class from my LINE App..." (SM2)

To conclude, students indicated that using LINE App can enhance their English learning motivation and most importantly they can learning English anytime any place they want when they have internet access.

## V. CONCLUSIONS AND SUGGESTIONS

The study aimed to explore the effects of integrating LINE App into English listening class for non-English majored freshmen in a technological university in southern Taiwan. The major findings of this study reveal that using LINE App to assist students' learning a second language (English listening) is helpful and effective. Additionally, the most important idea is students can learn English language any time and place when they want to learn, which is more convenient and accessible for second language learners. Furthermore, LINE App also allows students to enhance their autonomous learning, which is in accordance with the research finding of Ren, Yu and Su [2]. The limitations of the study include the results may not be able to generalize to the whole population due to the insufficient sample size (n= 23). Also, the statistical analysis can be done in more detail ways. Finally, a qualitative approach can be administered to make the study more thorough and discreet.

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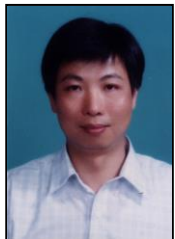
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