THE EFFECTS OF THE ECHOENGLISH APPLICATION ON EFL STUDENTS'
SPEAKING SKILLS

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ผลของการใช้แอปพลิเคชัน EchoEnglish ต่อทักษะการพูดของนักเรียนที่เรียนภาษาอังกฤษเป็น
ภาษาต่างประเทศ

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A Thesis Submitted in Partial Fulfillment of the Requirements

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BY
WATCHANA KRAJANGJOB

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This research investigates the effects of the EchoEnglish application on the speaking skills of EFL students. The objectives were as follows: (1) to investigate the effects of the EchoEnglish application on speaking skills of EFL students in the Science-Math Program; (2) to investigate the effects of the EchoEnglish application on the speaking skills of EFL students in the Chinese-English Program; (3) to compare the effects of the EchoEnglish application on the speaking skills of EFL students in Science-Math Program to those of students in the Chinese-English Program; (4) to explore the opinions of EFL students about learning English through the EchoEnglish application. The participants consisted of 70 EFL students selected via purposive sampling, 35 students in the Science-Math Program and 35 students in the Chinese-English Program. The research instruments included five lesson plans, an English speaking test, a questionnaire, a semi-structured interview, and a speaking skills rubric. The mean score, standard deviation, and t-test analyses were used to analyze the quantitative data, while content analysis was used to analyze the qualitative data from semi-structured interviews. The results revealed that there were statistically significant differences in the pre-test and post-test mean scores of the Science-Math Program students ($t = 26.39$, p < .05). Similarly, there were statistically significant differences in the pre-test and post-test mean scores of the Chinese-English Program students ($t = 21.56$, p < .05). When compared the post-test mean score of Science-Math Program students to those of the Chinese-English Program students, no statistically significant differences were found ($t = -0.19$, p >.05). This indicated that the EchoEnglish application had positive effects on students from different backgrounds. In addition, opinions about learning speaking through the EchoEnglish application was at a very positive level ($M= 4. 38$). This illustrated that students favored this teaching method and points out that the EchoEnglish application can be a useful tool to enhance the speaking skills of EFL students.

Keyword : The EchoEnglish application, Speaking skills, EFL students

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INTRODUCTION

Background

English has undoubtedly become a more important part of our daily lives as it is the most widely spoken language in the world. In addition to 341 million native speakers, there are 150-300 million people who speak English as a Second Language (ESL) and 100-1000 million speakers who speak English as a Foreign Language (EFL) (Gerard, 2000; Mahu, 2012). Moreover, English is now a major communication media among nations and organizations. For example, it is the official language of the United Nations and the ASEAN Economic Community (AEC). It is also the most commonly used language for acquiring access to resources, such as books, magazines, and newspapers written in English, which are available in many countries around the world. English is also the most commonly used language on the internet. Due to its increasing importance, English proficiency is a definite advantage.

English is also an essential skill in Thailand. The ASEAN Economic Community (AEC), launched in 2015, intends to open up a free labor market between the ten ASEAN member countries. As a result, professionals and skilled workers with advanced English language proficiency had an advantage in terms job seeking because English is the common medium for international communication in both the public and private sectors. Consequently, strong English language skills are necessary for Thai students if they want to gain maximum advantage of the 2015 AEC opportunities. Accordingly, the Ministry of Education (2002) put greater emphasis on English language communication (MOE, 2002). This development made the need for advanced communication in English even more crucial.

Speaking is considered the most important among all four English skills. Speaking is the process of producing and receiving information in language between speakers and receivers through the use of non-verbal and verbal symbols. Many scholars claim that speaking is the most important skill, especially in foreign language learning, because people use it to communicate for different functions and purposes (Kayi, 2006; Khamkhien, 2010; Nunan, 1991). Moreover, speaking is used twice as much as reading and writing in terms of communication (Rivers, 1987). In addition, speaking is the most important quality that employers require of graduates. Harvey (2000) claimed that good speaking skills are an indicator of success in job applications because it is seen first by employers. Therefore, mastering speaking skills is the most important aspect of learning a second or a foreign language (Harvey, 2000).

However, developing speaking skills are not easy for EFL students. Many research studies revealed that Asian countries where English is studied as a foreign language experienced difficulty acquiring it (Sawir, 2005; Tanveer, 2007; Tuan & Mai, 2015). Similarly, Thai students still face difficulties speaking English, despite the fact that they have studied English for many years. It was found that many Thai students could not use English skills effectively, especially in terms of listening and speaking (Jaiyai et al., 2005). There are many teaching methods employed to improve English speaking skills; however, there were insufficient results (Wanich, 2014).

Many factors that cause difficulties in speaking English among Thai students, such as rarely having a chance to use English in their daily lives. They only used English in the classroom and were rarely exposed to an authentic English language environment that allowed them to use English. The most important factor is that they

lacked confidence in speaking English with their teacher and classmates. The confidence factor is an important aspect of the affective factors and generally assumed to have a significant role in successful learning.

Numerous research studies have reported that learners who have high confidence can perform speaking easily, while learners who have low confidence are usually not able to improve their speaking skills (Dornyei, 2001; Krashen, 1981; Viswat & Jackson, 1993). The factor of confidence also provides learners with the motivation and energy to become more positive about their own learning and encourage them to acquire the target language. On the other hand, students who lack confidence are fearful, timid, and reluctant to speak in class (Ni, 2012). Therefore, it is very important to provide students with environments in which they have opportunities to use English in a comfortable environment conducive to developing confidence.

Nowadays, advances in information and communication technologies offer new opportunities for leaners. Learners are enhanced the quality and effectiveness of language teaching and learning by technology. The possibilities of mobile technology play an important role to motivate students to participate in communicative activities. Mobile learning can offer students two-way interaction with their peers, for example they can listen to each other and record their spoken production. Moreover, mobile technology can support classroom activity more convenient for students. Students were able to participate that allow them to share their own ideas what they have studied to the classmate. More importantly, mobile learning creates a safe environment for the students to practice and to gain more confidence in English speaking. According to Kelso (2010), technology assists English language students to

excel in a 21st-century educational environment and teaching English through technology can provide a less threatening environment for language learning. In other words, when students practice speaking on their own with the aid of a mobile learning application, their stress and anxiety levels dramatically decrease (Kelso, 2010). This means that mobile learning can support learning in difference background students. Therefore, mobile devices may become a good alternative to teach speaking skills.

Recently, the Thai government have created and promoted an application, the EchoEnglish application, which was designed to help Thai people to improve their English communication. The aim of this application is to increase the confidence levels in terms of speaking. Learners can achieve their learning goals and relieve their fears when they are speaking and keeping motivated. The Thai government has promoted the application to be used to enhance speaking skills among Thai people in schools and workplaces. Research studies on the effects of this application on speaking skills have yet to be found, as its impact are not yet clear. Therefore, this study aims to investigate the effect of the EchoEnglish application on the speaking.

Purposes of the Study

1. To investigate the effects of the EchoEnglish application on speaking skills of EFL students in the Science-Math Program.

2. To investigate the effects of the EchoEnglish application on speaking skills of EFL students in the Chinese-English Program.

3. To compare the effects of the EchoEnglish application on speaking skills of EFL students in the Science-Math Program to those of students in the Chinese-English Program.

4. To explore the opinions of EFL students about learning English speaking through the EchoEnglish application.

Research Questions

1. What are the effects of the EchoEnglish application on speaking skills of EFL students in the Science-Math Program?

2. What are the effects of the EchoEnglish application on speaking skills of EFL students in the Chinese-English Program?

3. What are the effects of the EchoEnglish application on speaking skills of EFL students in the different background students?

4. What are the opinions of the EchoEnglish application on students' opinion about learning English speaking through the EchoEnglish application?

Significance of the Study

The findings from this study provide alternative methods of teaching English speaking using the EchoEnglish application. For curriculum developers, English teachers, educators, course developers who attempt to help students with speaking problems may benefit from the results of the study. The findings can be used as the guidelines to develop and revise English courses for EFL students. Moreover, the results of this study will benefit English teachers to prepare new methods to teach English speaking. Finally, the results of this study can be used as a guideline for further studies.

Scope of the Study

This study investigated the effects of the EchoEnglish application on speaking skills of EFL students. This study consisted of eight weeks. The speaking

skills including fluency, pronunciation, and vocabulary. The participants of this study were seventy 10th grade EFL students studying at Surasakmontree School. They were divided into two groups: 35 students in Science-Math Program and 35 students in Chinese-English Program. They were taught English speaking using the EchoEnglish application.

Definitions of Terms

English speaking skills refers to the ability to speak English effectively. The components of speaking ability include fluency, pronunciation, and vocabulary.

Opinions refer to a view or judgment formed about learning English speaking through the EchoEnglish application.

The EchoEnglish application refers to a mobile learning application. It was promoted by the ministry of education. There were seven main features in this application: learning topics, lessons, listening, speaking, writing, test, and output mode.

CHAPTER II
LITERATURE REVIEW

This chapter presents the theoretical foundations and previous studies on the use of mobile learning to improve English speaking skills. It consists of four parts: speaking skills, English as Foreign Language (EFL) students, mobile learning, the EchoEnglish application, and related studies.

Speaking Skills

Definition of Speaking Skills.

Speaking is a kind of speech production that becomes a daily activity. People use it on a daily basis for exchanging ideas, news and information. This is a means through which learners are able to produce and receive information with others to achieve certain goals. This means that learners can express their opinions, hopes and viewpoints, and intentions. Rivers (1987) argues that speaking is used twice as much as other communication skills like reading and writing in communication (Rivers, 1987). Nunan (1991) also emphasized the importance of speaking skills, it deserves attention for both first and second languages because success is measured in terms of their ability to carry out a conversation in the target language (Nunan, 1991). It may be concluded that the most important aspect of learning a second or a foreign language is mastering in speaking.

There are multiple definitions of speaking in various aspects. Speaking is a communicative process of constructing meaning that involves producing, receiving and processing information (Burns & Joyce, 1997). Similarly, Bailey (2005) claimed that speaking is a process of communication which speakers build meaning through interaction and processing information (Bailey, 2005). In the same way, Kayi (2006)

stated that speaking is a process of producing and exchanging meaning through the use of non-verbal and verbal symbols, in a difference of situation. That is speaking is a communication between speakers and listeners. In conclusion, speaking is the process of producing and receiving information between a speaker and a receiver through the use of verbal and non-verbal symbols.

The Components of Speaking Skills.

According to Syakur, there are four components of speaking skills: vocabulary, pronunciation, fluency, and grammar (Syakur, 1987).

Vocabulary is an essential part of speaking. If students have insufficient vocabulary, they are not able to express their ideas effectively or communicate by oral and written. That is, a speaker can choose the appropriate diction to communicate in any kind of situation. Therefore, the more lexical knowledge that students have, there are more situations in which they can use it.

Pronunciation involves the clear production of words by following the features of the pronunciation rules and the sound patterns in a language. Celce-Murcia, Brinton, & Goodwin (2010) claimed that there are two features of pronunciation: the segmental and suprasegmental features. Segmental features can be focus on the activity of vowels and consonants. Suprasegmental aspect can be focus on activity of Intonation, linking, reduction, fluency, rhythm, word stress, and sentence stress(Celce-Murcia, Brinton, & Goodwin, 2010). Ur (2008) stated a learner may pronounce the sound perfectly, but still sounds foreign because of the wrong of intonation and stress (Ur, 2008). A speaker who constantly pronounce incorrectly a range of phonemes may cause listeners to misunderstand (Gerard, 2000). Therefore, students need to know the way of construct accurate segmental and master

suprasegmental features, these can be led students to achieve an effective oral communication.

Fluency can be described as the ability of speaking that speak fluently. Many language learners need to achieve in fluency. Signs of fluency include a reasonably fast rate of speech and only a small number of pauses and "ums" or "ers." These signs indicate that speakers do not have to spend a lot of time searching for the language items necessary to express the message (R. S. Brown & Nation, 1997). In conclusion, fluency is the free expression of oral language, without interruption.

Grammar is also essential for effective communication in speech. Heaton (1975) suggested that it is the ability to employ sentence structure and analyze the most appropriate grammatical form. That is, speakers need to classify an accuracy sentence in speaking (Heaton, 1975). The advantage of grammar is to learn the appropriate way to attain expertise in a language in oral and written form. In conclusion, the components of speaking skills include vocabulary, pronunciation, fluency, and grammar, but this study will only focus on three components: vocabulary, pronunciation, and fluency.

Assessment of Speaking Skills.

According to Jean, Ellis, and Dennis (2003), there are four main purposes of assessment. First, it helps to increase the continuous learning process. Second, it is to give feedback to students on their progress or achievement and to discuss with teachers and parents. Third, it is to identify the needs of the students and support them. Finally, it is to check the effectiveness of teaching and learning materials (Jean B, 2003).

There are two kinds of assessments: informal and formal assessments. According to H. D. Brown & Abeywickrama (2004), informal assessments are incidental and unplanned comments, responses, as well as coaching and other, impromptu feedback to students. It can be in various forms, such as saying "Nice job!", "Good work!" and "Did you say can or can't?" The aim of this kind is to check whether or not students understand the material, and then the teacher can determine whether or not the learning objectives have been reached. In contrast, formal assessments are often exercising or procedures (H. D. Brown & Abeywickrama, 2004). This specifically designed to tap into a storehouse of skills and language proficiency. These are systematic, planned sampling techniques constructed to give the teacher and students an appraisal of student achievement.

Nakamura and Valens (2001) suggested speaking test can be divided in three types of speaking tests: monologue, dialogue, and multilogue. In a monologue test, students are asked to talk about any topic they select. This provides students with an occasion to make a small presentation about this topic. The interview, is an open-ended test where students talk to the teacher as known as a dialogue speaking test. In this test, students need to employ the conversation skills that they have learned in class. In a multilogue speaking test, discussion and debate, students are put into groups where as a group, they are decided on a topic of interest for the rest of the class (Nakamura & Valens, 2001).

To assess the speaking skills of students, there are also some other considerations. Brown and Abeywickrama (2010) proposed that teachers need to do the following: specify a set of criterions, advice suggestive tasks, present maximum output, and set practical and reliable scoring procedures. Moreover, the tasks used in

the assessment, it should be designed that allow student to take, participate in communication in another situation that exists in real life. (Bachman, Palmer, & Palmer, 2010) The most popular instrument used to measure the speaking skills of students is a rubric (Andrade, 2005; Popham, 1997).

Rubrics of Speaking Skills.

It is not easy to test the speaking ability of students. Brown (2001) stated that speaking skills have more language features than other skills. Therefore, teachers should design the rubrics that represent the ability of students in each language component. There are various definitions of rubrics. According to Arter (2012), rubrics are complex, meaningful tasks which helps testers to maintain consistent judgments regarding the quality of student performance (Arter, 2012). In addition, Asmus (1999) claimed that rubrics are a guideline for rating student performance. In conclusion, rubrics are a set of criteria used to assess student performance in order to maintain consistent judgement (Asmus, 1999).

There are two types of scoring: holistic and analytical scoring. Holistic scoring is performed by giving a single score on the overall impression (Thonbury, 2008), 2008). The advantage of this type is that it is quick and adequate for the informal testing process. On the other hand, analysis scoring is performed by giving a separate score for different aspects of the task. The most positive aspect is that it forces the tester to consider various factors, such as grammar, vocabulary, comprehension, fluency, pronunciation and task completion. This study employed this type because it can clearly identify student performance.

There are four components in a rubric. According to Steven and Levi (2004), a rubric should include task descriptions, task dimensions, a performance scale, and

cell descriptions. In term of task description, it can be described as the assessment activity that provides as a reminder of what the task is about. The task dimensions are one of the tasks. The dimensions are listed in the table at the first column. They should be directly observable and in harmony with the learning outcomes of the program. In term of the performance scale, it describes the levels of performance along with each of the dimensions and is presented in the first row of the table. The scales should include three to five points. Lastly, cell descriptions describe what each level of performance means for each dimension. They help convey why a student is given a particular score (Steven, 2004).

English as a Foreign Language (EFL) Students

Some experts defined EFL in many ways. EFL means learning English in non-English-speaking countries (Shu, 1994). Similarly, Stern (1983) asserted that EFL means the language used outside the country (Stern, 1983). In summary, EFL refers to the English language that used and learned in non-English speaking countries. According to Peng (2019), EFL students are those who study English in the countries where English is not the official language or mother tongue language such as Thailand and Japan. In these countries, English is not used for daily communication. Similarly, Iwai (2011) claimed that EFL students refer to those who study English in non-English speaking countries. (E.g. Thai people who learn English in their country are EFL students) (Iwai, 2011). In conclusion, EFL students referred to students whose first language is not English and learn and use English.

There are many causes difficulties in speaking English among EFL learners. According to Rababa'h (2005), these factors are related to the learners themselves, the teaching strategies, and the environment. For the learners themselves, they lack the

sufficient vocabulary to understand their meaning across, and consequently, they are not able to keep the interaction going (Rabab'ah, 2005). Many learners also lack of motivation on order to speak English and do not get the points of learning and speaking English in a real life. This is supported by Littlewood (1981) who claimed that motivation factor is one of the most important factors to learn English. The development of communication can be achieved if learners have the motivation to speak and opportunity to express their opinion and relate with the people around them. In terms of teaching strategies, they do not put an emphasis on speaking, which resulted in the meagre development of this skill (Litlewood, 1981). Some EFL teachers still tend to use the passive strategies that focus on textbook-based grammar and translation (Maskhao, 2002). Moreover, some EFL classrooms focus on teacher-centered. This is supported by Wiriyachitra (2002), who argued that in the EFL classroom, many teachers had a teacher-centered class, which provided passive learning for the students (Wiriyachitra, 2002). In terms of the environment, the lack of a target language environment can be considered another problem, which of course results in a lack of involvement in real-life situations. This is supported by the study of Wanich (2014) which found that EFL students still struggled with speaking English since they had fewer opportunities to expose themselves to the language in daily. This has been found to be one of main problems with language learning for EFL students (Wanich, 2014). In conclusion, considering the above difficulties of EFL learners, it is important to employ varied teaching methods which create oral activities, desirable environment for the students, and provided opportunities to use the English language. Importantly, it is also important to create an engaging and desirable environment for

the students and provide them the opportunity to freely use the English language creatively.

Mobile Learning

Many scholars have defined mobile learning. According to Rodriguez et al (2013), mobile learning is a teaching and learning method that uses mobile phones or other handheld devices with some form of wireless connectivity, such as smart phones, personal digital assistants (PDAs), and tablets (Rodríguez, 2013). Kukulska & Shield (2008) defined mobile learning as formal or informal learning mediated via handheld gadgets which are conceivably accessible for use whenever and anyplace (Kukulska-Hulme & Shield, 2008). Ally (2009) claimed that mobile learning is the process of accessing and studying learning materials by using a mobile device and interacting with fellow students, teachers and school (Ally, 2009). In conclusion, mobile learning is a teaching and learning method that uses mobile phones or other handheld devices, such as mobile phones and tablets. Students can access language learning materials and to communicate with their teachers and peers at anytime and anywhere.

It is claimed that mobile technology has become an important tool for teaching and learning. Some studies found that the use of mobile devices does have a positive impact on improving English language proficiency. According to the characteristics of mobile learning, it can be divided into four types of strategies. There are identified: self-learning, situated learning, collaboration and informal learning, these were supported by mobile learning technology (Cheon, Lee, Crooks, & Song, 2012). Students are able to allow to pace learning at their own speed while using mobile devices. That is mobile learning supports self-study or individualized learning.

These devices allow learners to connect or make a conversation with others through mobile devices, and this means collaborative learning which supported by mobile devices. In addition, because it is portable, students are able to learn outside class at their own desire, enabling them to participate in learning activities anywhere and anytime without the traditional restrictions of time and place, which is known as informal learning. Lastly, students are able to study within a real situation through their own mobile devices, this can be referred to the situated learning. In addition, mobile learning has a positive impact on motivation. According to Al-Shehri (2011), mobile technologies have the important factor to establish learning practices both based on the needs of learners needs and experiences (Al-Shehri, 2011). Mobile devices also support learners in the overall learning output that sometimes go beyond the classroom. That is, it increases collaboration and adds interactivity to the applications, which encourages motivation, engagement and student achievement.

In addition, the characteristics of mobile like visuals for example video, sound, and animation make a great improvement in terms of supplying and maintaining motivation and the engagement of learners. This also positively influences student achievement (Sandberg et all, 2011). More importantly, mobile learning enhances two-way direct communication between students and teachers. In this way, students can communicate more easily than in the classroom. In conclusion, mobile phones have the potential to support the teaching and learning foreign languages. There are a number of innovative applications on mobile technology have also been integrated in many subjects of foreign language learning and English language learning and EchoEnglish is one of these applications.

The EchoEnglish Application

As a result of membership in the ASEAN community and Education 4.0 policy which played an important role in terms of language learning and teaching in Thailand, Government policy emphasizes promoting the English competence of Thai people. The Ministry of Education created a mobile application named EchoEnglish. This application was created in cooperation with the Ministry of Education, the Enconcept Academy and the Yuwasathirakul Foundation. This application was launched on March 8, 2016 by the Wisdomwide Co., Ltd. The Wisdomwide Co., Ltd is a company that produced educational materials. The aim of this application is to help Thai people learn English for free, anytime and anywhere, through mobile phones. (OBEC, 2016)

The EchoEnglish application was created to improve communication skills. According to the Thai Prime Minister, Prayuth Chan-o-cha, the government intended to help Thai students to speak English with confidence. After using this application, students will be encouraged to speak without fear (The Ministry of Education, 2016). Moreover, the EchoEnglish application provides practical and useful content that will suit future careers. The Minister of Education, Teerakiat Jareonsettasin, stated that this application can engage learners to practice English, suitable for careers, motivating learning activities that promote students to practice language skills related to future careers. (The Ministry of Education, 2016)

What is the EchoEnglish Application?

The EchoEnglish is a mobile application which helps Thai people to their English listening, speaking, reading, writing, pronunciation, and vocabulary. The application has special lesson videos. The videos are presented as learning on the

topics. For example, learning from situations, general English, English for travel, English for professions and business and more. The lesson videos which presented are skills-based on language skills: pronunciation, communication, cultural competence, basic grammar, and vocabulary. The topics of this application are especially designed for all level of learners (beginner to intermediate). The application consists of over 200 lessons covering all aspects of the English language and has been downloaded over 1,500,000 times (Taipetch, 2019).

Specific Qualifications.

According to Taipetch (2019), the Operations Manager of Wisdomwide Co., Ltd., there are six specific qualifications for this application.

1. The application presents English learning with videos. The videos are described in both of the Thai and English versions.

2. The sentence can be repeated as many times as necessary and learners can practice listening many times.

3. The application has a speech analysis system which immediately can report the results of speech. Hence, learners can pronounce the words or sentences until they are correct.

4. Learners can review the meaning, spelling, and language functions from videos.

5. The contents of each lesson conform to English for communication and learners can use them in everyday life.

6. This application is free.

Application features

There are seven main features in this application

1. Learning topics

Figure 1: Learning topics

There are various learning topics in this application, for example, basic English for general situations, Eng 24, VOA Learning English, Speak Up, and Memolody. The topics covered a wide range of language levels, from beginners to advanced students. The application also uses the Common European Framework of Reference for Languages (CEFR) to indicate the levels of each topic (A1, A1+, A2, A2+, B1, B1+, B2, B2+). Learners can choose the topics that are suitable and help them to improve their English. They can search by level as well as by the topics that they are interested in:

2. Lessons

Figure 2: Lessons

The application includes more than 200 English lessons. Lessons are presented as videos. The videos teach different content, depending on the lessons chosen by learners. The students can learn meaning, expressions, and sentence structure from the videos. The videos are displayed in both Thai and English versions. The videos show pictures and relevant simulations to make learners enjoy watching videos while learning the contents.

3. Listening
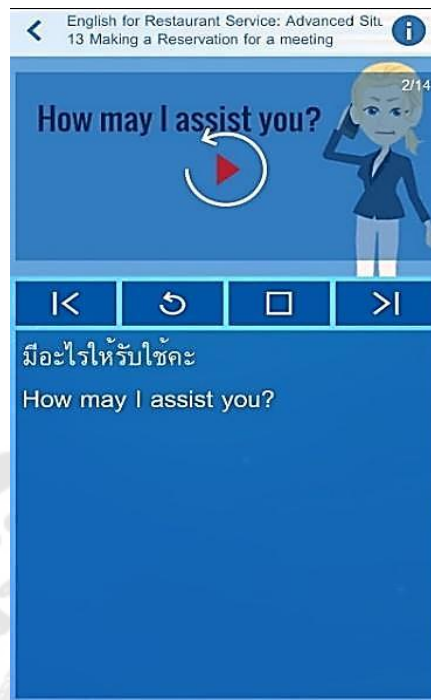
Figure 3: Listening

The aim of Listening part is to teach pronunciation and learners to listen to both the Thai and English languages. The videos teach pronunciation word-by-word and sentence-by-sentence. Specifically, the videos allowed learners an unlimited number of times to listen the pronunciation, so learners can practice pronunciation until they can do it correctly. This repetition can help student to gain greater knowledge about the words and sentences (Webb, 2007).

4. Speaking

Figure 4: Speaking

This section allows learners to speak. The video will give an example of pronunciation, and learners pronounce words or sentences that they hear. The application also has a speech analysis system, which provides instant feedback to learners on their pronunciation and fluency. The feedback can be the form of scores, the wrong sentence and rate levels. The advantage of immediate feedback helps more

effective learning (Irons, 2008). After learning the results, they are able to practice pronunciation until they pronounce the words or sentences correctly (Zahorik, 1987)

5. Writing

Figure 5: Writing

In this part, the learners can recheck the meanings of expression, spellings of words, and how the words are usage in sentences, phrases and sentences from the lesson videos. The aim is to help improve the vocabulary acquisition and writing skills of the students. The videos show sentences with missing words and then instruct learners to write the missing words.

6. Test
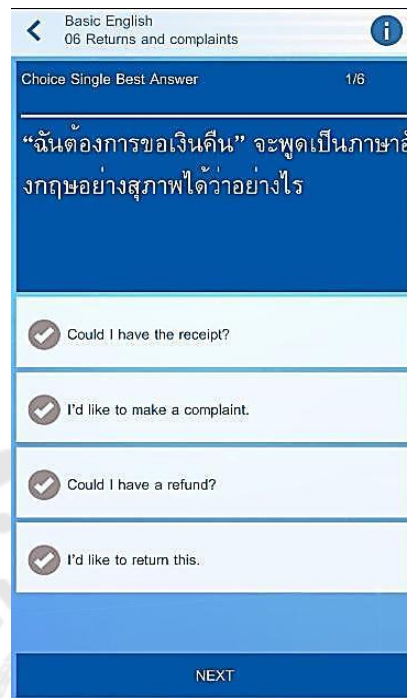
Figure 6: Test

A multiple-choice test is placed in Each lesson to assess overall comprehension and improvement and learners will be asked to answer questions. The application will show the correct answers immediately when learners submit to the test so that learners will know the results.

7. Output mode
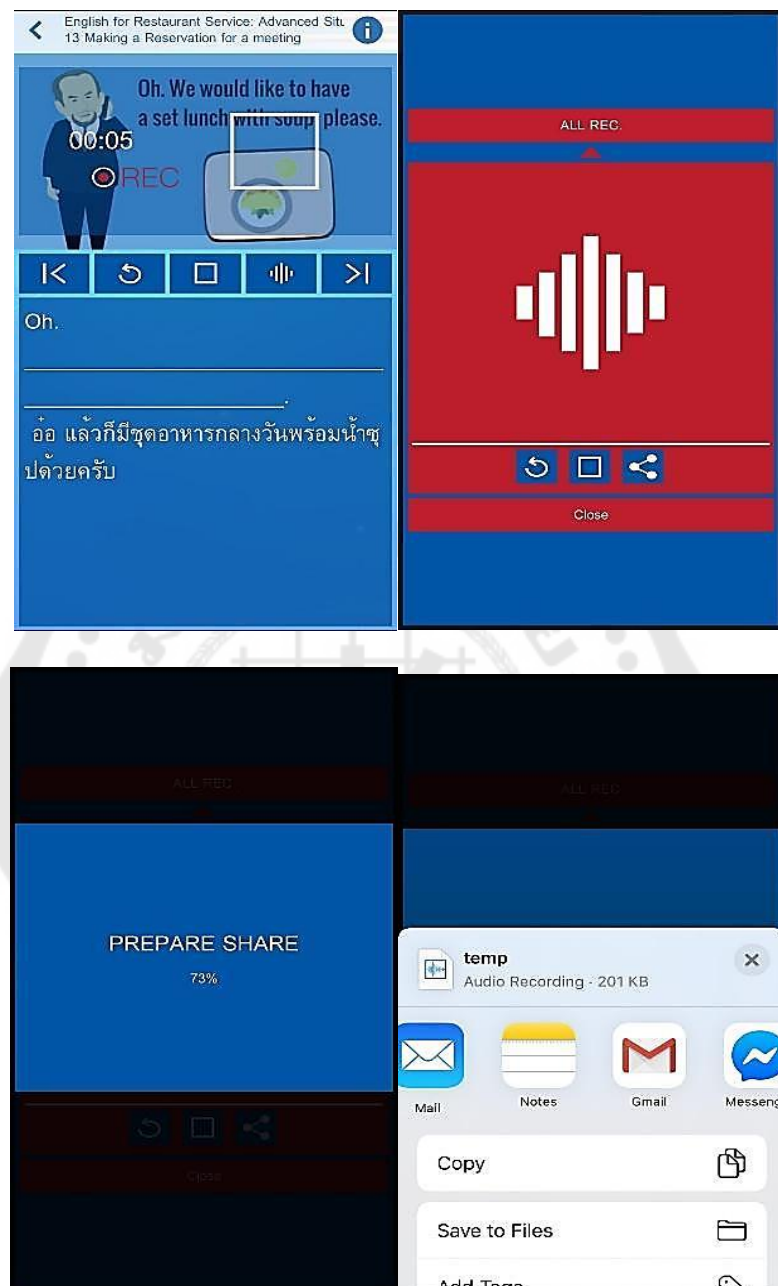
Figure 7: Output mode

The output mode is an overall practice, and learners are allowed to record previous sentences. The recorded sentences are then gathered together in one file. This file can be forwarded to others (teachers, parents, and friends) through social

media. Therefore, teachers are able to check and evaluate the progress and comprehension of learners.

The EchoEnglish application covers all aspects of English language competence. It was designed to be appropriate to Thai people. According to Taipetch (2019), through interaction and practice, learners should be encouraged to develop English language skills: listening, speaking, reading, and writing from the content related to the topics. Moreover, the content is related to careers, for example, English for restaurant services, English for OTOP and SME, English for Taxi, and English for Spa Receptionist and Therapist, so the content can be applied to the real-life and work of learners. Therefore, the content of each topic is presented in both Thai and in English, so that Thai people can easily understand the content.

Related Research

Several scholars conducted research studies on the use of mobile technology and mobile applications for improving speaking skills. Mobile technology and applications are viewed as potentially significant aids to language learning. For example, Hwang et al (2014) studied the attitudes to EFL students towards learning activities by using mobile learning devices to improve English speaking and listening skills of EFL students. The findings revealed that students were more encouraged to practice English skills when they used a mobile learning system. Moreover, it was found that their attitudes toward the learning activities were positive (Hwang, 2014).

In addtion, Bitter and Meylani (2016) studied the effects of a mobile English-speaking application (Qooco Kids English) on the speaking ability of students in two schools. The significant statistical findings indicated that the Qooco Kids English

application increased student achievement in both spoken and written English (Bitter & Meylani, 2016).

Kusmaryani et al (2019) investigated the influence of mobile applications on the speaking skills and critical thinking of students in terms of English language learning. The study used a mixed method to obtain the quantitative and qualitative data. The statistical results showed that mobile applications used for learning assistance positively optimized the speaking skills and critical thinking skills in terms of English language learning. The results of the interview revealed that students were very enthusiastic to explore and practice their English skills by using mobile learning applications. They also suggested that mobile learning applications are applicable for any subjects (Kusmaryani, Musthafa, & Purnawarman, 2019).

Moreover, Liu & Xuan He, (2014), investigated the effect mobile devices to learn English by self-learning. The participants were 15 students who studying at collage in China. The instrument of this study including mobile learning technology and its application, students were able to use mobile application to develop their English proficiency. The results found that students were preferring the mobile application to learn English with a self-study strategy instead of a conventional learning strategy. This is crucial and effective for students to use mobile application to learn English by their own pace (Liu et al., 2014).

Some researchers studied the effect of mobile applications on student anxiety in English speaking classes. Han and Keskin (2016) explored the impact of using the WhatsApp application on alleviating the speaking anxiety (FLSA) of the students and their feelings about these activities. The results founded that WhatsApp application

significantly impacted the language proficiency of the students by decreasing their EFL speaking anxiety (Han & Keskin, 2016).

In the same way, Machmud and Abdulah (2018) studied the effects of mobile applications on the students regarding their speaking skills and anxiety. The finding indicated that the speaking performance of students taught through mobile applications was significantly higher than the students taught by using traditional teaching methods. The speaking ability of the high-anxiety students taught by using mobile applications was higher than among the high-anxiety students taught by traditional teaching methods, and the speaking ability of low-anxiety students taught using mobile phone applications was also higher than the low-anxiety students and taught using traditional teaching methods (Machmud, 2018).

In addition, Mahachanawong (2019) studied the effects of mobile application on English listening-speaking abilities of ethnic students, Ahkha and Lahu. The participants were 20 ethnic students in grade 2 at Ban Huayyasai School in Chiang Rai Province. The instruments were the EchoEnglish, Genki English, Charades!, Keynote, Kahoot!, Plickrs, and LeraningEnglishKids, an English listening speaking test form, and a vocabulary acquisition test. The findings showed that the participants improved speaking and listening ability after they were taught through the application.

These related studies revealed the benefits of using mobile applications in the EFL classroom. Therefore, mobile application can be a good alternative way for teaching and learning English speaking.

CHAPTER III
RESEARCH METHODOLOGY

This chapter illustrates the methodological design of the study including research design, participant of the study, research instruments, data collection, and data analysis.

Research Design

The present study relied on a triangulation method: combining quantitative and qualitative data collection. The purpose of a triangulation method is "to simultaneously collect both quantitative and qualitative data, merge the data, and use the results to understand a research problem" (Creswell, 2002) The quantitative data consisted of students' pretest and posttest scores from speaking test and scores obtained from a questionnaire. The qualitative data included the open-ended part of the questionnaire and an interview. The data from the open-ended part and interview data were triangulated each other. Figure 8 explained the design of this research.
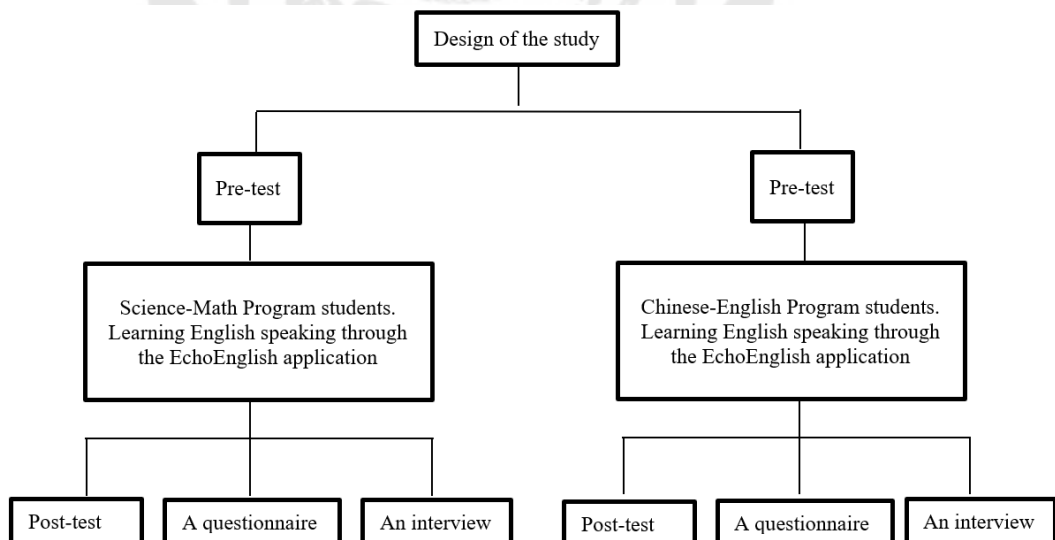

Figure 8: The design of the study

Participants of the Study

The population of this study were 455 tenth-grade students in Surasakmontree school. The reasons to choose Surasakmontree School were: 1) based on school curriculum, technology-based learning is used for teaching and learning, 2) one of the school curriculum objectives was to develop students' English competency, and 3) the vision of the school emphasized the importance of English language teaching in the 21st century. Hence, this study supported the school curriculum objectives and the vision of the school.

The participants of this study consisted of 70 tenth-grade students who studied in the second semester of the 2019 academic year at Surasakmontree school. These participants were selected via purposive sampling and divided into two experimental groups consisted of 35 Science-Math Program students and 35 Chinese-English Program students. The reasons to choose these participants were: 1) according to the school curriculum, tenth-grade students were required to be able to speak English for communication at the basic level; and 2) tenth-grade students was the most appropriate academic level to prepare themselves for further English proficiency test, such as O-NET, the general attitude test (GAT), and 9 common subjects.

Research Instruments

The instruments in this study included lesson plans, an English speaking test, a questionnaire, a semi-structure interview, and the rubric of speaking skills.

Lesson Plans

Five lesson plans were designed by the researcher. The EchoEnglish application was used in each lesson. Each lesson plan lasted 100 minutes. The lesson plans were designed based on the indicators and expected outcomes identified in the

Basic Education Core Curriculum B.E. 2551 (OBEC, 2008), and the school's curriculum. After that, the researcher selected the contents following the school's curriculum and specified the contents to teach.

In this study, the method for teaching speaking skills included five steps. The first was warm-up. The teacher activated students' attention to the lesson. The second was presentation. The teacher clearly presented the contents in each lesson. Students gained knowledge about the contents and remembered them. The third was practice. Students were assigned to practice speaking. The fourth was production. Students was assigned to speak. Last, the teacher and students participated in reviewing the productivity of the lesson. The EchchoEnglish application was used to each step.

In order to determine the validity, three specialists in teaching English were asked to determine content validity of lesson plans and commented on the appropriateness of language using the evaluation form (Item-Objective Congruence Index, IOC). The first specialist was an English instructor from Srinakharinwirot University. The second one was a teacher at Surasakmontree school. He also taught English to the participants of this experiment. The third specialist was an American teacher teaching secondary students at a public school. The items with the scores higher than or equal to 0.5 were considered appropriate; those with the scores less than 0.5 were revised according to the suggestions. The reliability and item facility were determined in the pilot phase study. Table 1 shows the content of the lesson plans. (See Appendix A)

Table 1: Contents in Lesson Plans

Week	Speaking skills contents	Time
1	Making a reservation for meeting	100
2	Western menu and wine list	100
3	Changing the menu, then have both	100
4	Bill, please, mistake, apologize	100
5	Credit card and tip	100

An English Speaking Test

To measure participants' speaking skills, an English speaking test was developed for pretest and posttest to compare the speaking ability of students in the experimental groups before the instruction to the ability after the experiment. The test was designed by the researcher and consisted of 2 tasks: responding to questions and describing a favorite restaurant. (See Appendix B)

In order to determine the validity, three specialists in teaching English were asked to determine content validity of an English speaking test and commented on the appropriateness of language using the evaluation form (Item-Objective Congruence Index, IOC). The first specialist was an instructor teaching English at a university. The second one was a teacher teaching English to the 10th-grade EFL students at a school. He also taught English to the participants of this experiment. The third specialist was an American teacher teaching secondary students at a public school. The items with the scores higher than or equal to 0.5 were considered appropriate; those with the scores less than 0.5 were revised according to the suggestions. The reliability and item facility were determined in the pilot phase study.

To determine the reliability, an English speaking test was tried out with 30 10th - grade EFL students at Surasakmontree School, who studied in the Additional English course in the second semester of 2019 academic year. The instruments were analyzed using the reliability co- efficient Cronbach's alpha. The reliability of the test was 0.75. Since Cronbach's alpha value was higher than 0.7, an English speaking test was strong enough to evaluate students' speaking skills.

A Questionnaire to Study Students' Opinions about Learning English Speaking through the EchoEnglish Application

To study students' opinions on the implementation of the EchoEnglish application in a classroom, a questionnaire was used. It composed of 10 five-point Likert items. Students were asked to respond to a series of statements using responses ranging from 1 to 5, where 1 means "strongly disagree/very poor", 2 signifies "disagree/poor", 3 indicates "not sure/fair", 4 corresponds to "agree/good", and 5 means "strongly agree/very good." In addition, for the students' criticism, opinions, suggestions about teaching speaking through the application can be received from an open-ended question (See Appendix C)

In order to determine the validity, three specialists were asked to determine content validity of the questionnaire and commented on the appropriateness of language using the evaluation form (Item-Objective Congruence Index, IOC). The items with the scores higher than or equal to 0.5 were considered appropriate; those with the scores less than 0.5 were revised according to the suggestions. The reliability and item facility were determined in the pilot phase study.

To determine the reliability, the questionnaire was tried out with 30 10th - grade EFL students at Surasakmontree School who studied in the Additional English

course in the second semester of 2019 academic year. The instruments were analyzed using the reliability co-efficient Cronbach's alpha. The reliability of the questionnaire was 0.87. Since Cronbach's alpha value was higher than 0.7, the questionnaire was strong enough to evaluate students' opinions about learning speaking through the EchoEnglish application.

A Semi-Structured Interview

A semi-structured interview was used in order to allow the researcher to obtain more information, apart from a questionnaire. The interviews were conducted in the students' native language (Thai) to avoid a language barrier in conveying a message. After the experiment, the researcher asked ten students to be as volunteer for interviewing. (See Appendix D)

The Rubric of Speaking Skills

The rubric of speaking skills was adapted from Brown (2001). The reasons of using Brown's rubric were that 1) It was easy-scoring; 2) Rubric' criteria were not complicated and divided clearly; 3) It was used by many scholars such as Masyi'ah (2004), Nur and Agustina, (2018), Rukminingsih (2016), and Alfi (2015). (H. D. Brown & Principles, 2001). (See Appendix E)

Data Collection

This study was last 8 weeks. The participants were asked to sign the consent form and completed the pretest. Soon after the pretest, two experimental groups were taught speaking skills through the EchoEnglish application for five weeks. After the instruction, the students in both groups took the posttest and completed the questionnaire to study their opinions. The researcher asked students in both experimental groups to volunteer for the interview; the interview was conducted after

students' completing the questionnaire. The data collection plan schedule was illustrated in table 2

Table 2: Data Collection

Week	Time	Procedures for the data collection	Instruments	
			Students	Researcher
1	100	Orientation		Consent form
2	100	Students took the pre-test	Pre-test	
3	100	Making a reservation for meeting	EchoEnglish	Lesson plan
4	100	Western menu and wine list	EchoEnglish	Lesson plan
5	100	Changing the menu, then have both	EchoEnglish	Lesson plan
6	100	Dessert, desert	EchoEnglish	Lesson plan
7	100	Credit card and Tips	EchoEnglish	Lesson plan
8	100	Student took the posttest, completed the questionnaire, and interview	Posttest Questionnaire	

Data Analysis

The data from the pretest and posttest were analyzed by comparison of mean score, standard deviation, and the *t*-test analysis. Dependent *t*-test analysis was used to determine whether there were any differences in students' speaking skills between before and after the experiment. Independent *t*-test analysis was used to determine whether there were any differences in students' speaking skills before and after the experiment between the Science-Math Program and the Chinese-English Program.

The data from the questionnaire was scored as follows: Strongly Agree =5, Agree = 4, Neutral = 3, Disagree = 2, Strongly Disagree = 1. The levels of students' opinions were determined by using the following criteria: 0-.99 = Highly Negative, 1.00-1.99 = Negative, 2.00-2.99 = Average, 3.00-3.99 = Positive, 4.00-4.99 = Very positive. The data from the open-ended part of the questionnaire and from the interview were analyzed by content analysis.

Ethical Considerations

All students in the study volunteered to be involved in the study. At the beginning of the study, written informed consent from all participants were obtained. Participants were told of the nature and purpose of the research. They understood all procedures required in the study and realized that participating in the study were not disadvantage them, but they could gain benefits from participation in the project. They were also assured that it was their right to withdraw at any stage. Confidentiality and anonymity were assured as all data were kept securely and a coding method for students' identification were employed.

CHAPTER IV
RESULTS OF THE STUDY

This chapter was conducted to investigate the effects of the EchoEnglish on speaking skills of EFL students in the Science-Math Program and Chinese-English Program, and to compare the effects of the EchoEnglish application on speaking skills of EFL students in the Science-Math Program to students in the Chinese-English Program. Furthermore, this study was aimed to explore the opinions of EFL students about learning English speaking through the EchoEnglish application.

There are two sections in this chapter. The first section is about students' speaking skills including the effects of the EchoEnglish application on speaking skills of EFL students in the Science-Math Program and Chinese-English Program and the comparison of the effects of the EchoEnglish application on speaking skills of EFL students in the Science-Math Program to students in the Chinese-English Program. The second section describes students' opinions about learning English speaking through the EchoEnglish application.

4.1 Students' Speaking Skills

4.1.1 The Effects of the EchoEnglish Application on Speaking Skills of EFL Students in the Science-Math Program

To investigate the effects of the EchoEnglish application on speaking skills of EFL students in the Science-Math Program, the data from the pretest and posttest were analyzed using mean score, standard deviation, and a dependent *t*-test analysis. The results are presented in Table 3

Table 3 The Comparison of the Pre-test Mean Score to Post-test Mean Score of Science-Math Program Students.

Science-Math Program	n	M	SD	t	df	p-value
Pre-test	35	5.86	1.56			
Post-test	35	12.29	1.13	26.39*	34	.000

* p<0.05

According to Table 3, the results indicate that there were statistically significant differences in the pre- test and post- test mean score of Science-Math Program students (t = 26.39, p < 0.05). The pre-test mean score was 5.86 (SD = 1.56) while the post-test mean score was 12.29 (SD = 1.13). Therefore, the post-test mean score was significantly higher than the pre-test mean score. The t-test analysis shows the positive effects of the EchoEnglish application on EFL students' speaking skills in Science-Math Program students.

To investigate the effects of the EchoEnglish application on sub speaking skills (fluency, pronunciation, vocabulary) of EFL students in the Science-Math Program, the data from the pretest and posttest were analyzed using mean score, standard deviation, and dependent t-test analysis. The results are presented in Table 4.

Table 4 The Comparison of the Pre-test Mean Score to Post-test Mean Score of Students' Sub Speaking Skills of Science-Math Program Students

Science – Math Program		n	*M*	*SD*	*t*	*df*	p-value
fluency	Pre-test	35	2.03	0.79		34	
	Post-test	35	4.03	0.71	14.08*		.000
pronunciation	Pretest	35	1.89	0.68	16.49*	34	.000
	Post-test	35	4.00	0.64			
vocabulary	Pre-test	35	1.94	0.74			
	Post-test	35	4.26	0.61	18.05	34	.000

* p<0.05

According to Table 4, the results indicate that there were statistically significant differences in the pre‑ test and post‑ test mean score of students' sub speaking skills (fluency) of Science - Math Program students ($t = 14.08$, $p < 0.05$). The pre-test mean score was 2.03 $(SD = 0.79)$ while the post-test mean score was 4.03 $(SD = 0.71)$. There were statistically significant differences in the pre‑ test and post‑ test mean score of students' sub speaking skills (pronunciation) of Science-Math Program students ($t = 16.49$, $p < 0.05$). The pre-test mean score was 1.89 $(SD = 0.68)$ while the post-test mean score was 4.00 $(SD = 0.64)$. There were statistically significant differences in the pre‑test and post‑test mean score of students' sub speaking skills (vocabulary) of Science-Math Program students ($t = 18.05$, $p < 0.05$). The pre-test mean score was 1.94 $(SD = 0.74)$ while the post‑test

mean score was 4.26 $(SD = 0.61)$. Therefore, the post-test mean score was significantly higher than the pre-test mean score. The *t*-test analysis shows the positive effects of the EchoEnglish application on EFL students' sub speaking skills (fluency, pronunciation, vocabulary) of Science-Math Program students.

4.1.2 The Effects of the EchoEnglish Application on Speaking Skills of EFL Students in the Chinese-English Program

To investigate the effects of the EchoEnglish application on speaking skills of EFL students in the Chinese-English Program, the data from the pretest and posttest were analyzed using mean score, standard deviation, and a dependent *t*-test analysis. The results are presented in Table 5

Table 5 The Comparison of the Pre-test Mean Score to Post-test Mean Score of Chinese-English Program Students

Chinese – English Program	n	*M*	*SD*	*t*	*df*	p-value
Pre-test	35	5.89	2.00			
Post-test	35	12.34	1.28	21.56*	34	.000

* p<0.05

According to Table 5, the results indicate that there were statistically significant differences in the pre-test and post- test mean score of Chinese-English Program students ($t = 21.56$, $p < 0.05$). The pre-test mean score was 5.89 $(SD = 2.00)$ while the post-test mean score was 12.34 $(SD = 1.28)$. Therefore, the post-test mean score was significantly higher than the pre-test mean score. The *t*-test analysis

shows the positive effects of the EchoEnglish application on EFL students' speaking skills in Chinese-English Program students.

To investigate the effects of the EchoEnglish application on sub speaking skills (fluency, pronunciation, vocabulary) of EFL students in the Chinese-English Program, the data from the pretest and posttest were analyzed using mean score, standard deviation, and dependent *t*-test analysis. The results are presented in Table 6.

Table 6 The Comparison of the Pre-test Mean Score to Post-test Mean Score of Students' Sub Speaking Skills of Chinese-English Program Students

Chinese – English Program		n	*M*	*SD*	*t*	*df*	p-value
fluency	Pre-test	35	1.74	0.82		34	
	Post-test	35	4.06	0.73	15.79*		.000
pronunciation	Pretest	35	1.94	0.80	17.19*	34	.000
	Post-test	35	4.11	0.58			
vocabulary	Pre-test	35	2.20	0.80	12.63*	34	.000
	Post-test	35	4.17	0.77			

* p<0.05

According to Table 6, the results indicate that there were statistically significant differences in the pre-test and post-test mean score of students' sub speaking skills (fluency) of Chinese-English Program students ($t = 15.79$, $p < 0.05$). The pre-test mean score was 1.74 $(SD = 0.82)$ while the post-test mean score was 4.06 $(SD = 0.73)$. There were statistically significant differences in the pre-test and post- test mean score of students' sub speaking skills (pronunciation) of Chinese-

English Program students ($t = 17.19$, $p < 0.05$). The pre-test mean score was 1.94 $\left(SD = 0.80\right)$ while the post-test mean score was 4.11 $\left(SD = 0.58\right)$. There were statistically significant differences in the pre-test and post-test mean score of students' sub speaking skills (vocabulary) of Chinese-English Program students ($t = 12.63$, $p < 0.05$). The pre-test mean score was 2.20 $\left(SD = 0.80\right)$ while the post-test mean score was 4.17 $\left(SD = 0.77\right)$. Therefore, the post-test mean score was significantly higher than the pre-test mean score. The t-test analysis shows the positive effects of EchoEnglish application on EFL students' sub speaking skills (fluency, pronunciation, vocabulary) of Chinese-English Program students.

    4.1.3 The Comparison of the Effects of the EchoEnglish Application on Speaking Skills of EFL Students in the Science-Math Program to those of Students in the Chinese-English Program.

    To compare the effects of the EchoEnglish application on EFL students' speaking skills of Science-Math Program to those of Chinese-English Program, an independent t-test analysis was used. The results of this analysis are presented in Table 7.

Table 7 The Comparison of Speaking Skills of the Science-Math Program Students to that of the Chinese-English Program Students.

	Group	M	SD	df	t	p-value
Pretest	Science – Math Program	5.86	1.56	68	-0.06	0.94
	Chinese – English Program	5.89	2.00			
Posttest	Science – Math Program	12.29	1.13	68	-0.19	0.84
	Chinese – English Program	12.34	1.28			

* $p<0.05$

After the experiment, the results showed that there were no statistically significant differences ($t = -0.19$, p $= 0.84$) in the post-test mean scores of students in the Science-Math Program $\left(M = 12.29, SD = 1.13\right)$ and that of the Chinese-English Program $\left(M = 12.34, SD = 1.28\right)$. This means, after the experiment, there were no statistically significant differences in the mean scores of the speaking skills post-test of the Science-Math Program and that of the Chinese-English Program. These results indicate that the effects are similar the speaking skills of students in both groups were at the same level. The following section reports the results from the questionnaire and the semi-structured interview.

4.2 Students' Opinions about Learning English Speaking through the EchoEnglish Application.

To explore students' opinions about learning speaking through the EchoEnglish application after the instruction of the experiment, the data were collected and merged from the questionnaire and semi-structured interview.

4.2.1 Questionnaire

The data from the questionnaires were analyzed and calculated by using the mean and standard deviation. After that, the mean scores were interpreted into five levels from highly negative to very positive. The results are revealed in Table 8 and Table 9 and Table 10.
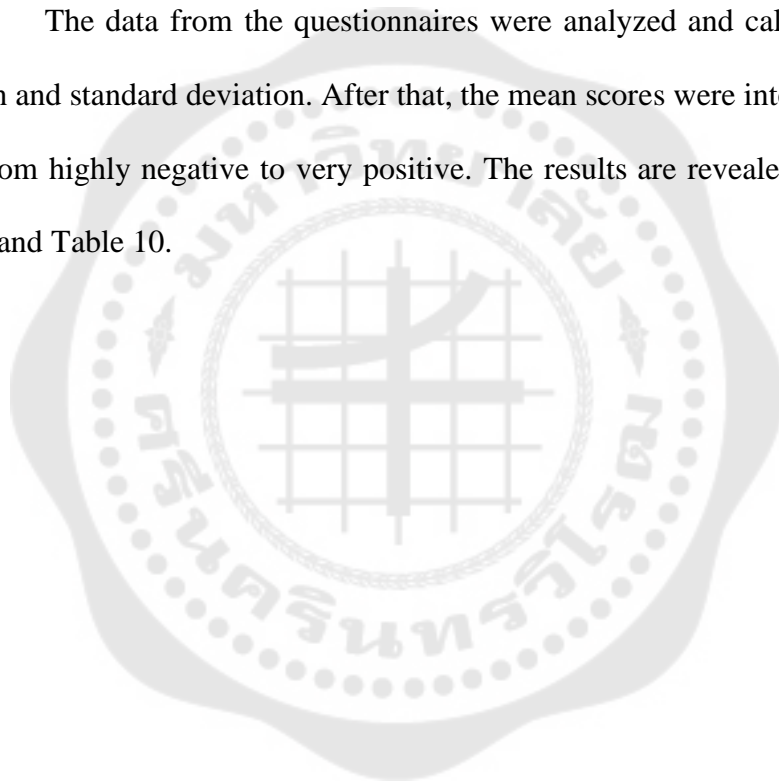
Table 8 Opinions about Learning English Speaking through the EchoEnglish Application

items	Statements	n	*M*	*SD*	Level
1	Using the EchoEnglish application to practice speaking skills is enjoyable.	70	4.46	0.75	Very positive
2	Using the EchoEnglish application to practice speaking skilsl is less stressful.	70	4.54	0.53	Very positive
3	I can use the vocabulary learnt by the EchoEnglish application better, since they provide me with more pictures, sound, definition, examples.	70	4.31	0.73	Very positive
4	The EchoEnglish application helps me become more confident in speaking.	70	4.73	0.44	Very positive
5	By participating in frequent non-threatening situations/ testing (with the EchoEnglish application), I am now able to face more challenging ones in real life.	70	4.50	0.63	Very positive
6	The EchoEnglish application allows me to interact better in the class.	70	4.49	0.55	Very positive
7	The EchoEnglish application helps enhance my speaking skills.	70	4.44	0.65	Very positive
8	Learning speaking through the EchoEnglish application is more practical than through textbooks.	70	4.37	0.64	Very positive
9	The use of the EchoEnglish application in learning environments encourages me to participate in learning activities.	70	3.97	0.86	Positive
10	Interacting with the EchoEnglish application helps me remember vocabulary, expressions, sentence structure better.	70	4.03	0.79	Very positive
	Average		4.38	0.65	Very positive

Table 8 reveals in general, students' opinions about learning English speaking skills through the EchoEnglish application were highly positive (M = 4.38).

This means that this method decreased student's stress and increased their confidence when they spoke English. The statements of the highest agreement were: "The EchoEnglish application helps me become more confident in speaking," (M=4.73) followed by the statement "Using the EchoEnglish application to practice speaking skills is less stressful." (M=4.54). In addition, students thought that the method of teaching helped them spoke English in everyday life and they enjoyed class activity. As shown in table 9, the statement "By participating in frequent non-threatening situations/ testing (with the EchoEnglish application), I am now able to face more challenging ones in real life," (M=4.50), and followed by "The EchoEnglish application allows me to interact better in the class." (M=4.49). In addition, the statement shown that students favored and enjoyed learning English speaking through this application was "Using the EchoEnglish application to practice speaking skills is enjoyable" (M=4.46).

Although there were five statements received the lowest scores compared to other statements, the mean scores were still in a very positive level. These statements were: "The EchoEnglish application helps enhance my speaking skills" (M=4.44), "Learning speaking through the EchoEnglish application is more practical than through textbooks" (M=4.37), "I can use the vocabulary learnt by the EchoEnglish application better, since they provide me with more pictures, sound, definition, examples" (M=4.31), and "The use of the EchoEnglish application in learning environments encourages me to participate in learning activities" (M=3.97).

Table 9 Opinions about Learning English Speaking Skills through the EchoEnglish Application of Science-Math Program Students

items	Statements	M	SD	Level
1	Using the EchoEnglish application to practice speaking skills is enjoyable.	4.17	0.86	Very positive
2	Using the EchoEnglish application to practice speaking skills is less stressful.	4.54	0.51	Very positive
3	I can use the vocabulary learnt by the EchoEnglish application better, since they provide me with more pictures, sound, definition, examples.	4.20	0.83	Very positive
4	The EchoEnglish application helps me become more confident in speaking.	4.77	0.43	Very positive
5	By participating in frequent non-threatening situations/ testing (with apps), I am now able to face more challenging ones in real life.	4.60	0.55	Very positive
6	The EchoEnglish application allows me to interact better in the class.	4.49	0.51	Very positive
7	The EchoEnglish application helps enhance my speaking skills.	4.54	0.61	Very positive
8	Learning speaking through the EchoEnglish applicaition is more practical than through textbooks.	4.51	0.56	Very positive
9	The use of the EchoEnglish application in learning environments encourages me to participate in learning activities.	3.77	0.84	Positive
10	Interacting with the EchoEnglish application helps me remember vocabulary, expressions, sentence structure better.	4.11	0.80	Very positive
	Average	4.37	0.22	Very positive

Table 9 reveals that overall the value of Science-Math Program students'

opinions about learning English speaking through the EchoEnglish application were

very positive $(M = 4.37)$. This means that students had very positive opinions about

learning English speaking through the EchoEnglish application. Students were

encouraged to speak English with confidence. The statements which received the highest mean scores was: "The EchoEnglish application helped me became more confident in speaking" ($M=4.77$). Students agreed that this application helped them able to speak English in real situations which shown in the statement "By participating in frequent non-threatening situations/ testing (with the EchoEnglish application), I am now able to face more challenging ones in real life" ($M=4.60$). In addition, students thought that this teaching method could support them to improve speaking skills, as shown in the statements "The EchoEnglish application helps me enhance my speaking skills" ($M=4.54$); and "Learning speaking through the EchoEnglish application is more practical than through textbooks" ($M= 4.51$). In addition, the statements shown preference of enjoying class activities presented " Using the EchoEnglish application to practice speaking skills is less stressful" ($M=4.54$); and "The EchoEnglish application allows me to interact better in the class" ($M=4.49$). These statements were rated at a very positive level.

Although there were four statements received the lowest scores compared to other statements, the mean scores were still in a highly positive level. These statements were: "I can use the vocabulary learnt by the EchoEnglish application better, since they provide me with more pictures, sound, definition, examples" ($M=4.20$); "Using the EchoEnglish application to practice speaking skills is enjoyable" ($M=4.17$); "Interacting with the EchoEnglish application helps me remember vocabulary, expressions, sentence structure better" ($M=4.11$); and "The use of the EchoEnglish application in learning environments encourages me to participate in learning activities" ($M=3.77$).

Table 10 Opinions about Learning English Speaking through the EchoEnglish Application of Chinese-English Program Students

items	Statements	M	S.D.	Level
1	Using the EchoEnglish application to practice speaking skills is enjoyable.	4.74	0.51	Very positive
2	Using the EchoEnglish application to practice speaking skills is less stressful.	4.54	0.56	Very positive
3	I can use the vocabulary learnt by the EchoEnglish application better, since they provide me with more pictures, sound, definition, examples.	4.43	0.61	Very positive
4	The EchoEnglish application helps me become more confident in speaking.	4.69	0.47	Very positive
5	By participating in frequent non-threatening situations/ testing (with the EchoEnglish application), I am now able to face more challenging ones in real life.	4.40	0.70	Very positive
6	The EchoEnglish application allows me to interact better in the class.	4.49	0.61	Very positive
7	The EchoEnglish application helps enhance my speaking skills.	4.34	0.68	Very positive
8	Learning speaking through the EchoEnglish application is more practical than through textbooks.	4.23	0.69	Very positive
9	The use of the EchoEnglish application in learning environments encourages me to participate in learning activities.	4.17	0.86	Very Positive
10	Interacting with the EchoEnglish application helps me remember vocabulary, expressions, sentence structure better.	3.94	0.80	Positive
	Average	4.40	0.23	Very positive

Table 10 reveals that overall, the value of Chinese-English Program students'

opinions about learning speaking through the EchoEnglish application were very

positive $(M= 4.40)$. This means that the students had positive opinions on classroom

activities and liked the teaching method. Based on the mean scores of students'

opinions, the statement of the highest agreement was "Using the EchoEnglish application to practice speaking skills is enjoyable" (M=4.74). Students also thought that this teaching method increased their confidence in speaking, as shown in the statement "The EchoEnglish application helps me become more confident in speaking" (M=4.69). In addition, the students felt relaxed and were interacted to do class activities which shown in the statements "Using the EchoEnglish application to practice speaking skills is less stressful" (M=4.54); and "The EchoEnglish application allows me to interact better in the class" (M=4.49). Moreover, the students could enhance vocabulary knowledge. It can be seen from the statements "I can use the vocabulary learnt by the EchoEnglish application better, since they provide me with more pictures, sound, definition, examples" (M=4.43).

Five statements were rated the lowest mean scores statements; however, the mean scores were still at a very positive level. These statements were: "By participating in frequent non-threatening situations/ testing (with apps), I am now able to face more challenging ones in real life" (M=4.40); "The EchoEnglish application helps enhance my speaking skills (M=4.34); "Learning speaking through the EchoEnglish application is more practical than through textbooks" (M=4.23); "The use of the EchoEnglish application in learning environments encourages me to participate in learning activities" (M=4.17); and "Interacting with the EchoEnglish application helps me remember vocabulary, expressions, sentence structure better" (M=3.94).

According to the opinion mean score of students in the Math-Science program and English-Chinses program, this suggests that students' opinions about learning English speaking skills through the EchoEnglish application of both groups

were at a very positive level. It can be pointed out that learning English speaking skills through the EchoEnglish application had positive effects on students in both groups.

4.2.2 The Semi-Structured Interview

In this study, the researcher asked students in the experimental groups to volunteer for an interview. There were 10 students, five students from the Science-Math Program and five students from Chinese-English Program. The data from the interview were analyzed by using content analysis. The results from the interviewing supported the results of the questionnaire. That is, students had very positive opinions about learning English speaking through the EchoEnglish application.

Students agreed that the EchoEnglish application helped them speak English confidently. All students (100%) showed the same idea that using the EchoEnglish application was a good method for learning English speaking skills. For example, one student expressed "I want to speak English with foreigners as much as I could." Some students said when they studied with a foreign teacher, they were willing to speak English more. Another student said that using the EchoEnglish applications helped her to speaking English because a combination of many features in this application helped her dare to speak. Another student added "This application allowed me practice speaking anytime and anywhere, I wasn't afraid I couldn't keep up with my friends." Seven students (70%) stated that using the EchoEnglish application always challenges them to learn English speaking skills in class activity, and the activities encouraged them to practice English speaking actively. For instance, one student said, "I felt that using the EchoEnglish application helped me to be more active to do English speaking and I felt more confident when I speak English." Two

students commented that learning English speaking by using the EchoEnglish application helped decrease their stress in speaking. Other students confirmed they dared to speak English without fear of being wrong. This led them to speak English with confidence. These opinions can be interpreted that the EchoEnglish application supported students speak English with confidence.

In addition, the EchoEnglish application helped students' pronunciation. All students (100%) agreed that this application supported them to learn pronunciation. For example, one student said that the application evaluated speaking by giving instant feedbacks, he was able to know the wrong word he pronounced. Some students said they had to pronounce the word correctly in order to get the better point. One student agreed "I was encouraged to pronounce the words by doing activities in class, this application taught me about pronunciation." One student expressed that she learnt the correct pronunciation from this application by doing activity in class. Other students confirmed that the features in this application encouraged them to pronounce the word correctly.

Furthermore, it was found that using the EchoEnglish application motivated students to learn English speaking skills. All ten students (100%) said that they had fun using the EchoEnglish application and they enjoyed learning English speaking skills more than learning from texts only. Eight students (80%) also felt that learning English speaking skills by using the EchoEnglish application increased their motivation to participate in classroom activities. They responded that they enjoyed and felt relaxed when they learned through this application. For instance, all students responded that they were willing to participate in classroom activities when using the EchoEnglish application. Two students expressed; "I feel more relaxed and excited to

learn English speaking skills when the contents are presented through the features in this application", and "I was enthusiastic learning speaking because I could learn speaking myself." Other students commented, "I always felt shy when I speak English; however, I feel relaxed and enjoyed to speak English when it is accompanied with images, sounds and animation."

In conclusion, these interview data the analysis showed that students had very positive opinions about learning English speaking skills through the EchoEnglish application. From students' judgments above, they responded that the EchoEnglish application helped them speak English with confidence and supported them about pronunciation. Furthermore, this application English motivated students to learn English speaking skills. This led them to speak English with confidence in their daily lives.

Summary of the Chapter

This chapter presented the results of the research objectives regarding the effects of EchoEnglish application on EFL students' speaking skills, the effects of EchoEnglish application on EFL students' sub speaking skills (fluency, pronunciation, vocabulary), the comparison of the effects of EchoEnglish application on the speaking skills of Science-Math Program students to those of Chinese-English Program students. Furthermore, students' opinions about learning English speaking through the EchoEnglish application were presented. The next chapter summarizes the findings of the study with the discussion, implication of the study and recommendations for further studies in according with the main findings.

CHAPTER V
CONCLUSION AND DISCUSSION

This chapter presents the conclusion that describes the purposes of the study, research methodology, and the findings of the study. In addition, it presents a discussion of the study. The implications of the study, limitations, and recommendations for further studies are also discussed in this chapter.

Conclusion

This study was conducted for the following purposes:

1. To investigate the effects of the EchoEnglish application on speaking skills of EFL students in the Science-Math Program.

2. To investigate the effects of the EchoEnglish application on speaking skills of EFL students in the Chinese-English Program.

3. To compare the effects the EchoEnglish application on speaking skills of EFL students in Science-Math Program to those of students in the Chinese-English Program.

4. To explore the opinions of EFL students about learning English speaking through the EchoEnglish application.

The participants of the study were 70 students. They were tenth-grade students who studied in the second semester of the 2019 academic year at Surasakmontree school. The students were divided into two groups: the students in Science-Math Program (35 students) and Chinese-English Program (35 students). The instruments used in this study were 1) five lesson plans, 2) an English speaking test, 3) a questionnaire on students' opinions about learning English speaking through the EchoEnglish application, 4) a semi-structured interview, and 5) a rubric of speaking

skills. Mean score, standard deviation, and the *t*-test analysis were employed to analyze the quantitative data while content analysis was used to analyze the qualitative data.

The findings of the study were:

First, the results reveal the effectiveness of the EchoEnglish application in enhancing speaking skills of EFL students in Science-Math Program. That is, post-test mean score were significantly higher than the pre-test mean score (t=26.39, p < 0.05).

Second, the results reveal the effectiveness of the EchoEnglish application in enhancing speaking skills of EFL students in Chinese-English Program. That is, post-test mean score were significantly higher than the pre-test mean score (t=21.56, p < 0.05).

Third, the results reveal that the gained speaking skills of students in both groups were at the same level. That is, there were no statistically significant differences (t=-0.19, p < .84) in the post-test mean score of students in the Science-Math Program $(M= 12.29, SD= 1.13)$ and that of the Chinese-English Program $(M= 12.34, SD= 1.28)$. This means that the EchoEnglish application had effects on different background students.

Fourth, the results reveal that in general, students' opinions about learning English speaking through the EchoEnglish application were very positive $(M = 4.38)$. It points out that learning speaking through the EchoEnglish application had a positive effect on students' opinions of the Science-Math Program students and Chinese-

English Program students. Additionally, the results of the interviews supported the questionnaire responses, revealing that students liked and enjoyed learning English speaking through the EchoEnglish application.

Discussion

According to the results of this study, the EchoEnglish application helped students to improve their speaking skills and there are many reasons to explain these results. Firstly, the EchoEnglish application offers a good learning environment. Similar to the work of Kelso (2010), teaching English through mobile applications and other technology can provide a less threatening language learning environment (Kelso, 2010). In this study, the EchoEnglish application provided a less stressful and anxious environment. The students practiced speaking directly with the application. This environment stopped students from being shy and afraid of speaking. As a result, they had more confidence in speaking and developed their learning performance and speaking skills. Similar to the ideas of Dornyei (2001), Krashen (1981), and Viswat & Jackson (1993), confident students were able to perform well easily, while students who lacked confidence were usually not able to develop their speaking skills. As the results of this study and the post-test mean score of their speaking skills were significantly higher than the pre-test mean scores of both groups. This can be indicated in the results of the questionnaire statement which received the highest level of agreement: "The EchoEnglish application helped me become more confident in speaking" (M=4.73). Also, in the interview, the students reported that they were willing to speak English with their foreign teachers. These findings are in line with the research of Han and Keskin (2016), which found that mobile application significantly impacted the language acquisition of the students by lowering their EFL

speaking anxiety. It can be concluded that the EchoEnglish application created a safe environment for students to practice English speaking.

Secondly, the speech analysis system of the EchoEnglish application helped to support the speaking skills of students. This system provided sounds and prompt feedback to evaluate the pronunciation of students. It scored and rated levels of pronunciation immediately. Students were able to correct their pronunciation mistakes of or continue to practice, if they were correct. Like the ideas of Zahorik (1987), if the pronunciation is incorrect, immediate feedback allows learners to make corrective modifications and prevent continued practice of the incorrect one. In contrast, if the pronunciation is correct, immediate feedback can motivate students to continue. This immediate feedback helped students speak effectively. Similarly, the work of Irons (2008) demonstrated that the sooner feedback is received, the more effective it is for learning. The speech analysis system of the EchoEnglish application which provided students the immediate feedback helped students speak effectively.

Thirdly, the use of repetition in the EchoEnglish application helped students improve their speaking skills. According to Taipetch (2019), in the application, words and sentences can be repeated as many times as necessary and repeatable words and sentences enable students to strengthen their memories. In this study, the EchoEnglish application allowed students to repeatedly interact with each word or sentence and in many contexts. As the result, students were able to remember meaning and functions of words and sentences. These findings are in line with the study of Webb (2007), which found that learners can gain greater knowledge of the words if the repetition is increased. His study revealed that if the learners frequently encounter the same words, the more opportunities they have to develop their knowledge.

This study found that the EchoEnglish application supported individualized learning which facilitate students' speaking. Students were able to learn speaking by self-study. Similar to the ideas of Cheon, Lee, Crooks, & Song (2012), individualized learning can be supported by mobile technology. In this study, the EchoEnglish application allowed students to learn outside class at their convenience. Students can learn speaking at their own pace and be responsible for their own instruction, or pace and process, for completing course materials. In other word it was flexible enough for students to learn English speaking. This can be seen from the interview statements, such as "I could learn speaking myself through this application," and "I could learn speaking out of class anytime and anywhere, so I wasn't afraid that I couldn't keep up with my friends," and "I was enthusiastic about learning speaking because I could learn speaking myself" These findings are in line with the research of Liu & Xuan He (2014), which found that students were willing to use applications to learn English with a self-regulated learning approach, instead of a traditional learning approach. They concluded that it was helpful and efficient for students using mobile applications to learn English by themselves. Therefore, the EchoEnglish application supported individualized learning of the various backgrounds of the EFL students.

More importantly, this study found that students favored the learning through the EchoEnglish application. It helped increase students' motivation in learning. According to Sandberg et al. (2011), visuals such as video, sound, animation, flashcards, etc. made a great contribution to supply and maintain the motivation and engagement of learners. In this study, the EchoEnglish application provided video, sound, and animation. These characteristics helped to increase student motivation and engaged students to be active in learning. This can be proved by the opinions of

students, which expressed that the elements of visuals, such as video, sound, and animation positively motivated them to learn to speak English (*M*=4.37). These findings were in line with the research of Hwang et al. (2014), which found that students were more motivated to practice English skills when they use a mobile learning application, and had positive attitudes toward learning activities were positive. Similarly, Kusmaryani et al (2019) found that students were very enthusiastic about exploring and practicing English skills by using mobile learning applications.

It can be concluded that this study confirms the advantages of using the EchoEnglish application in learning English speaking skills. That is, this application provided several advantages for students. Firstly, it helped to support the confidence of students in terms of speaking. Secondly, it supported active learning and student-centered learning styles in terms of the diversity of the demographic backgrounds of the students. This application also supported differentiated learning. Thirdly, it helped students to gain speaking knowledge by practicing their newly acquired English speaking skills in active learning environments. Finally, it also increased student motivation and engagement in learning, this methodology can support students to become successful in the 21st century. As previously mentioned, the EchoEnglish application could be introduced as an alternative method to assist English speaking and learning in the EFL classroom and to improve the English teaching of EFL instructors.

Implications of the Study

        This study proved that teaching English speaking through the EchoEnglish application was a good tool to enhance students' speaking skills. The EchoEnglish application made speaking learning process easier, and more enjoyable. This study points out that the EchoEnglish application is valuable for not only academic purposes, but also motivational purposes by creating interesting speaking activities, motivation, engaging and good environment. Hence, the result of this study will be helpful for teachers or educators to apply this effective method to teach speaking in EFL classroom. Furthermore, the findings can be useful for developing a curriculum in order to encourage students' language competency and 21st century skills.

Limitations of the Study

        This study was limited to the 10th grade students at a government secondary school, which was a very particular group of students. As a result, the finding might not be a representative of students in other grade levels and other groups of students in different context. Furthermore, this study aimed to investigate the effectiveness of teaching English speaking through the EchoEnglish application in enhancing students' speaking skills of Science-Math Program to those the Chinese-English Program. Therefore, the results in this study might not be generalizable for teaching English speaking in other aspects.

Recommendations for Further Studies

        Although the findings of this study confirmed the positive effects of teaching English speaking through the EchoEnglish application on the EFL students' speaking skills, further studies need to be conducted to expand knowledge in the field of EFL

learning. Firstly, this study aimed to investigate the effects of the EchoEnglish application on EFL students' speaking skills. It would be interesting to use the EchoEnglish application to teach other language skills, e.g. listening, reading, and writing. Secondly, this study was conducted to investigate the effects of the EchoEnglish application on EFL students' speaking skills in the 10th grade students' speaking skills. Therefore, it will be interesting to investigate the effects of this teaching method on students in other level. Finally, the experiment in this study covered only five weeks. It will be interesting to attain more the experiment over a longer period of time and more variety of mobile application. Using varied materials in classrooms will improve students' learning. For this reason, it also will be interesting to investigate the effects of variety of mobile application integrated in enhancing speaking skills and language skills for EFL students.

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APPENDIXES
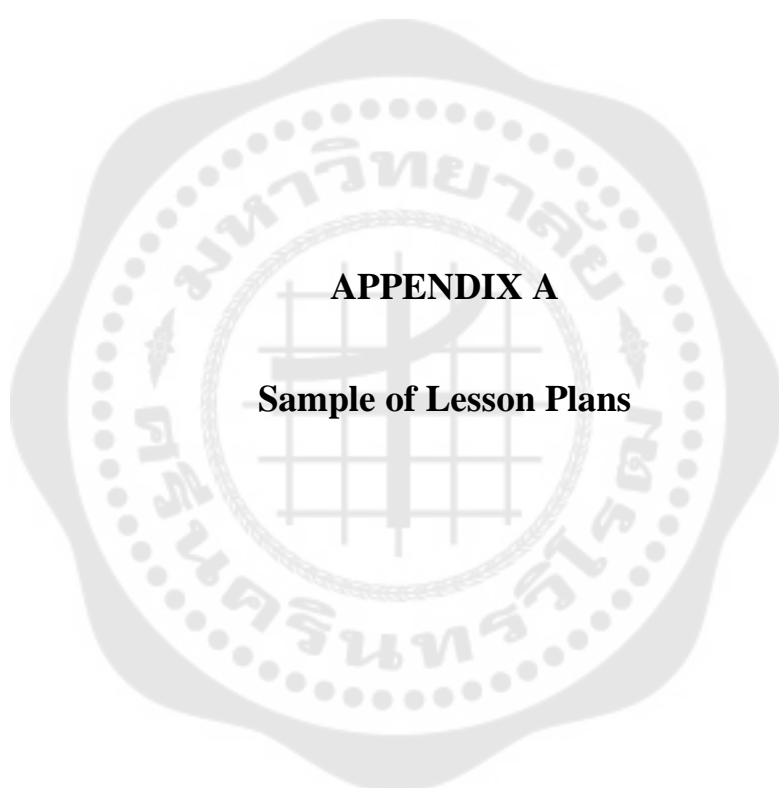
APPENDIX A

Sample of Lesson Plans

Lesson plan 1

Topic: Making a reservation for meeting   Time: 100 minutes

Lesson Overview

In this lesson, students will learn vocabulary, expressions and language function about making a reservation for meeting then practice pronunciation and speaking. After that students will learn how to making a reservation for meeting and make a group to do role play activity.

Objectives:

1. Students will be able to identify vocabulary, phases and sentences about making a reservation for meeting.

2. Students will be able to create a dialogue and do role play activity.

Language functions and expressions

Vocabulary: reservation, meeting, beverage, soup, breakfast, lunch, dinner, brunch, booking, cancel, people, availability, booking, special, assist, customer, restaurant.

Expression:

- How may I assist you today?

- Hello, I would like to make a reservation for a meeting

- Of course

- Next … for ten people

- What time would you like the reservation for?

- I would say 9.30 a.m. with a coffee break

- We would like to have a set lunch with soup, please

- May I have your name and phone number please

- My name is … My phone number is …

Material: Power point presentation, worksheets, mobile phones, the EchoEnglish application, the rubric of speaking skills

Teaching procedures

Teaching method	Classroom Activity	Material
Warm-Up (5 minutes)	- Activated students' attention to the lesson by asking students about their favorite food. - Discuss about the topics.	- Power point presentation
Presentation (20 minutes)	- Introduce the lesson by discussing with students about the vocabulary and expressions that used at the restaurant. - Present the meaning of vocabulary and expressions about making a reservation for meeting through the power point presentation and the EchoEnglish application (lesson) - Teach the language function through the situation using the EchoEnglish application (lesson) - Review by asking student individually. - Teach the pronunciation using the EchoEnglish application (listening)	- Power point presentation - The EchoEnglish application - Mobile phone
Practice	- Ask students to practice speaking and	- The EchoEnglish application

	pronunciation using the EchoEnglish application (speaking). - Ask students to speak to their peers. - Ask students to practice using words and expressions through the EchoEnglish application (writing) - Evaluate by asking students to complete the exercise (writing the meaning of vocabulary and expressions)	- Mobile phones
(40 minutes)		
Production (30 minutes)	- Ask student to work in groups to create a dialogue related to the topic and do a role play activity. - Evaluate speaking through the role play activity - Evaluate overall comprehension through the EchoEnglish application (test) - Evaluate speaking through the EchoEnglish application (output mode) - Gives feedbacks and conclusion.	- The EchoEnglish application - Mobile phone - The rubric of speaking skills
Conclusion (5 minutes)	- Ask students to review the lesson they have learnt.	- Power point presentation - Assignment

Example of speaking lesson in the EchoEnglish application used in class activities

Example of the speech analysis system, instant feedback, score report, and award

Example of score report, and award.

Lesson plan 2

Topic: Western menu and wine list   Time: 100 minutes

Lesson Overview

In this lesson, students will learn vocabulary, expressions and language function about western menu and wine list then practice pronunciation and speaking. After that students will learn how to order the western menu and wine list and make a group to do role play activity.

Objectives:

1. Students will be able to identify vocabulary, phases and sentences about western menu and wine list.

2. Students will be able to create a dialogue and do role play activity.

Language functions and expressions

Vocabulary: Order, dish, wine list, recommend, recommendation, light wine,

Expression:

- Here are your drink menu and food menu.

- I would like ….

- I will come back and take your order

- Are you ready to order?

- Would you like to have some wine to go with sir?

- Could I see the wine list, please?

- Here you are, sir

- Are there any recommendations for the wine

- I would recommend …..

Material: Power point presentation, Assignment, mobile phones, the EchoEnglish application, the rubric of speaking skills

Teaching procedures

Teaching method	Classroom Activity	Material
Warm-Up (5 minutes)	- Encourages students to be interested in the lesson - Encourage students to give the example of Western food menu. - Discuss about the topic	- Power point presentation
Presentation (20 minutes)	- Introduce the lesson by discussing with students about the vocabulary and expressions that used for ordering the western menu and wine. - Present the meaning of vocabulary and expressions about western menu and wine list through the power point presentation and the EchoEnglish application (lesson) - Teach the language function through the situation using the EchoEnglish application (lesson) - Review by asking student individually. - Teach the pronunciation using the EchoEnglish application (listening)	- Power point presentation -The EchoEnglish application - Mobile phones

Practice (40 minutes)	- Ask students to practice pronunciation using the EchoEnglish application (speaking). - Ask students to speak to their peers. - Ask students to practice using words and expressions through the EchoEnglish application (writing) - Evaluate by asking students to complete the exercise (writing the meaning of vocabulary and expressions)	- The EchoEnglish application - Exercise, Assignment - Mobile phones
Production (30 minutes)	- Ask student to work in groups to create a dialogue related to the topic and do a role play activity. - Evaluate speaking through the role play activity - Evaluate overall comprehension through the EchoEnglish application (test) - Evaluate speaking through the EchoEnglish application (output mode) - Gives feedbacks and conclusion.	- Assignment - The EchoEnglish application - Mobile phone - The rubric of speaking skills
Conclusion (5 minutes)	- Ask students to review the lesson they have learnt.	- Power point presentation - Assignment

Example of speaking lesson in the EchoEnglish application used in class activities

Lesson plan 3

Topic: Changing the order, then have both   Time: 100 minutes

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Lesson Overview

In this lesson, students will learn vocabulary, phrases, expressions and language function on the topic "Changing the order, then have both" then practice pronunciation and speaking. After that students will learn how to order and change the menu then make a group to do role play activity.

Objectives:

1. Students will be able to identify vocabulary, phrases, expressions and sentences about asking the way.

2. Students will be able to order and change the menu and do role play activity.

Language functions and expressions

Vocabulary, phrases: already, order, change, check, sea bass, fish sauce, alright, kitchen, shrimp

Expression:

- Excuse me?

- How may I help you?

- I already ordered but could I change it?

- What would you like to have, sir?

- I will check it for you?

- I would like to have 'deep fried sea bass with fish sauce'

- I will tell the kitchen.

- I'm sorry to tell you that your 'shrimp with fish sauce' is ready.

- We'll have both then.

Material: Power point presentation, worksheets, Assignment, mobile phones, the

EchoEnglish application, the rubric of speaking skills

Teaching procedures

Teaching method	Classroom Activity	Material
Warm-up (5 minutes)	- Encourages students to be interested in the lesson - Show pictures about the situations for speaking. - Ask questions and discuss about the topic	- Power point presentation
Presentation (20 minutes)	- Introduce the lesson by discussing with students about the vocabulary phases, and expressions about changing the order, then have both. - Present the meaning of vocabulary and expressions about changing the order, then have both through the power point presentation and the EchoEnglish application (lesson) - Teach the language function through the situation using the EchoEnglish application (lesson) - Review by asking student individually. - Teach the pronunciation using the EchoEnglish application (listening)	- Power point presentation -The EchoEnglish application - Mobile phones

Practice (40 minutes)	- Ask students to practice pronunciation using the EchoEnglish application (speaking). - Ask students to practice speaking with their peers. - Ask students to practice using words and expressions through the EchoEnglish application (writing) - Evaluate by asking students to complete the exercise (writing the meaning of vocabulary and expressions)	- The EchoEnglish application - Mobile phones
Production (30 minutes)	- Ask student to work in groups to create a dialogue related to the topic and do a role play activity. - Evaluate speaking through the role play activity. - Evaluate overall comprehension through the EchoEnglish application (test) - Gives feedbacks	- Worksheet, Assignment - The EchoEnglish application - The rubric of speaking skills
Conclusion (5 minutes)	- Ask students to review the lesson they have learnt.	- Power point presentation

Example of speaking lesson in the EchoEnglish application used in class activities

APPENDIX B

An English speaking test

An English Speaking Test

An English speaking test consists of 2 tasks; responding to questions and describing a favorite restaurant. The test lasts approximately 15 minutes.

Task 1: Responding to questions (5 minutes)

Directions: In this part of the test, you will answer three questions. For each question, begin responding immediately after you hear a question. You will have 1 minute to respond to Questions 1 and 2, and 3.

Tester: Imagine you are a customer at the restaurant, you are talking to a food and beverage staff. You will respond the question immediately.

Question 1: Can I start you off with anything to drink?

Question 2: Are you ready to order? What would you like to order, sir?

Question 3: How was everything, sir?

Task 2: Describing a favorite restaurant (10 minutes)

Directions: In this part of the test, you will describe your favorite restaurant. You will have 5 minutes to prepare. Then you will have 5 minutes to speak.

Question 1: What is the name of the restaurant?

Question 2: Where it is located?

Question 3: What kinds of food they serve?

APPENDIX C

A questionnaire to study students' opinions about learning English

speaking through the EchoEnglish application

A questionnaire to study students' opinions about

learning English speaking through the EchoEnglish application

Name: ....Class: ....

This questionnaire has been designed to identify your opinion of using the EchoEnglish application in English language learning. Please read the statements below carefully and tick the appropriate choices that reflect your opinion of using EchoEnglish application in English language learning.

Directions: Use the scale below to answer the questionnaire items.

1 (Strongly Disagree), 2 (Disagree), 3 (Neutral), 4 (Agree), 5 (Strongly Agree)

No	Items	5	4	3	2	1
1	Using the EchoEnglish application to practice speaking skills is enjoyable.					
2	Using the EchoEnglish application to practice speaking skills is less stressful.					
3	I can use the vocabulary learnt by the EchoEnglish application better, since they provide me with more pictures, sound, definition, examples.					
4	The EchoEnglish application helps me become more confident in speaking.					
5	By participating in frequent non-threatening situations/ testing (with the EchoEnglish application), I am now able to face more challenging ones in real life.					
6	The EchoEnglish application allows me to interact better in the class.					
7	The EchoEnglish application helps enhance my speaking skills.					
8	Learning speaking through the EchoEnglish application is more practical than through textbooks.					
9	The use of the EchoEnglish application in learning environments encourages me to participate in learning activities.					
10	Interacting with the EchoEnglish application helps me remember vocabulary, expressions, sentence structure better.					

Additional opinions

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APPENDIX D

A semi-structured interview

A semi-structured interview

A semi-structured interview was used in order to allow the researcher to obtain more information, apart from a questionnaire. The questions were:

1) Do you enjoy learning English through the EchoEnglish application?

2) How the EchoEnglish application encourage you in speaking class?

3) Does the EchoEnglish application help you speak English with confidence? How?

APPENDIX E

The rubric of speaking skills

The rubric of speaking skills

The rubric of speaking skills was adapted from Brown (2001)

Skills	5	4	3	2	1
Fluency	Has complete fluency in the language such that his speech is fully accepted by educated native speakers.	Able to use the language fluently on all levels normally pertinent to professional needs. Can participate in any conversation with a high degree of fluency.	Can discuss particular interests of competence with reasonable ease. Rarely has to grope for words.	Can handle with confidence but not with facility most social situations, including introductions and casual conversations about current events, as well as work, family and autobiographical information.	Is unable to speak or give only one word or very short utterance with a long pause; unable to communicate ideas
Pronunciation	Equivalent to and fully accepted by educated native speakers.	Errors in pronunciation are quite rare.	Errors never interfere with understanding and rarely disturb the native speaker. Accent may be obviously	Accent is intelligible though often quite faulty.	Errors in pronunciation are frequent but can be understood by a native speaker used to dealing with

			foreign.		foreigners attempting to speak his language.
Vocabulary	Speech on all level is sufficiently accepted by educated native speakers in all its features including breadth of vocabulary and idioms, colloquialisms, and pertinent cultural references.	Can understand and participate in any conversation within the range of his experience with a high degree of precision of vocabulary	Able to speak the language with sufficient vocabulary to participate effectively in most formal and informal conversations on practical, social and professional topics. Vocabulary is broad enough that he rarely has to grope for a word.	Has speaking vocabulary sufficient to express him simply with some circumlocutions.	Speaking vocabulary inadequate to express anything but the most elementary needs.

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