THE EFFECTS OF MOBILE-BLENDED COOPERATIVE LEARNING ON EFL STUDENTS' LISTENING COMPREHENSION IN CAMBODIAN CONTEXT

Nangsamith Each

A Thesis Submitted in Partial Fulfillment of the Requirements for

the Degree of Master of Arts in English Language Studies

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ผลของการจัดการเรียนรู้แบบร่วมมือกันในรูปแบบผสมผสานผ่านการใช้เทคโนโลยีเคลื่อนที่ที่มีต่อการฟังเพื่อความเข้าใจของนักศึกษาที่เรียนภาษาอังกฤษในฐานะภาษาต่างประเทศในบริบทของกัมพูชา

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ON EFL STUDENTS' LISTENING COMPREHENSION IN

CAMBODIAN CONTEXT

Suranaree University of Technology has approved this thesis submitted in partial fulfillment of the requirements for a Master's Degree.

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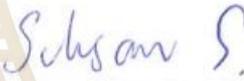
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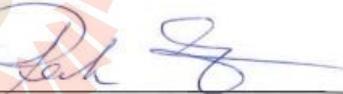
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น้องสมิธ อีช : ผลของการจัดการเรียนรู้แบบร่วมมือกันในรูปแบบผสมผสานผ่านการใช้
เทคโนโลยีเคลื่อนที่ที่มีต่อการฟังเพื่อความเข้าใจของนักศึกษาที่เรียนภาษาอังกฤษในฐานะ
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183 หน้า

การศึกษาครั้งนี้มีวัตถุประสงค์เพื่อศึกษาผลของการจัดการเรียนรู้แบบร่วมมือกัน
ในรูปแบบผสมผสานผ่านการใช้เทคโนโลยีเคลื่อนที่ที่มีต่อการฟังเพื่อความเข้าใจและศึกษาความ
คิดเห็นของนักศึกษาที่เรียนภาษาอังกฤษในฐานะภาษาต่างประเทศในบริบทของกัมพูชาที่มีต่อการ
จัดการเรียนรู้แบบร่วมมือกันในรูปแบบผสมผสานผ่านการใช้เทคโนโลยีเคลื่อนที่ในเรื่องการฟัง
เพื่อความเข้าใจ

ชั้นเรียนที่มีนักศึกษา 30 คน (ชาย = 12, หญิง = 18) ที่อยู่ในระดับปานกลางได้ถูกเลือก
แบบเฉพาะเจาะจงเพื่อเข้าร่วมในการศึกษานี้ พวกเขาทั้งหมดได้ลงทะเบียนในรายวิชาภาษาอังกฤษ
สำหรับผู้ใหญ่ที่มหาวิทยาลัยพระตะบอง (UBB) ในปีการศึกษา 2562 การผสมผสานระหว่างวิธีการ
วิจัยเชิงปริมาณและเชิงคุณภาพได้ถูกนำมาใช้ในกระบวนการรวบรวมข้อมูลภายในระยะเวลา
8 สัปดาห์ โดยใช้รูปแบบการศึกษากลุ่มเดียวและวัดก่อนหลังการทดลอง การทดสอบก่อนและ-
หลังเรียนถูกนำมาใช้เพื่อเก็บข้อมูลที่เกี่ยวข้องกับการพัฒนาการฟังหลังจากการเรียนการสอน
ในชั้นเรียนและการใช้เว็บไซต์ในรูปแบบผสมผสานผ่านการใช้เทคโนโลยีเคลื่อนที่ แบบสอบถาม
จำนวน 20 ข้อและการสัมภาษณ์แบบกึ่งโครงสร้างได้ถูกนำมาใช้หลังจากการทดลองเพื่อสอบถาม
ความคิดเห็นของนักศึกษาที่มีต่อการจัดการเรียนรู้แบบร่วมมือกันในรูปแบบผสมผสานผ่านการ
ใช้เทคโนโลยีเคลื่อนที่

ผลของคะแนนการทดสอบก่อนและหลังเรียนแสดงให้เห็นว่ามีความแตกต่างอย่างมี
นัยสำคัญที่ $p = 0.000$ ($p < 0.05$) ซึ่งแสดงให้เห็นว่านักศึกษาได้มีการพัฒนาความเข้าใจในการฟัง
ด้วยคะแนนเฉลี่ยของการทดสอบก่อนเรียน ($M = 12.43$, $SD = 5.23$) และคะแนนเฉลี่ยของการ
ทดสอบหลังเรียน ($M = 16.03$, $SD = 4.65$) นอกจากนี้ผลจากแบบสอบถามและการสัมภาษณ์แบบ

กึ่งโครงสร้างพบว่านักศึกษามีความคิดเห็นในเชิงบวกต่อการจัดการเรียนรู้แบบร่วมมือกันในแบบ
ผสมผสานผ่านการใช้เทคโนโลยีเคลื่อนที่ที่มีต่อการฟังเพื่อความเข้าใจ (MBCL) โดยมีค่าเฉลี่ย 4.21
(SD = 0.61) เหตุผลสำหรับความคิดเห็นในเชิงบวกอาจมาจากเว็บไซต์ที่เป็นมิตรกับผู้ใช้บน
อุปกรณ์เทคโนโลยีเคลื่อนที่ ความสะดวก ความสนุก แรงจูงใจรวมถึงการพัฒนาทักษะอื่น ๆ
ในช่วงการระบาดของโควิด (การพูด คำศัพท์ ไวยากรณ์ และการออกเสียง)-19 นี้การใช้รูปแบบ
ผสมผสานผ่านการใช้เทคโนโลยีเคลื่อนที่ที่มีต่อการฟังเพื่อความเข้าใจ (MBCL) สามารถช่วยให้
นักศึกษาเรียนรู้ภาษาได้อย่างสะดวกโดยเฉพาะการฟังเพื่อความเข้าใจ หากครูผู้สอนภาษามีความ
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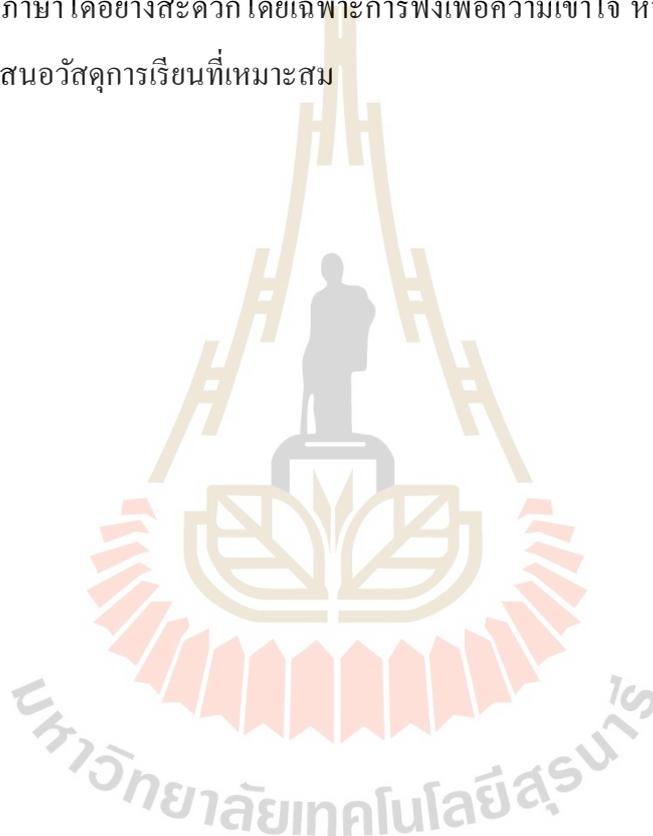
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ปีการศึกษา 2562   ลายมือชื่ออาจารย์ที่ปรึกษา_____

NANGSAMITH EACH : THE EFFECTS OF MOBILE-BLENDED COOPERATIVE LEARNING ON EFL STUDENTS' LISTENING COMPREHENSION IN CAMBODIAN CONTEXT. THESIS ADVISOR : SUKSAN SUPPASETSEREE, Ph.D., 183 PP.

LISTENING COMPREHENSION/ MOBILE-BLENDED LEARNING/ COOPERATIVE LEARNING/ MOBILE-BLENDED COOPERATIVE LEARNING

The aims of the present study were to investigate the effects of Mobile-Blended Cooperative Learning (MBCL) on EFL students' listening comprehension and to examine Cambodian EFL students' opinions toward the use of Mobile-Blended Cooperative Learning (MBCL) on listening comprehension.

A class of 30 students (Male=12, Female=18) was purposely selected from an intermediate class to participate in the study. They were all enrolled in the English for Adults program at the University of Battambang (UBB) for the academic year 2019. A combination of quantitative and qualitative research methodologies were implemented as the sources for data collection over a period of 8 weeks in a single group pre-test/post-test design. Pre-test and post-test instrument were used to collect data regarding the listening enhancement after in class instruction and MBCL website. A 20 items questionnaire and semi-structured interview were administered after the experiment to check students' opinions toward Mobile-Blended Cooperative Learning (MBCL).

The results of the pre-test and post-test scores indicated that there were significant differences at p=0.000 (p<0.05). As a result, students enhanced their listening comprehension with average scores of pre-test (M=12.43, SD=5.23) and the

average scores of post-test (M=16.03, SD=4.65). In addition to this, the results from questionnaire and semi-structured interview revealed that students had positive opinions toward the use of Mobile-Blended Cooperative Learning (MBCL) on listening comprehension at the average score of 4.21 (SD=0.61). The reason for their positive opinion might come from the user-friendly website on mobile devices, convenience, fun, motivation as well as improving other skills (speaking, vocabulary, grammar, and pronunciation). During this COVID-19 pandemic, the implementation of Mobile-Blended Cooperative Learning (MBCL) can help students learn language conveniently especially listening comprehension if the language teachers are flexible and offer appropriate materials.
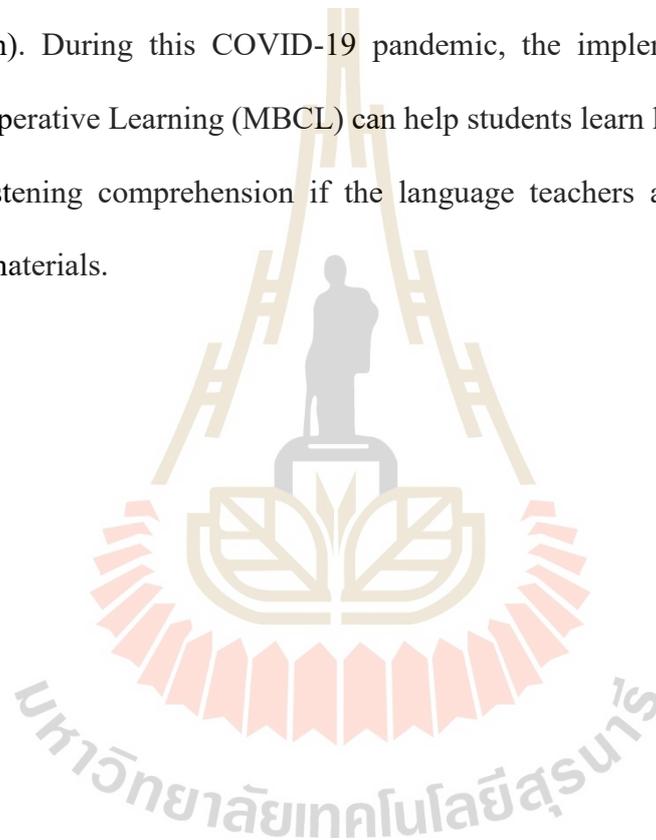
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Academic Year 2019   Advisor's Signature _Sulison S._____

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This study would not have been completed without the help and support of many people to whom I would like to express my sincere gratitude.

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Beside my advisor, I would like to thank the rest of my thesis committees: Dr. Peerasak Siriyothin and Asst. Prof. Dr. Kittitouch Soontornwipast for their entire insightful comments, and suggestions which have contributed greatly to the improvement of this thesis.

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Finally, my thanks go to other individuals who in one way or another shared their time, efforts, ideas, skills and knowledge; I humbly dedicate this research to all of you.

Nangsamith Each

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LIST OF ABBREVIATIONS

AEC	ASEAN Economic Community
BL	Blended Learning
CL	Cooperative Learning
CLL	Cooperative Language Learning
CLT	Communicative Language Teaching
EA	English for Adults
EFL	English as a Foreign Language
ELED	English Language Education Department
IFL	Institute of Foreign Languages
KET	Key English Test
MBCL	Mobile-Blended Cooperative Learning
MOEYS	Ministry of Education Youth and Sport
MALL	Mobile Assisted Language Learning
PET	Preliminary English Test
UBB	University of Battambang
ZPD	Zone of Proximal Development

CHAPTER 1

INTRODUCTION

This chapter gives a brief introduction to the present study aiming at investigating the effects of Mobile-Blended Cooperative Learning (MBCL) on EFL students' listening comprehension in a Cambodian context and their opinions towards the proposed method. It is organized under the following headings: background and rationale of the study, statement of the problem, purpose of the study, research questions, research hypotheses, significance of the study, definitions of key terms, as well as limitations of the study. It ends with the summary of the chapter.

1.1 Background and Rationale of the Study

English is known as an international language which is used widely throughout the world. Crystal (2003) stated that *"English is a global language"* (p.2). That means English is used to communicate worldwide such as signs, advertisements, informal communication and political speech as well as official language across nations. With non-stop development, globalization, and information, it cannot be denied that English is the only language that people can communicate and discuss with different nationalities in terms of political discussion, business, international communication and researches (Xue & Zuo, 2013). Therefore, Cambodia is also one among those nationalities which use English as a foreign language.

In the Cambodian context, English is believed to be a very important language because of the opening of the ASEAN Economic Community (AEC). For this reason, domestic and regional job markets make English the secondary skill. This means that besides the professional skill of each individual person, he/she has to be able to communicate in English; otherwise, he/she is not able to get a better job in any company or organization. Accordingly, the Ministry of Education, Youth and Sport (MoEYS) announced that English language education would be taught in Cambodian state schools from grade 4 and introduced new English language textbooks to help students learn effectively (Tweed & Som, 2015). This means that students learn English for at least 9 years (grade 4 to 6 for primary school, grade 7 to 9 for secondary school and grade 10 to 12 for high school) according to the state schools' curriculum. Although English is strongly promoted and encouraged as a compulsory subject, the English proficiency of Cambodian students is still ineffective because teaching skills and methods are at the teacher centered, so students have a very limited chance to practice English (Clayton, 2002; Clayton, 2008; Igawa, 2008; Song, 2015). For example, teachers present their teaching and learning materials at all times orally, using grammar translation or audiolingual methods to teach their students. As a result, students do not have any chance to discuss their learning in class, work in groups or in pairs as well as to express their thoughts. This shows that Cambodian students still have problems in understanding English communication.

According to the report of the English Proficiency Index (2019), the English proficiency level of Cambodian students is very low compared to other Asian countries. It is probably because they have limited opportunities to communicate in class as well as outside the classroom. Generally, in order to be proficient in English, students have

to be good at four macro skills: reading, writing, speaking, and listening. Therefore, in real communication people always want to be engaged with others who speak the same target language; as a consequence, it is necessary to understand what those people say. In this regard, developing listening proficiency leads to the achievement of speaking proficiency (Rost, 2011). According to Gilakjani & Ahmadi (2011), listening plays the most crucial role in communication because listening takes between 40-50%, whereas speaking only 25-30%, reading 11-16%, writing 9%. Even though listening is considered the most important aspect in developing language skills, it is also the most challenging in terms of learning and teaching and it has not got much attention compared to the other three: reading, writing, and speaking (Tuwairesh, 2013; Hadijah & Shalawati, 2016; Sejdiu, 2017; Artyushina & Sheypak, 2018). In accordance with the statement above, listening is also the forgotten and most challenged skill in the Cambodian context because most teachers consider that because this skill does not appear in the national exit exam, it is not necessary to teach their students, as a consequence the pressure of large numbers of students in a class make them skip this skill.

There are some research studies which confirm that listening is the most challenging skill. Taghizadeh & Namayandeh (2018) investigated the challenges of listening to academic lectures with 94 Iranian undergraduate engineering students at the Iran University of Science and Technology. A qualitative research method with three open-ended interview questions was used for data collection. The results revealed that students faced many challenges while listening to the academic lectures because of insufficient vocabularies and the speed of delivery. Another study conducted by Ulum (2015) explored the listening problems faced by a group of first year students at Hakkari

University, Turkey. Fifty volunteer elementary English proficiency level students were selected for the study. The researcher used a questionnaire and an interview for data collection. The results indicated that students find it difficult to understand the listening text when speakers speak with varied and unfamiliar accents as well as limited vocabularies and unclear pronunciation. It can be concluded that in both high school and university education processes, listening skill was a painful skill for EFL students who participated in the study. Gilakjani & Sabouri (2016); on the other hand, conducted a study on reviewing the importance of listening comprehension in English language teaching. The review of the literature illustrated that in spite of the significance of listening, language learners contemplate listening as the most challenging language skill to learn. It is also concluded that students are able to develop their listening comprehension with the assistance of teachers by using appropriate materials, activities as well as plenty of time to practice.

As mentioned previously in the research study that in order to improve listening comprehension, EFL teachers should use suitable materials and activities; consequently, EFL learners should experience different kinds of listening sources such as video, tape, modern technology (eg. mobile phone or computer) as well as the new approaches in teaching and learning English. The growth of modern technology tools makes learning more from impossible to possible. For example, mobile phones are one among many technology tools that can enrich learners' English as well as listening comprehension skills. Al-Baekani & Ridwan (2018) conducted a study on the integration of mobile phones as interactive media in extensive listening with 30 students at Private Senior High School Muhammadiyah Karawang, West Java, Indonesia. The researchers used descriptive qualitative research method and the data collections which

are observation, interview, and documentation. The findings revealed that the majority of students responded positively to the use of mobile phones as interactive media in extensive listening. To make it specific, students mentioned convenience and interest in using their mobile phones (37%), accessing anywhere and anytime (30%), easiness (17%), authenticity (10%), and usefulness and fun (7%) in using their mobile phones to enhance English listening. Another study by El-Desouky (2015) investigated the effectiveness of using Mobile Assisted Language Learning (MALL) to develop EFL listening skills and learner autonomy with 80 female secondary stage students at Emam Nasef Secondary School, Zarka city, Demitta Governorate, Egypt. Participants were divided into control group (n=40) and experimental group (n=40). A quasi-experimental design was used as research design with an android pre-post listening test and a pre-post learner autonomy scale as data collections to measure learner autonomy concerning tablet usage. There are no statistically significant differences between the two groups in the pre-test and pre-scale; though, the results of T-test indicated that both the post-listening test and the post FL learner autonomy scale were different from the results in the pre-test and pre-scale in favor of the experimental group. The researcher also used Eta Square to determine the effect size of the treatment program and the results pointed out that the treatment program has an effective impact on improving EFL first year secondary stage students' listening skills and learner autonomy. In short, mobile phones can be used as a technology tool to help students improve their listening comprehension.

Having only a technology tool is insufficient; there should be other appropriate methods to consolidate understanding, such as blended learning (BL). BL is the combination between face to face and online instruction (Yang, 2012; Cechova,

Skybova, & Koukalova, 2018). There are numerous research studies on using blended learning to enhance students' language skills including listening. Rahmawati (2019) investigated the students' voice and choice on blended learning implementation in listening and speaking for formal setting course at an Islamic Private University, Yogyakarta, Indonesia. Six English Language Education Department (ELED) freshmen who enrolled in the course were selected using the snowball sampling technique. A qualitative research method with in-depth interview and observation was used in the study. The results of the study showed that the blended learning model was appropriate for the students' learning needs. Besides, the students mentioned that blended learning (face-to-face with the online meetings) was an effective delivery mode with some reasons: *"various learning materials, interactive yet challenging activities, appropriate to the students' proficiency level, relevant to the course syllabus, flexible, and improved language skills"* (p.59-61). Syamsuddin & Jimi (2019) explored the effects of the blended learning method to improve students' achievement and motivation in listening. Action Research design with two cycles (each cycle comprised of planning, implementation, observation, and reflection) was used. Observation and testing were used as data collection with 23 third semester students of the English Department, Faculty of Letters, University of Sawerigading Makassar, Indonesia. The findings indicated that students' listening achievement could improve through the blended learning method with the average score of the initial achievement 42.07, first cycle score 61.59, and second cycle score 68.11. Furthermore, students' learning motivation also increased using the blended learning method.

Both the technology tool (mobile phone) and blended learning method might not be adequate to enrich students' listening comprehension skills. Effective learning

activities should be also included such as cooperative learning (CL). CL is not only concerned with group work, but also *"involves conscious thoughts, wary to variation elements and parts of group work"* which share goals and benefits to all the group members (Soumia, 2016 p. 24). To prove how effective CL is, the researcher of the present study reviewed some previous studies concerning the effectiveness of CL in language skills. Yavuz & Arslan (2018) examined the effects of cooperative learning on language skills in an English course with 66 10th grade students studying at an Anatolian high school in, Zonguldak, Turkey. The participants were divided into experimental (n=33) and control group (n=33). A quasi-experimental design was employed with pre-test and post-test as data collections. Students' vocabulary knowledge, grammar knowledge, reading comprehension and listening skills were measured using an achievement test developed by the researchers. The results revealed that cooperative learning had a larger effect on vocabulary knowledge, grammar, listening and reading skills compared to traditional methods. On one hand, Kirbaş (2017) evaluated the effect of together technique, one of cooperative learning methods on the development of the listening comprehension and listening skills of the eighth grade students from Şair Nef'i Secondary School and Alparslan Secondary School, Turkey. Participants were divided into three groups: two experimental groups (n=19 and n=34) and a control group (n=22). Pre and post-test of "Listening-Comprehension Achievement Test" were implemented to collect data from experimental and control groups. The results revealed that the experimental group outperformed the control group in the post-test achievement scores. As a result, learning together technique, one of the cooperative learning methods, is more effective than the traditional learning

method in improving the listening comprehension and the listening skills of the eighth grade students in the Turkish class.

In summary, seeing the individual benefits of mobile phones, blended learning and cooperative learning in enhancing language skills as well as listening comprehension, the combination of the three: Mobile-Blended Cooperative Learning (MBCL) might be capable of improving Cambodian EFL students' listening comprehension skills. There are three reasons to support this assumption; firstly, there are more than 90% of Cambodian students who use smart phone in their everyday life (based on need analysis mentioned in 1.2 Statement of the problem); secondly, most Cambodian teachers focus only on in class instruction, so the students have no chance and motivation to practice outside classroom or online; and last but not least, teachers usually use traditional teaching methods like grammar translation or theaudiolingual method to teach. Therefore, this proposed method will open the eyes of Cambodian teachers to the 21st century teaching methodology.

1.2 Statement of the Problem

In Cambodia, English plays an important role as individuals and the wider social perspective. For this reason, being able to speak English means a better job and well-paid salary because all professional jobs in Cambodia use English in written as well as spoken language. Bun (2010) mentioned that being proficient at English speaking leads to a better future and can help solve the common issues in Cambodia such as official documentation, international trade, international relation negotiation, and political issues. Given the importance of English, it is to be implemented in the Cambodian education curriculum from grade 4 to grade 12 together with new English language

textbooks (Tweed & Som, 2015), yet Cambodian students still have problems with communicative competence (Igawa, 2008). They are introverted which leads them to be passive learners. This is probably because of teaching methods; most teachers focus on a textbook based and grammar translation approach. For instance, those teachers take the whole hour to teach everything from the textbook and students just listen and repeat; it is like teaching the book not the students. Additionally, they hardly ever teach some additional real-world knowledge to the students because their objective is to finish teaching all the textbook contents at the end of the academic year to avoid the blame from the school principals or directors. According to Dilnoza (2018), a grammar translation approach could enhance students' grammar and translation skills, but it could not help them to have good communication skills in a foreign language. Moreover, the class sizes are usually too big, between 40 to 70 students, which makes it difficult for teachers to apply the 21st century teaching methodologies like communicative language teaching or cooperative language learning. This limits the opportunity for students to communicate with their classmates and teachers. Ayeni & Olowe (2016) claimed that the results of their study on the implication of large class sizes in the teaching and learning of business education in Tertiary Institution in Ekiti State, that class size has a negative impact on teaching and learning; for example, students' academic achievement and do not promote students' seriousness. In class, after students listen to their teacher's explanation, they normally copy everything from the white board or do the exercises and teachers correct them as the whole class. Teaching materials are very limited, especially for listening skills because only materials from the course book are used to teach students, additional learning materials are rarely provided and there are not enough tapes for teacher to use. Guyana Ministry

of Education (2016) claims that *"Teaching materials can support student learning and increase student success".* So, Cambodian teachers should take into consideration when they select any teaching materials for students to learn**.** On the other hand, the national exit exam focuses only on grammar, reading and writing. As a consequence, most teachers concentrate on teaching grammar, reading and writing to prepare their students for the examination and forget about teaching listening and speaking. Accordingly, some learners are not efficient in listening and speaking. Because of the national exit exam, it seems that teachers only teach students to pass the required exam. Thus, it should be the responsibility of the classroom teachers to find appropriate methods to teach students all the important skills not only the skills in the national exit exam. As mentioned, conventional methods have a negative impact on the teaching and learning process, so supplementary methods should be introduced. To ensure that the teachers are interested in this method and to see if the students really need and agree that they have any problems with language skills; particularly communication competence, the following paragraph will give the detailed examples.

To confirm whether or not Cambodian students need to improve any English language skills, especially listening as mentioned in the previous paragraph, the researcher has conducted a preliminary study-needs analysis survey before deciding to conduct the present study. Based on the needs analysis survey of students and teachers in November, 2018 at English for Adults program (EA) under the management of the Institute of Foreign Languages, University of Battambang (UBB), it clearly showed that Cambodian EFL university students really need to improve their listening skills; this result parallels the finding of Igawa (2008) who stated that Cambodian students still need to improve their communication competence skills. Both teachers and

students survey from preliminary study stated that listening skills need to be improved and all teachers mentioned that they are happy to implement and use the technology tool with some face to face instruction to improve students' listening comprehension (detailed of preliminary study are presented in chapter 3: Methodology 3.1 Preliminary Study).

After evaluating the results of the preliminary study, the researcher decided to conduct research on enhancing Cambodian students' listening comprehension. The researcher believes that the conventional teaching method is not usually effective in the 21st century era, so she reviewed many previous studies of technology enhanced language learning as it is one of the 21st century teaching method mentioned in 1.1 Background and Rationale of the Study and 2.8 Previous Studies of Blended learning. Based on the results from both mentioned sections, most studies paid much attention on integrating blended learning (BL) with computer, blended learning (BL) with mobile assisted language learning (MALL), and blended learning (BL) with cooperative learning (CL) (but only with science subjects: physics, mathematics, biology or chemistry). In spite of extensive research studies, research on combining the three: MALL, BL, and CL on enhancing listening comprehension or other skills, has not been found, especially in the Cambodian context. To close this gap, the present study aims at investigating the effects of Mobile-Blended-Cooperative Learning (MBCL) on EFL students' listening comprehension in Cambodian context. The researcher has designed the overview of the present study illustrates in figure 1.1 Mobile-Blended Cooperative Learning Overview to see the clear picture of the activities presented in the study.
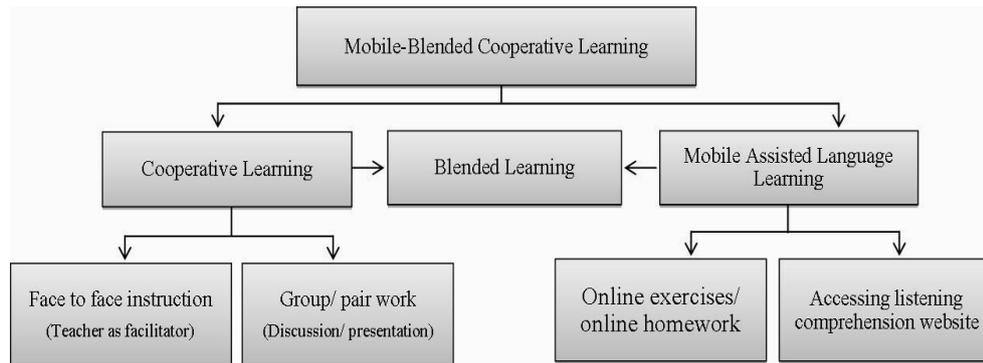
Figure 1.1 Mobile-Blended Cooperative Learning Overview Designed

by the Researcher

1.3 Purpose of the Study

The present study aims to:

1. investigate the effects of Mobile-Blended Cooperative Learning (MBCL) on EFL students' listening comprehension in Cambodian context.

2. examine Cambodian EFL students' opinions towards the use of Mobile-Blended Cooperative Learning (MBCL) on listening comprehension.

1.4 Research Questions

The present study is specifically designed to answer the following questions:

1. What are the effects of Mobile-Blended Cooperative Learning (MBCL) on EFL students' listening comprehension in Cambodian context?

2. What are Cambodian EFL students' opinions towards the use of Mobile-Blended Cooperative Learning (MBCL) on listening comprehension?

1.5 Research Hypothesis

Based on research questions, it can be hypothesized that:

1. Mobile-Blended Cooperative Learning (MBCL) can enhance Cambodian EFL students' listening comprehension at the level of 0.05.

2. **Cambodian EFL students have positive opinions towards the use Mobile-Blended Cooperative Learning (MBCL) on listening comprehension.**

1.6 Significance of the Study

The present study will significantly contribute to the field of English language teaching and learning in four aspects:

1.6.1 Institution Aspect

Each institution in Cambodia will understand how to upgrade and update their English subject and English Major curriculum, particularly the listening comprehension skills; by integrating mobile blended learning in classroom teaching. More importantly, this new pedagogy may increase the quality of education in their institutions; especially, the English for Adults Program (EA), at the Institute of Foreign Languages of the University of Battambang (UBB).

1.6.2 Teaching Aspect

This study provides a new pedagogical approach for teachers integrating the concept of mobile blended learning with cooperative learning activities to enhance students listening comprehension as well as other language skills; for example, grammar, vocabulary, and speaking. Additionally, it can also facilitate teachers to build a rapport with students both inside and outside the classroom, by providing support directly and indirectly through e-mail and chat rooms, and organizing an interactive

learning environment as well as activities to help students develop their listening comprehension successfully.

1.6.3 Learning Aspect

Students learn how to develop their listening comprehension skills through Mobile-Blended Cooperative Learning (MBCL). This study serves as a model to help students effectively learn through cooperative learning activities. For those who are absent from class can also learn later at a convenient time, and they can also contact their classmates and teacher for clarification or assistance.

1.6.4 Research Aspect

Even though the world is now in a digital era, Cambodian teachers of English are committed to traditional teaching methods which is teacher centered (Igawa, 2008; Song, 2015). For this reason, there is a big gap in the research field concerning the technology used in teaching and learning. This study helps the researchers who are interested in integrated Mobile-Blended Cooperative Learning to improve language skills; particularly, listening skills, to understand more about this new innovation in order to strengthen and expand their knowledge in their future studies in the field of English language teaching and learning.

1.7 Definitions of Key Terms

Key terms of the present study will be described in the following paragraph:

Cambodian EFL students are those who are studying at an intermediate level at the University of Battambang (UBB) in Cambodia under the English for Adults Program (EA) of the Institute of Foreign Languages (IFL) and they all are non-English major students.

Listening comprehension is the ability to understand the messages from the other speakers and to be able to give a response. Gulec & Durmus (2015) point out that listening is the way of making choices from what is heard, forming them, integrating what is transferred with prior knowledge by the speaker, and forming them mentally. In the present, study listening comprehension is the ability to understand and interpret the message from the speakers and to be able to answer each listening exercise such as listening for the main idea, identifying the key information from short exchanges, identifying specific information, identifying detailed meaning, as well as identifying the attitude and opinions of the speakers.

Mobile is any mobile phone devices that can access the internet and able to access the website developed by the researcher in the present study at any time any place.

Blended Learning is the modern approach that combines both face to face and online instruction to teach listening comprehension skills. In the present study the researcher adopts the Enriched Virtual Model of blended learning, so she teaches pre and post listening tasks face to face and students do the exercises online for the main listening task.

Mobile-Blended Learning means the combination of mobile devices and blended learning. In the present study, mobile-blended learning refers to in class and online instruction with the assistance of mobile devices.

Cooperative Learning (CL) refers to "*instructional methods that teachers use to organize students into small groups, in which students work together to help one another to learn academic content through exchanging thoughts and opinions, interact with each other and to accomplish common learning goals*" (Soumia, 2016 p.23). In the present study CL is the teaching approach which the researcher organizes students

to work in group or in pairs and at least one high proficiency student will be included in each group. They work cooperatively to accomplish the goal in the form of discussion, role play or presentation.

Mobile-Blended Cooperative Learning (MBCL) is a new method proposed by the researcher. It is the combination of the three: mobile, blended, and cooperative learning used together to enhance Cambodian EFL students' listening comprehension. Mobile is used as the tool to access the listening online website developed by the researcher, blended learning is used as the teaching method in both face to face and online instruction, and cooperative learning is used as the learning activities in the form of group or pairs work in the present study. So, mobile, blended and cooperative learning work collaboratively to achieve the goal of developing Cambodian EFL students' listening comprehension.

Lesson plans are teaching procedures prepared by the teachers with specific objectives in order to teach a specific lesson or skill. In the present study the lesson plans were written by the researcher. The researcher named this lesson plan as "MBCL lesson plan" which is carefully designed and written to fit a MBCL classroom specifically focusses on integrated skills listening and speaking. Both pre and while listening task focus on main listening from online learning website (MBCL website) and post listening task mainly rely on speaking skills, a discussion in pairs or groups on previous listening text.

1.8 Limitations of the Study

The present study was conducted at a public university in Battambang province (University of Battambang), Cambodia. Thirty students were required to study listening

comprehension by using Mobile-Blended Cooperative Learning (MBCL). Therefore, there are three main limitations of the present study:

1. The study focused on 30 intermediate students who enrolled English for Adults program (EA) under the supervision of the Institute of Foreign Languages of the University of Battambang (UBB), so the results might not be able to be generalized to other levels of EFL students in EA program.

2. MBCL was developed to help intermediate students at the English for Adults program (EA) to enhance their listening comprehension. Therefore, the subject of this study could not represent EFL students in other schools in Cambodia because each student has a different background, learning styles, and needs.

3. MBCL website was developed mainly for enhancing listening comprehension, so it could not be used for enhancing other skills like reading comprehension, writing or speaking.

1.9 Summary

This chapter provided a brief introduction of the present study. First, it started with the background and rationale of the study. It then, stated purpose of the study, research questions, research hypotheses, significance of the study, and definitions of key terms. Three limitations of the study were also described in this chapter respectively. Finally, the summary of the chapter was presented. In the next chapter, the researcher will provide detailed information regarding the role of English in Cambodia, listening comprehension in EFL context, factors affecting listening comprehension, model of listening, mobile assisted language learning, blended learning, theory of learning and teaching approach as well as previous studies of blended learning in the EFL context.

CHAPTER 2

LITERATURE REVIEW

This chapter deals with the review of the literature relevant to the present study. It falls into 9 sections: (1) English language in Cambodia, (2) definitions of listening comprehension, (3) factors affecting listening comprehension, (4) models of listening comprehension, (5) mobile assisted language learning (MALL), (6) blended learning, (7) theory of learning and teaching approach, (8) previous studies of blended learning, and (9) summary.

2.1 English Language in Cambodia

Cambodia is located in Southeast Asia bordering with Vietnam, Laos, Thailand, and the Gulf of Thailand where English is not the official language, but the foreign language for communication across the different nations. Over the past three decades, English was illegal for students to study in Cambodia, only French was allowed. From 1993 until the present, both English and French are allowed in the Cambodia education system (Igawa, 2008). Because of ASEAN integration, English is the most preferred language; the study and the use of English have been strongly encouraged and promoted in Cambodia.

Although English has been promoted in the Cambodian education system as a compulsory subject, there are also some significant challenges for English teachers and learners in Cambodia. Cambodians face communication difficulties because of

confusion with mother tongue in pronunciation, both lexical and grammatical borrowings from Khmer language. Moreover, there is the challenge of balancing the teaching of Standard English and newer varieties of English. English proficiency across a range of diversities will be most beneficial to learners, as more and more of the world's English speaking population will speak English as a first language because of an increasingly globalized world (Moore & Bounchan, 2010). These trends clearly show that English language teachers in Cambodia need to develop their skills to fit appropriately with the development of the rest of the world. For example, they should learn more about the 21st century teaching methods and adopt these methodologies in their classroom. Additionally, they should accept that the same teaching methods will not work with different groups of students, so using appropriate methods in different groups should be taken into consideration.

Even though there are some challenges in English education in Cambodia, the Ministry of Education Youth and Sport (MoEYS) is working very hard to ensure that Cambodian students are able to communicate in the international environment, like English public speaking contest, debates, studying abroad and other activities involving the English language as the medium. For this reason, the Ministry of Education Youths and Sport (MoEYS) has introduced the English language in Cambodian state schools from grade 4 (Tweed & Som, 2015); in the past students started to study English in secondary school (grade 7 to 9). In addition to the rapid growth of the English language in Cambodia, Dr. Hang Chuon Naron, Ministry of Education Youth and Sport (MoEYS) addressed at the 14th CamTESOL conference that *"With the increasing of teachers with standard pedagogy, Cambodian students have improved their English language skills compared to the last 25 years. Moreover, English is not only for*

communication, but also important for higher education and a future career in Cambodia." (IDP Education, 2018 p.4). For instance, most of the learning materials in every field at university level are written in English and professional jobs in Cambodia need English as one of the qualification criterion.

It is clearly assumed that the development of English teaching and learning in Cambodia is moving forward and it is expected that many Cambodian students will be competent with the English language in the future if the government hires more specialist teachers of English or trains the current teachers to use the appropriate methods in the 21st century in order to teach all levels of Cambodia education effectively. As mentioned previously Cambodian students have problems with communication, especially listening comprehension as stated clearly in chapter 1. The next section will briefly present the definition of listening comprehension and the reasons why it is difficult for foreign language learners as well as Cambodian students.

2.2 Definitions of Listening Comprehension

Listening comprehension is the ability to understand the messages from other speakers and to be able to give a response. According to Djoudi (2009) and Rost (2011), listening comprehension means that listeners are able to understand the spoken language we hear from the speaker. Buck (2001) defines listening comprehension as the complex process where speech codes in the form of sound, takes place in real time and the listener has no time to review like written language. Nadig (2013) indicated that listening comprehension comprises numerous processes elaborated in understanding and making meaning of spoken language (eg. recognizing speech sounds, understanding the meaning of individual words, and syntax of sentences). Brown

(2007) states that *"Listening comprehension is the psychomotor process of receiving sound waves through the ear and transmitting nerve impulses to the brain"* (p.301). Another definition of listening is an active and interactional process which listeners receive speech sound and then tries to interpret to spoken language (Solak & Erdem, 2016).

Based on Richards (2008) listening and listening comprehension refers to the same thing and these two terms are the synonyms. Many researchers have found that listening is not only the active skills, but it is also the process of constructing meaning from sound; efforts and practices are needed for listening improvement (Solak & Erdem, 2016; Anandapong, 2011). Alqahtani (2014) indicated that listening is one of the most significant skills involved in learning any languages including mother tongue.

In the same way, listening comprehension in the present study refers to the ability to understand and interpret the messages from the speakers. Once the students are able to comprehend each message from the speakers, they are able to do a variety of listening tasks. For example, students can listen to identify the main idea, key information, specific information and the attitude and opinions of the speakers. Understanding the definitions of listening comprehension is not enough; therefore, the next section describes the major factors affecting listening comprehension.

2.3 Factors Affecting Listening Comprehension

Listening is known as the most difficult language skill among speaking, reading and writing. As a consequence, it is essential for teachers and learners to focus more on the factors affecting listening comprehension in order to overcome any obstacles in the

process of teaching and learning listening skills. The following sections introduces some factors influencing listening comprehension.

2.3.1 Listening Materials

Listening materials are considered as one of the factors which can influence students' listening comprehension. In some classes, teachers use some recorded materials that are not of high quality. The quality of the sound system can impact on learners' listening comprehension (Bingol, Celik, Yidliz, & Mart, 2014; Hamouda, 2013). Ur (1984) suggested that teachers should carefully select the listening materials based on the authenticity and make some edits to the materials according to the learners' level. Similarly, materials used in Cambodian listening classrooms are also of low quality because teachers only use the audios from the textbook and tape, they do not consider whether the materials are appropriate to the students' level of understanding. More importantly, the textbooks are not regularly updated and some textbooks have been used more than 10 years.

2.3.2 Speaker Factors

It is important to consider the spoken language of the speaker when the language teacher select the listening materials for his/her students. A study titled *"Listening comprehension problems with English lectures"* conducted at the University of Baghdad, Iraq with 30 first year students argued that majority of the participants (56.66%) in the study admitted that they could not understand the listening text because of the speaker (Dehaam, 2016). The following sub-factors will describe the reasons why speaker factors can make it difficult for students to comprehend what is being said.

2.3.2.1 Rate of Delivery

Virtually every language learner initially thinks that native speakers speak too fast. He/She often feels overloaded with incoming information. Actually, the number and length of pauses used by a speaker is more crucial to comprehension than sheer speed. *"A capable listener, nevertheless, needs to be able to comprehend language delivered at varying rates of speed and, at times, delivered with few pauses"* (Brown, 2007 p.306; Brown &Lee, 2015 p. 325). According to Buck (2001), rate of delivery has a big impact on comprehension; the research on the relationship between speech rate and comprehension illustrate that faster speech causes difficulty with comprehension.

2.3.2.2 Various Accents or Pronunciation

As we all know that English has been used as medium in communication with different nationalities. It is undoubted that accents and pronunciation must be varied because of different nations. According to Ur (1991), pronunciation of words in spoken language is usually different from the ones in a dictionary. For example, *"orright"* for *"all right"* or *"sh we go?"* for *"shall we go?"* (p.106). In different circumstances, accents vary between different groups of speakers and they can cause the listeners to be unable to comprehend at first. As an example, *"in the case of English, Australians pronounce English differently from Americans, and this is different again from British English"* (Buck, 2001 p. 34). Native speakers are generally used to hearing a wide variety of accents. However, when they hear a new accent or pronunciation for the first time, they may not understand it very well and it can take a little while for them to get used to it (Buck, 2001).

As cited in Buck (2001) *"Accent is potentially a very important variable in listening comprehension. When listeners hear an unfamiliar accent-perhaps hearing an Australian for the first time after studying with American teachers-this can cause problems and may disrupt the whole comprehension process. An unfamiliar accent can make comprehension almost impossible for the listener"* (p.35).

2.3.2.3 Redundancy

Spoken language, unlike most written language, has a good deal of redundancy. The next time you are in a conversation, notice the rephrasing, repetition, elaborations, self-correction, and the use of fillers; for example, *"I mean"*, *"you know"*, *"well"*, or *"er"*. Such redundancy helps the hearer to process meaning by offering more time and extra information. Learners can train themselves to profit from such redundancy by first becoming aware that not every new sentence or phrase will necessarily contain new information and they look for a signal of redundancy (Ur, 1991; Brown, 2007; Brown & Lee, 2015).

2.3.2.4 Reduced Forms

While spoken language does indeed contain a good deal of redundancy, it also has many reduced forms and sentence fragments. Reduction can be phonological *"Djeetyet?"* for *"Did you eat yet"*, morphological *"contractions like I'll"*, Syntactic *"elliptical forms like when will you be back? / tomorrow maybe"*, or pragmatic *"phone rings in the house, child answers and yells to another room in the house, Mom phone!"* (Brown, 2007 p. 305; Brown & Lee, 2015 p. 324). These reductions give students significant difficulties, especially for those who may have initially been exposed to the full forms of the English language.

2.3.2.5 Prosodic Features (Stress and Intonation)

The prosodic features of the English language are very important for comprehension (Buck, 2001). Because English is a stress-timed language, English speech can be a terror for some learners as mouthfuls of syllables come spilling out between stress points. Also, intonation patterns are very significant not just for interpreting such straightforward elements as *"questions, statements and emphasis but more subtle messages like sarcasm, endearment, insult, solicitation, praises, etc."* (Brown, 2007 p. 306; Brown & Lee, 2015 p. 325).

Among many factors mentioned in speaker sections, there are three main factors affecting Cambodian students: rate of delivery, various accents or pronunciation, and redundancy. Cambodian students have difficulties with the speed of listening audios because when it is too fast, they could not catch up any words and then they lose all focus and comprehension. Sometimes, they know every phrase and sentence, but they could not comprehend the whole context. It is because of different pronunciations and accents of different speakers. Redundancy is also their problem since their teachers might not guide them or inform them about redundancy; therefore, they do not know which words or phrases that are repeated or redundant.

2.3.3 Listener Factors

The last major factor affecting listening comprehension is the listener him/herself. According to Dehaam (2016), listeners' factor does impact on listening comprehension. The sub-factors below will present the reasons behind the listener factors.

2.3.3.1 Cultural Differences

Cultural differences are the outstanding factor affecting students'
listening and comprehension skills. Zhipeng (2017) argued that understanding the
cultural background as well as cultural differences can assist both teachers and students
in teaching and learning to listen. Considerably, learners should be familiar with the
cultural knowledge of language that has a significant effect on the learners'
understanding. If the listening task involves completely different cultural materials then
the learners may have critical problems in their comprehension (Bingol, Celik, Yidliz,
& Mart, 2014). It is the responsibility of teachers to guide and give cultural background
knowledge about listening activities to students so that they can overcome cultural
barriers.

2.3.3.2 Lack of Background Knowledge

The background of learners is a key agent in listening comprehension.
Background knowledge on a variety of topics gives learners a natural way of learning
target language and allows them to communicate properly (Ardila, 2013). A study
conducted by Hamuoda (2013) on *"Listening comprehension problems encountered by
Saudi students in the EL listening classroom"* also acknowledges that background
knowledge is an essential variable that can affect listening. In his study with 60 first
year students at Qassim University using questionnaire and interview to collect data
found that students used their previous experience and background knowledge to
understand the spoken text (23.3% sometimes, 40% often, and 26.7% always).
Background knowledge is a powerful and very frequently used strategy to comprehend
any language skills including listening.

2.3.3.3 Lack of Vocabularies and Grammar Knowledge

A lack of basic vocabulary and grammar knowledge influences the interpreting of target language. Hadijah & Shalawati (2016) stated in their study that limited vocabulary mastery can affect students' listening skills. According to Bingol, Celik, Yidliz, & Mart (2014), when listening texts contain known words, it would be very easy for students to comprehend them. If students know the meaning of words this can trigger their interest and motivation can have a positive impact on students' listening comprehension ability. A lot of words have more than one meaning and if they are not used appropriately in their appropriate contexts students will get confused.

Hamouda (2013) investigated *"Listening comprehension problems Encountered by Saudi Students in the EL listening classroom"* with 60 first-year students majoring in English language and translation at Qassim University. Quantitative and qualitative methods with a questionnaire and a semi-structured interview were used. The results of the study revealed that among many factors; for example, accent, pronunciation, speed of speech, insufficient vocabulary, different accent of speakers, lack of concentration, anxiety, and poor quality of recording, meant that a great number of the students 50/60 (83.3%) admitted difficulty with grammatical structures obstructed their listening comprehension. In short, listening comprehension problems do occur without adequate grammar and vocabulary knowledge. It is crucial that grammatical structures and vocabularies in listening texts are introduced beforehand (Yildiz & Albay, 2015).

2.3.3.4 Lack of Listening Strategies

The lack of listening strategies is a serious problem for EFL learners because they do not know how to deal with different types of listening tasks. Goh

(2000) stated that it is very important to teach listening strategies to students. In contrast, Gilakjani & Sabouri (2016) mentioned that it is very important for teachers to help students develop the necessary strategies of listening comprehension (eg. listening for understanding particular information, listening for the main ideas, explanation and inference, and listening for intended meaning) through providing different tasks and activities at different levels.

2.3.3.5 Physical Conditions

Physical conditions also play a substantial role in restricting students from comprehending the listening materials. Goh (1999) indicated that physical conditions that affect students listening comprehension include fatigue, nervousness, anxiety, and impatience. Bingol, Celik, Yidliz, & Mart (2014) pointed out that physical conditions like inconvenient classrooms also affect students listening comprehension. In particular, in a large classrooms students sitting in the back rows might not hear the listening audio clearly as students sitting at the front. The noise from outside may affect students sitting by the window. The unstable temperature (too hot or too cold) in the classroom also causes difficulty for students' listening comprehension. As a teacher, it is important to take all these aspects into consideration before teaching listening comprehension because it can cause students to lose concentration in the target tasks.

Among all issues mentioned in the listener factors section, cultural differences, lack of listening strategies, and insufficient vocabularies are the challenges for Cambodian students. When it comes to listening tasks or exercises that are out of an Asian context; as in western culture, students are unsure and confused because of their lack of knowledge of that culture. Most teachers forget about teaching listening strategies and some of them teach only once and never review students again before the

listening practice exercises. For this reason, many students do not know which strategies they should use in this or that listening exercise. Insufficient vocabularies also make them lose concentration or attention on their listening practices because they could not understand the meaning of the key vocabularies in the listening audios. In order to deeply understand more about listening comprehension, the models of listening comprehension are presented below.

2.4 Models of Listening Comprehension

The cognitive view of language learning recognizes listening comprehension as being ultimately the same as reading comprehension (Brown, 2006). In this regard, listening comprehension models can be classified into different types. In this part, three widely known models of listening comprehension are described: top-down, bottom-up, and the interactive model. Being able to use each model interchangeably will ensure that students will be proficient in listening skills.

2.4.1 Bottom-up Model

The bottom-up model is the strategy in which the listeners use linguistic knowledge clues; namely, phonemes, syllables, words, phrases and sentences to understand the meaning in the context they are listening to (Solak & Erdem, 2016; Gilakjani & Sabouri, 2016; Brown, 2007). Another explanation indicates that bottom-up processing is a text based approach where the listener counts on the language in the message; specifically, the combination of sounds, words, and grammar that creates meaning. The listening activities of this model can be seen in listening for specific details, recognizing cognates, or recognizing word-order patterns (Tyagi, 2013). Additionally, the bottom-up model refers to the use of information we have about

sounds, word meanings and discourse markers; for example, *"first, then and after that"* to gather our understanding of what we read or hear one step at a time (Brown 2006, p.2). Richards (2008) viewed bottom-up processing as the use of incoming input in order to have a basic understanding of the message. Comprehension means *"a process of decoding sounds, words, clauses, sentences, and texts – until meaning is derived"* (p. 4). It is agreed that the language process is a definite order, it means that from the lowest level of detail to the highest level (Buck, 2001; Wang & Hu, 2018; Nation & Newton, 2009). It is assumed that first the listeners decode the phonemes (smallest sound segment) and then this is used to identify the individual words. Then it continues to the higher stage, the semantics level (grammatical characteristics) followed by analysis of semantic contents to understand the literal meaning of the context (Buck, 2001). Although bottom-up is in the fixed sequence as many scholars mention, in real life, listeners rarely use this sequence order for comprehension.

In the Cambodian context, students use bottom-up processing in various listening activities. Likewise, they use this model for listening for specific information/details, dictation, guessing meaning of new vocabularies, sequencing the event in the listening audio, or listening and repeating the words or specific sentences. This model mostly occurs in beginner classes.

2.4.2 Top-down Model

The top-down model on the other hand is the strategy where listeners use context and previous knowledge about the topic, genre, culture and other schema knowledge stored in long-term memory to look for information to decide the meaning of spoken language as well as dynamically constructing the original meaning of the speaker using the new input (Brown, 2006; Solak & Erdem, 2016; Wang & Hu, 2018;

Gilakjani & Sabouri, 2016; Tyagi, 2013). Another view of the top-down model points out that the process of acquiring different knowledge does not occur in the fixed sequences. It is because of the different knowledge that we have as background knowledge and we probably understand the meaning of the words before we decoded the sounds (Buck, 2001). Similar to the previous explanation, top-down processing focuses on activating schemata (background knowledge) with global understanding and interpreting of a text (Brown, 2007; Wang & Hu, 2018; Richards, 2008). According to Nation & Newton (2009), top-down processing is defined as the whole to parts. That means the listener uses the context previously understood to predict what is going on in the message then they confirm, correct, or add the new information. All scholars come up with different meanings of the top-down model, whereas, they all mean the same-using the background knowledge to comprehend the meaning of the whole text.

Cambodian students also use the top-down model to help them to comprehend the meaning of the listening text. They use this model; for example, in listening for the main idea or detailed information, activating background knowledge, predicting, or inferring the whole context. Students do not usually know that they use the top-down model to understand the text, they just only know that they have to use their previous knowledge to guess the meaning of the whole text or to find the main idea of the text and so on. When they could not understand the listening text, they do not usually notice that because they lack the background knowledge; in contrast, they think that they do not understand the words or the speed of listening is too fast. To be able to fully comprehend the listening text, EFL students as well as Cambodian students should integrate both models: top-down and bottom-up in the practice of listening. The

following section will explain in detail about the integration of both top-down and bottom-up, the interactive model.

2.4.3 Interactive Model

Bottom-up or top-down alone cannot make the listeners fully comprehend listening; as a consequence, different researchers invented a new model that is interactive, they define this model differently, but they mean the same. One definition of the interactive model is the combination between top-down (background knowledge information, contextual information) and bottom-up model (linguistic information). These processes occur simultaneously and actively interact with one another and making comprehension and interpretation easier (Gilakjani & Sabouri, 2016; Ableeva, 2008). Buck (2001) indicates that the listening comprehension results from the *"interaction between a number of information sources, which include the acoustic input, different types of linguistic knowledge, detail of context, and general world knowledge, and so forth, and listeners use whatever information they have available, or whatever information seems relevant to help them interpret what the speaker is saying."* this is called the interactive model of listening comprehension (p.3).

Learners apparently use both bottom-up and top-down processing to comprehend listening skills that is called the interactive model. Firstly, they hear the sound and then hold it in their memory for a while to connect from one to another to interpret before new things come. At the same time, they use their background knowledge to figure out the meaning that is relevant to their prior knowledge and schemata (Brown, 2006; Wang & Hu, 2018). Generally, both bottom-up and top-down models come together. It is not predictable which process will occur first, it depends on the familiarity of the listener about the topic, the content of a text, the text type and the

purpose of the listener (Richards, 2008). For instance, an experienced chef may listen to a radio program about cooking a chicken recipe to compare the other recipe with his own. He has a particular prior knowledge to apply to the task and only listens to similarities and differences. He makes more use of the top-down strategy. Though, a beginner cook listens to the same program and may pay much greater attention trying to identify each step in order to write down the recipe. Here, bottom-up processing is needed the most.

Some teachers in Cambodia use the interactive model to teach their students, but not all of them. For instance, they use only bottom-up or top-down processing-most of the time, they forget about top-down that means they do not usually activate their students' background knowledge and they just jump directly into the main listening tasks. To sum up, EFL teachers should be carefully trained to use the interactive model to teach listening effectively.

Among the three models: bottom-up, top-down and interactive, the researcher of the present study has employed the interactive model as the main model in the process of developing lesson plans and teaching students in class. In her view, bottom-up or top-down alone could not help students improve their listening comprehension. As the present study has mentioned in chapter 1, mobile technology is used as the tool in blended cooperative learning to enhance Cambodian EFL listening comprehension, the following section will discuss mobile assisted language learning in detail.

2.5 Mobile Assisted Language Learning (MALL)

Because of the significance of English in language teaching and learning, educators not only use the traditional approaches in teaching, but also integrate modern technologies. Technology appears to be a crucial tool in English language teaching (Shyamlee & Phil, 2012). An example of modern technology enhanced language learning is Mobile Assisted Language Learning (MALL). It has been broadly recognized to be an essential approach in language education. MALL is also known as m-learning which provides teachers the opportunity to advance the quality and proficiency of education through facilitation, choice, availability, flexibility, and accessibility to education (Valk, Rashid, & Elder, 2010; Oz, 2015). The next section will briefly explain the meaning of Mobile Assisted Language Learning (MALL).

2.5.1 Definition of Mobile Assisted Language Learning (MALL)

There have been many definitions of Mobile Assisted Language Learning (MALL) in different settings and contexts. Recently, researchers and scholars have been continually making an effort to define the fixed definition for MALL through conducting research, conferences or seminars. According to Ahmed (2015), utilizing portable devices in education is a definition of MALL. In contrast, Traxler (2009) argued that using advanced technologies such as smartphones, tablets, MP3/MP4 players, personal digital assistants (PDAs) and palmtop computers to support language acquisition was another meaning of MALL. El-Hussein and Cronje (2010), suggest that in higher education institutions, MALL could be defined by focusing primarily on two terms, *"mobility and learning"*. The word "mobility" referred to either the technological ability in the physical contexts concerned with students' learning participation or the technological influences that related to learners' behavior and

attitudes towards academic process and learning objectives. Furthermore, m-learning is defined as *"any sort of learning that happens when the learner is not in a fixed, predetermined location, or learning that happens when the learner takes advantage of the learning opportunities offered by mobile technologies"* (O'Malley, 2003 as cited in Kim, 2013). To see in-depth how mobile assists students in language learning, the following section illustrates some research studies to prove its benefits.

2.5.2 Advantages of Mobile Assisted Language Learning (MALL)

Mobile Assisted Language Learning (MALL) has been broadly recognized to be an essential approach in language education since it is able tobe used at anytime and anywhere. MALL is also known as a motivational tool to increase students' study time, taking part in the learning process of their daily life as well as to connect them with the real world experience (Read & Kukulska-Hulme, 2015). Also, the use of MALL is a powerful and active tool for learning English as a foreign language (EFL) effectively (Hsu, 2012; Miangah & Nezarat (2012). Besides, Gholami & Azarmi (2012) illustrate that MALL facilitated by mobile devices, inspired learners to demonstrate good behavior in using them in both formal and informal education. Everyone can possibly learn at anytime and anywhere in their lifelong learning. Another researcher claimed that mobile and communication technologies for language learning to strengthening lecturers' and students' relationship, enriching study, and promoting ownership (Osman, 2013).

Again, the arrival of mobile technology brought a vital resource to encourage instructors' professional development in English language teaching and learning. It was also productive for developing language skills (Shohel, Mahruf, & Power, 2010; Chanprasert & Han, 2014). For example, a study conducted by Rahimi & Soleymani

(2015) investigated the impact of mobile learning on EFL learners' listening anxiety and listening comprehension with 50 female intermediate English students. The participants were divided into two groups: a control group (n=25) and an experimental group (n=25). Both listening anxiety questionnaire and Key English Test (KET) were used in data collection. The result showed that listening activities by using mobile learning have an important effect on reducing listening anxiety and it also plays a significant role in improving learners' listening skills. Also, Saidouni & Bahloul (2016) explored the teachers and students' attitudes towards using mobile-assisted language learning in higher education at the University of Batna 2. The descriptive research design with questionnaires was used in this study. The samples were randomly selected: 80 master students and 14teachers of English. The results indicated that both teachers and students have positive attitude towards the effectiveness of MALL. Similarly, both showed their agreement on the potential of MALL as a promising approach for teaching and learning foreign languages in terms of speaking, reading, and culture. In short, it is beneficial to use mobile assisted learning in language learning and teaching.

With the many advantages of mobile assisted language learning in different language skills as well as with different EFL students in various countries, it might be a good tool to enhance Cambodian students' language skills especially listening. Mobile assisted language learning alone may not be enough because it is just the tool to access the main material; as a result, it should incorporate with other modes like blended learning to make the process of learning in this modern era more effective. It can be assumed that both mobile and blended learning complement each other. Details of blended learning will be explored in the following section.

2.6 Blended Learning (BL)

There are many experts trying to define the definitions of Blended Learning (BL) and all come up with various meanings, but they all go in the same direction. BL is the mixture between e-learning and the traditional classroom (Holmes &Gardner, 2006; Thorne, 2003; Bryan & Volchenkova, 2016). Watson (2008) describes Blended Learning as the incorporation of face to face and online learning to help enrich the classroom experience and to extend learning through the advanced use of information and communications technologies. Blended strategies increase student's engagement and learning via online activities supporting the course curriculum and developing effectiveness and efficiencies by reducing lecture time. Another explanation of BL is any language course that uses both traditional teaching methods and online learning with appropriate use of technology. Technology here refers to any tool that can access to the internet like laptops, tablets, PCs, iPads, mobiles, and others (Mubarok, 2015; Saliba, Rankine & Cortez, 2013).

BL is an advanced concept that holds the advantages of both conventional teaching in the classroom and ICT supported learning comprising both offline and online learning (Lalima & Dangwal, 2017). According to Marsh (2012, p.4) BL has some advantages which can be described below:

- provides a more individualized learning experience

- provides more personalized learning support

- supports and encourages independent and collaborative learning

- increases student engagement in learning

- accommodates a variety of learning styles

- provides a place to practice the target language beyond the classroom

- provides a less stressful practice environment for the target language

- provides flexible study, anytime or anywhere, to meet learners' needs

- helps students develop valuable and necessary twenty-first century learning

    skills

The concepts of BL cannot be defined just only in a single statement as different

scholars gives different meanings to the term; however, it is clear that all contents are

referred to as face to face communication and online space. In this case, if it is used as

the teaching methodology in the Cambodian context, the teachers have to combine both

face to face instruction and online instruction in order to understand the BL concept.

2.6.1 Models of Blended Learning (BL)

The BL Model is divided into four main models: Rotation Model, Flex

Model, A La Carte Model and Enriched Virtual Model (Bryan & Volchenkova, 2016;

iNACOL, 2015). The detailed explanation of each model are as follows:

Rotation Model: any course or subject where students rotate between online

working and classroom based modalities. Students often rotate among online learning,

small-group instruction, and pencil-and-paper assignments at their desks. The key is the

alarm informing them that it is time to shift to their next assigned activity. There are

four sub-models in the rotation model: station rotation, lab rotation, flipped classroom,

and individual rotation. *Flex Model:* a course or subject where online learning is the

backbone of the learning process. Students learn on their available schedule. Teachers

are there to help them face to face when needed. *A La Carte Model:* a course that a

student takes entirely online to accompany other experiences that the student is having

at a brick-and-mortar school or learning center. The teacher of the A La Carte course is

the online teacher. Students may take the A La Carte course either on the brick-and-

mortar campus or off-site. Students take some courses A La Carte and others face-to-face at a brick-and-mortar campus. *Enriched Virtual Model:* a course or subject where students are required to be in a face-to-face class with their teacher and they are free to complete their remaining coursework online.
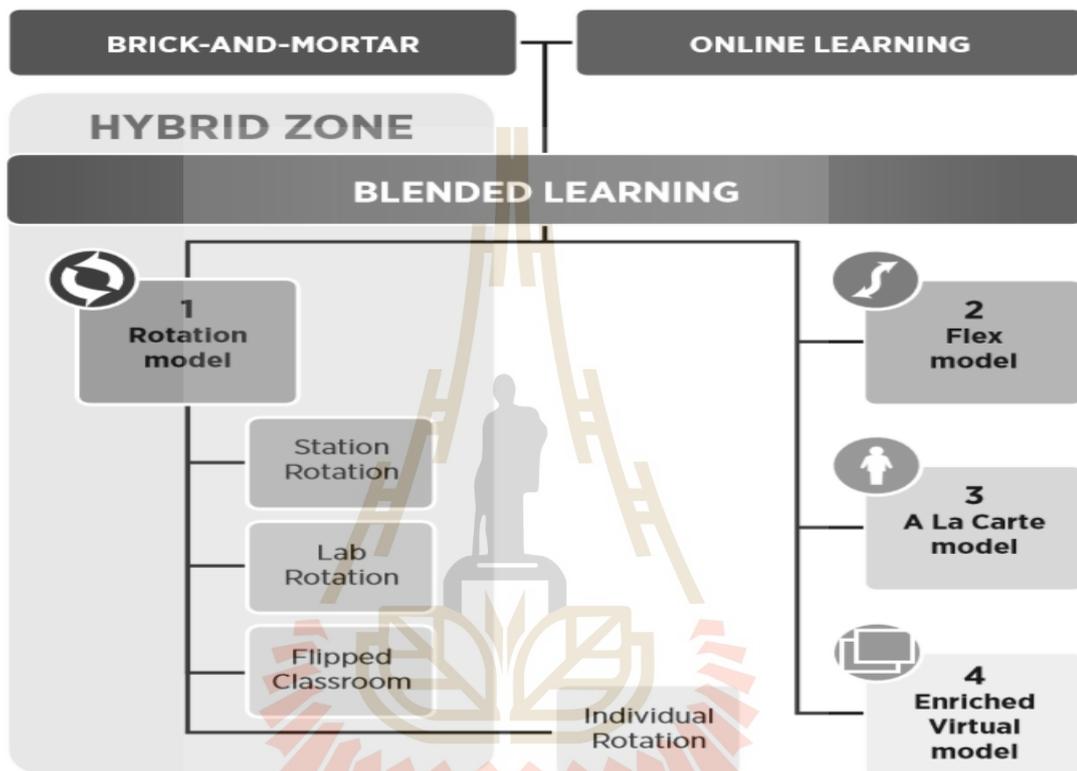
Figure 2.1 Blended Learning Model (iNACOL, 2015)

Among the four main models, the present study adopts the Enriched Virtual Model because the researcher chooses to employ face to face instruction and then online exercises with some online homework. As mentioned above on the definitions of BL, it is the integration between the traditional classroom and online space with appropriate technology tools that enriches language skills. Therefore, the present study does not only adopt the Enriched Virtual Model of BL, but also combine the Mobile Assisted

Language Learning (MALL) as the tool to assist in teaching listening comprehension to Cambodian EFL students.
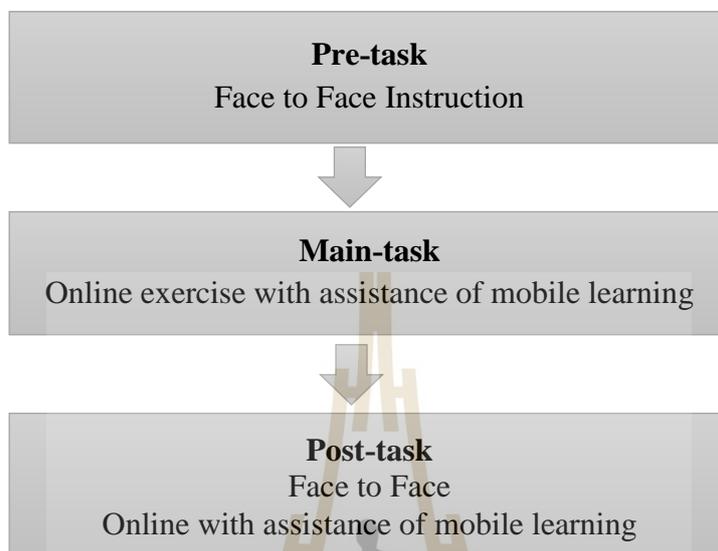
Figure 2.2 Model of BL with Assistance of MALL in the Present study

Figure 2.2 describes how mobile devices can assist in the process of teaching and learning listening. Firstly, there is a face to face instruction between the teacher (the researcher) and students in the pre-task stage where students activated their background knowledge and learned new vocabularies from the listening. Next, students were asked to work individually at the main-task stage and did the listening exercises on the online learning website (MBCL website) developed by the researcher using their smart phone. Finally, at the post-task stage students were asked to work both face to face and online with the assistance of a mobile device. They worked in groups or in pairs face to face with speaking tasks and worked online on grammar exercises. Since BL underlies the theory of constructivism and the researcher also has integrated this theory in developing the website and designing lesson plans, the following section will describe this in detail.

2.7 Theory of Learning and Teaching Approach

A theory of learning and teaching approach is very important in the process of teaching and learning. As a language teacher, it is essential to select the appropriate theory and approach for his/her students in order to develop their language skills. Below is the detailed description of language learning theory.

2.7.1 Constructivism

Constructivism or constructivist theory does not only focus on learning directly from the classroom teacher, but it is about constructing knowledge by learners themselves. Constructivism indicates that individuals construct their own knowledge and understanding of things from the world around them and reflecting from those experiences (Bhattacharjee, 2015). According to Guo (2015), learners are motivated to be active knowledge constructors. Constructivism is one among many learning theories which has a great influence on second language learning and education (Richards & Rodgers, 2014). Under constructivist theory, there are many hidden dimensions illustrated by well-known psychologist and theorists e.g. Jean Piaget (1896–1980), John Dewey (1859–1952) and Lev Vygotsky (1896–1934). Even though they all see constructivism in different ways, at least they are similar in some aspects, for example, learners are actively engaged in their own learning process in which learners organize the new knowledge on the basis of existing knowledge (cognitive dimensions) and they interact with other learners and solve the problems via conversation (social dimensions) (Richards & Rodgers, 2014). Before moving to the concepts of each individual psychologist, there is a table (table 2.1) comparing the differences between traditional and constructivist classroom.

Table 2.1 Comparison between Traditional and Constructivist Classroom (Bhattacharjee, 2015)

Traditional classroom	Constructivist classroom
Begins with parts of the whole emphasizes basic skills.	Begins with the whole expanding to parts.
Strict adherence to fixed curriculum.	Pursuits of student questions/ interests.
Textbooks and workbooks are used.	Primary sources/ manipulative materials are used.
Instructor gives/ students receive.	Learning is interaction-building on what students already know.
Instructor assumes directive/ authoritative role	Instructor interacts/ negotiates with students.
Assessment via testing/ correct answers.	Assessment via student works, observations, points of view, tests. Process is as important as product.
Knowledge is inert.	Knowledge is dynamic, changes with experiences.
Students work individually.	Students work in groups.

The first concept of constructivism coined by John Dewey, was the one who rejected the notions of conventional classroom teaching. In his project of progressive education, Dewey sees traditional classroom as *"passive and receptive learning"* since children receive knowledge from the teacher and the main focus is on repetition and memorization. In contrast with the traditional classroom, Dewey proposed an active learning principle and discussed in progressive education. Active learning allows students to be more active in the process of learning and teacher should give more opportunities to them to learn through their own experiences (Pardjono, 2016). Dewey also argued that individuals need to be involved in a set of circumstances and

relaxations at the same time. In other words, an individual thinks of something, makes the decision and takes action on what he/she has decided. At Dewey's school students are presented with a real life problem and are guided to solve the problems through practical activities, how the children react in the situation is how they learn (Zhou & Brown, 2015). Dewey puts more emphasis on authenticity and practicality.

Not that different from Dewey, Jean Piaget also rejected the traditional classroom method of learning. Piaget argued that it is not realistic when teachers teach and students listen because students probably do not learn exactly what their teacher intended. For this reason Piaget proposed cognitive constructivism. This theory is focused on children's cognitive development and their external knowledge namely learners construct knowledge by generating their own rules; they search for meaning, which requires understanding the whole as well as parts and they are expected to be active (Suhendi & Purwarno, 2018; Ackermann, 2001). Piaget's notions convinced educators to consider the active *"constructing"* mind of the individual learner which had been mainly ignored by traditional teaching methods (Toylor, 2015 p.1).

Piaget claimed that children construct new knowledge from their experience through an accommodation and assimilation process. The accommodation process happens when new experiences or information conflict with existing knowledge, that is to say, changing internal structures to provide consistency with external reality. Children have to adopt existing schema (background knowledge) and learn from their or other's failure. In contrast, assimilation process happens when they can combine the new experience with existing knowledge without changing the framework, in other words to fit external reality to the existing cognitive structure (Pardjono, 2016; Amineh

& Asl, 2015; Solomonidou, 2009). Assimilation and accommodation complement each other. "As reality is assimilated, structures are accommodated" (Schunk, 2012 p.236).

In contrast to Piaget who focused on individual development, Lev Vygotsky viewed learners as *"active organizers of their experiences and emphasizes of social and cultural dimensions of the development"* (Solomonidou, 2009; Pardjono, 2016 p.168). In vygotsky's concept of social constructivism, learning takes place when there is the interaction between two people or more (e.g. students and teachers) in specific social settings (e.g. classroom), objects (course books, texts, or pictures) and culturally prepared activities and events (instructional acts) (Richards & Rodgers, 2014; Jia, 2010; Schunk, 2012; Zhou & Brown 2015). According to Toylor (2015) Vygotsky's Social constructivism addresses both personal constructivism and radical constructivism, knowing that learning is a social process as well.

The key concept of Vygotsky's theory that makes him famous is his concept of a Zone of Proximate Development (ZPD) which is; *"the distance between the actual developmental levels as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers"* (Schunk, 2012 p. 243). To put it simply, ZPD is the link between what they can learn or develop by themselves and what they receive with the help of others (Alanazi, 2019; Verenikina, 2010). Figure 2.3 illustrates the Zone of Proximal Development circle and differentiates each circle. The smallest circle represents what students can do without the help of the teacher or classmates; however, the circle located in the middle refers to what students can learn with the assistance of the teacher or other guidance. The largest circle denotes things beyond

their knowledge of understanding that means although there is some assistance from others; they could not comprehend the materials.
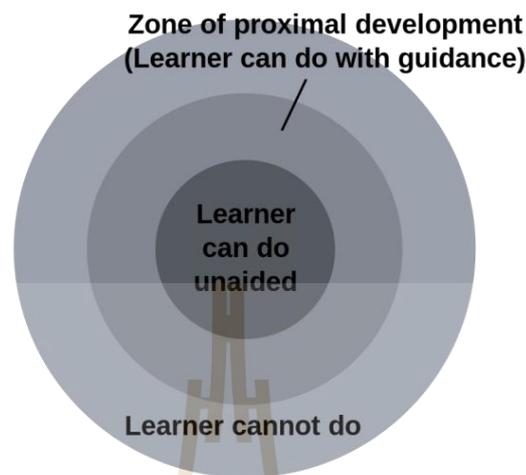
Figure 2.3 Zone of Proximal Development (ZPD) (McGowan, 2014)

Based on these brief explanations of constructivism from different psychologists, the theories can be categorized into two major groups: individual cognition of development (Jean Piaget) and social interaction (John Dewey & Lev Vygotsky). Constructivism could also be implemented in Blended classrooms due to learners constructing their knowledge and interpreting individually from their experiences (Amineh & Asl, 2015). Therefore, in blended constructivist classrooms, the teacher tries to create the situation where students can think individually and make their own meaning from their experience; for example, the teacher asks some questions or give a small quiz to activate their background knowledge. In this case the teacher act as the facilitator to help whenever needed just as Marsh (2012) mentioned in the BL that it is to give them more engagement and individualized opportunities in the process of their learning. To make it simple, learners are responsible for their own learning process. On the one hand, it is noticeable that cooperative learning (CL) is one of many

approaches that supports constructivism (Richards &Rodgers, 2014). Therefore, CL was applied together with blended learning in the present study as they complement each other. To confirm whether or not CL is suitable for the present study, a brief description of this approach will be presented in the following section.

2.7.2 Cooperative Language Learning (CLL)

Cooperative language learning (CLL) is one of the current teaching and learning approaches known as cooperative learning (CL) which is the extension of communicative language teaching (CLT) (Brown, 2007; Brown & Lee, 2015). Many scholars proposed different definitions of CL, but all share the similarities. One definition of CL is to make use of cooperative activities comprising of pairs or small groups of students in the classroom sharing information in order to achieve the same goals and success or failure of the group which relies on all individual members(Richards & Rodgers, 2014; Brown, 2007; Brown & Lee, 2015; Zang, 2010; Crandall, 1999). Jacobs, Lee, & Ng (1997) indicated that CL is to work as a team where students work cooperatively in small groups to accomplish the academic and effective social goals. Meng (2010) states that CL is the heterogeneous class groups where the class is managed in groups of four or six students to justify the learning task cooperatively. Both teacher and students work together to build up a friendly learning and social environment in the class.

CL supports some theories of language acquisition, for example, Jean Piaget and Lev Vygotsky who focus on *"the central role of social interaction in learning"* and the learning process is cooperation rather than competition (Richards &Rodgers, 2001, p.194). This means that learner-centered learning is promoted and students are required to interact with each other through spoken and written language to ensure that

students and teachers work together to reach the goal and objectives of the lessons (Richards &Rodgers, 2014; Richards &Rodgers, 2001; Brown, 2007). Abdullah & Jacobs (2004) recommended that CL promote interaction in the following ways:

1. The literature on CL recommends that students different from each other on one or more variables become group mates. This heterogeneity increases the likelihood that negotiation for meaning will be necessary. Furthermore, teachers often use the variable of second language proficiency when creating heterogeneous groups. This means that the more proficient students will be available to attempt to facilitate comprehension of their less proficient peers.

2. In cooperative learning, teachers can encourage more negotiation for meaning by allowing groups to try to sort out their own communication difficulties without teacher intervention, although teachers do stand ready to help if, after trying, groups remain deadlocked or confused.

3. CL activities provide a context in which students may be more likely to interact than in a whole class setting.

4. Group activities encourage students to interact with each other in a way that promotes a focus on form such a focus on form can be encouraged when grammar constitutes at least one aspect of group tasks.

5. The teaching of collaborative skills can play a crucial role in promoting peer interaction, because these skills provide students with strategies for effective interaction. Examples include collaborative skills that second language learners can use to repair communication breakdowns, such as asking for: repetition, slower speed of speaking, louder volume, and explanation of words. Collaborative skills also prove

useful when students understand the input they have received, but wish to disagree or ask for further information.

Table 2.2 showed the comparison between traditional teaching method and cooperative learning (CL) (Zhang, 2010).

Table 2.2 Traditional Teaching Method and Cooperative Learning

	Traditional language teaching	**Cooperative language learning**
Independence	None or negative	Positive
Teacher roles	The center of the classroom, Controller of teaching pace and direction, judge of students' right or wrong, the major source of assistance, feedback, reinforcement and support.	Organizer and counselor of group work, facilitator of the communication tasks, intervener to teach collaborative skills
Materials	Complete set of materials for each student.	Materials are arranged according to purpose of lesson. Usually one group shares a complete set of materials.
Types of activities	Knowledge recall and review, phrasal or sentence pattern practice, role play, translation, listening etc.	Any instructional activity, mainly group work to engage learners in communication, involving processes like information sharing, negotiation of meaning and interaction.
Interaction	Some talking among students, mainly teacher-student interaction	Intense interaction among students, a few teacher-student interaction
Room arrangement	Separate desks or students placed in pairs.	Collaborative small groups
Student expectations	Take a major part in evaluating own progress and the quality of own efforts toward learning. Be a winner or loser.	All members in some way contribute to success of group. The one who makes progress is the winner
Teacher-student relationship	Superior-inferior or equal	Cooperating and equal

In summary, cooperative learning is an approach where the teacher gives more opportunities to learners to learn through their own experience as well as in groups to help them grow through cooperation not competition. The teacher on the other hand, becomes the facilitator or guardian ready to assist them at any time they need. There should be no hesitation in applying CL in language classroom since it improves students' language proficiency in terms of collaboration not competition.

Finally, the researcher is confident that CL is appropriate for lesson plan development in the present study. As mentioned previously in section 1.2, statement of the problem, the present study aims to investigate Mobile-Blended Cooperative Learning (MBCL) in enhancing Cambodian EFL listening comprehension. Because the previous studies on the combination of the three have not been found, the following section will focus on the preview of previous studies of blended learning (BL) in EFL context.

2.8 Previous Studies of Blended Learning (BL)

Numerous studies of BL in EFL and science context were conducted by many scholars as follows:

Banditvilai (2016) evaluated the use of blended learning to enhance students' language skills and learner autonomy at Kasetsart University, Kamphaeng Saen Campus, Thailand. Sixty students were equally divided into two groups: control and experimental group. Pre-test, post-test, questionnaire, and semi-structured interview to measure the potential of available technology to develop language skills and learner autonomy was used. The findings showed that there was no significant difference between the two groups with respect to their language abilities (t = 0.37, p > 0.05) in

their pre-test; however, there was significant difference between the two groups (t = -3.38, p < 0.05) in their post-test. The researcher also indicated that this significant difference showed the online practice is directly beneficial to enhance the four language learning skills (speaking, listening, writing, and reading) as well as autonomous learning and learner motivation.

In a study conducted by Alfahadi, Alsalhi, & Alshammari, (2015), the researchers investigated EFL secondary school teachers' views on blended learning in Tabuk, Saudi Arabia. It also aimed at investigating the teachers' views on blended learning content and process, and the effectiveness of blended learning in developing teachers' performance. A quantitative questionnaire with the sample of 35 EFL Saudi teachers was implemented. The results indicated that the teachers' views toward blended learning were generally positive and very promising in both sections. Moreover, EFL teachers were highly optimistic about how blended learning would help them in improving their performance and how it would motivate their students to learn English. Finally, there were no significant differences between teachers' responses to the content and process of blended learning, with regards to qualifications, experience, and the amount of training done.

Al-Bataineh, Banikalef, & Albashtawi (2019) examined the effect of blended learning on EFL students' grammar performance and attitudes with 28 Jordanian EFL learners at Irbid National University, Irbid Jordan. Mixed research methods were employed using quasi-experimental design (pre-test and post-test) followed by interviews. The participants were equally divided into two groups: experimental group (n=13) taught using Moodle (blended learning) and the control groups (n=15) taught using conventional methods. The findings revealed that students in the experimental

group outperformed students in the control group. Moreover, the qualitative analysis results indicated that blended learning had a positive impact on the learners' English grammar performance and learners were strongly satisfied and motivated to learn English using similar methods. Bataineh, Banikalef, & Albashtawi (2019) also suggested that blended learning could be used as an effective method of teaching English grammar in EFL settings.

Qindah (2018) studied the impact of blended learning on English as a foreign language students' usage of grammar in context with 45 female students in a Palestinian public secondary girls' school near Ramallah. The students were divided by the school administration, 23 students in the control group and 22 in the experimental group. Experimental design with both quantitative and qualitative data (pre-posttest and interview) were used. The results revealed that the experimental group outperformed the control group (at p=0.00). More importantly, students showed positive attitudes toward the blended materials, they pointed out that it not only improved their grammar, but also helped them to retain what they learned as well as giving them feedback to help them improve their pronunciation in an interesting and fun way.

In a study conducted by Ghazizadeh & Fatemipour (2017), the researchers aimed at determining the effect of blended learning on the reading proficiency of Iranian EFL learners. A quasi-experimental design was adopted to reach this goal. 60 intermediate-level Iranian EFL learners were randomly assigned to two groups: control group and experimental group. Both groups were tested for their reading skills before and after the treatment using the reading section of the Preliminary English Test (PET). The results indicated that blended learning has a statistically significant positive effect on

the reading proficiency of Iranian EFL learners. Blended learning can be adopted in the English language classes, to facilitate the learning process especially the reading skill.

Bataineh & Mayyas (2017) examined the effect of Moodle-enhanced instruction on Jordanian EFL students' reading comprehension and grammar performance at a Jordanian state university, Jordan. Thirty two students were purposefully selected and were randomly divided into an experimental group (n=17) and a control group (n=15). Quasi-experimental design with pre-test and post-test were used in this study. The analysis of the study revealed that there are potential statistically significant differences (at p≤0.05) between the experimental and control group students' reading comprehension and grammar which can be attributed to Moodle supplementation. These significant differences meant the experimental group outperformed the control group in both reading comprehension and grammar.

Kim (2014) examined the effects of mobile phone usage in blended learning of reading comprehension with 44 students enrolled in an English Reading course at a university in Seoul, South Korea. Students were divided into one experimental (n=23) and one control group (n=21). Pre-test and post-tests were employed to compare means after the experiment and the questionnaire was also used to measure their perspective of m-learning. The findings indicated that all the participants improved their reading comprehension after the experiment. In the meantime, the experimental group significantly outperformed the control group in reading comprehension (at p=0.01). The researcher of this study mentioned from the survey that most students in the experimental group considered it useful and helpful to use mobile phones for English learning.

Mofrad (2017) investigated the effectiveness of practicing writing in a blended learning environment with 60 female intermediate EFL students studying English at the University of Velayat, Iranshahr, Iran. Students were randomly assigned into four groups based on the learners' learning style including: Extroverted-blended, introverted-blended, Extroverted-traditional and Introverted-traditional. Pre-test and post-test were also used in this study. In the blended learning activity, students practiced learning writing skills using different media and technology though in the traditional learning activity, they did that without using any technology tools. The results presented that the extroverts outperformed the introverts and the learners in the blended learning environment outperformed those in the traditional learning environment.

Hosseinpour, Biria, & Rezvani (2019) explored the effects of blended learning through implementing Edmodo mobile application on the academic writing proficiency and perceptions of Iranian intermediate EFL learners at Islamic Azad University, Isfahan, Iran. There were two classes in this study: a class with 27 intermediate students was assigned as an experimental group and a class with 26 intermediate learners was the control group. A quasi-experimental research with mixed method design (pre-test, post-test, and structured interview) was employed. The findings showed that it was possible to integrate Edmodo mobile application into essay writing class because the experimental group outperformed the control group (M=82.19, SD=3.175; M= 79.58, SD=3.580 at p=0.07) in writing proficiency as well as such aspects as organization, vocabulary, and mechanics of writing. The follow-up interviews indicated that the majority of students had positive perceptions and acknowledged it as an innovative, engaging and helpful activity. The researchers suggested that Blended Language Learning is a promising area in the field of TEFL, and it is essential for teachers to keep

their teaching methodologies and techniques compliant with the technology developments of the 21st century.

Ginaya, Rejeki, & Astuti (2018) investigated the effect of blended learning through the application of WebQuest project tasks embedded in a modified conventional teaching model to students' speaking ability at State Polytechnic of Bali, Indonesia. Two classes (3A &3B) of 51 third-semester students were selected and 3A class (n=23) was the experimental group and 3B class (n=28) was assigned as the control group. Pre-test, post-test, teaching diary, observation, and questionnaires are used as research instruments. Results showed that the experimental group were significantly improved in terms of English-speaking ability, and the improvement was also supported by their increased learning motivation and interest.

Mubarok (2015) examined the implementation of the blended learning model in improving students' listening comprehension and their opinion toward the use of blended learning. The sample for this study is 67 second semester students of the English Education Program (PBI) at the Islamic University of Nahdlatul Ulama (UNISNU), Jepara. It is an action research with observation, interview, questionnaire, and Listening test. This study contains three cycles and each cycle comprises two meetings. The findings indicated that Blended Learning could be implemented in two models: Flip model and Lab Rotation model and it could increase students' listening comprehension, their final listening score (77) higher than passing grade. Students had a positive attitute towards the application of the Blended Learning model in Listening class.

Aji (2017) studied the implementation of blended learning in teaching listening to university students. This study was conducted with a class of 28 students at a university

in east Java, Indonesia. This is a qualitative research design by interviewing the listening lecturer, observing the activities in the classroom and giving the questionnaire to the students. The result revealed that the implementation of blended learning in teaching listening at university was able to improve the students' listening skill, offering ways for lecturers to be more effective in the teaching and learning process bringing positive outcomes for the students.

Nabi (2015) explored the effectiveness of blended learning on the Palestinian seventh graders' English listening skills and their attitudes toward blended learning at UNRWA schools, North Gaza. The students were randomly selected from a purposive sample from Beit-Hanoun Prep and divided into a control group (n=44) and an experimental one (n=44). An experimental research design including pre-test, post-test and an attitude scale were used to measure students' attitudes towards blended learning in acquiring listening comprehension skills. The results showed that the experimental group (M=72.431) outperformed the control group (M=63.659) in post-test. Therefore, there were statistically significant differences at (p ≤0.05) between the experimental and the control group in all domains of listening and the total degree of the attitude scale in favor of the experimental group which means that the blended learning program has the big impact on students' attitude.

Yapici (2016) examined the effect of Blended Cooperative Learning Environment (BCLE) in biology teaching on students' classroom community sense, their academic achievement and on their levels of satisfaction in a state university in Turkey. Quantitative and qualitative research methods with both pre-test and post-test as well as the scale of learners' views on BCLE were used. There were two different academic year students in this study; 30 students in 2012-2013 academic year was assigned as the

experimental group and 31 students in 2013-2014 academic year were the control group. The findings revealed that the experimental group outperformed the control group, the students' classroom community sense developed and they also had a high level of academic achievement and satisfaction.

Sulisworo, Agustin, & Sudarmiyati (2016) explored the effect of the cooperative-blended learning strategy to the learning performance on physics in high school grade XII in a school in West Java, Indonesia. Quasi-experimental pre-test and post-test control group design using motivation as the covariate were used. Students were divided into two groups: Experimental (n=30) and the control group (n=32). The result points out that students who were taught using cooperative learning had higher learning achievement than those taught using face-to-face learning, higher motivated students tended to get better learning outcomes.

To sum up, all 15 previous studies which the researcher has reviewed focused on the two main areas: an EFL context and science by using blended learning. Most studies paid attention on integrating blended learning (BL) with computer, blended learning (BL) with mobile assisted language learning (MALL), or blended learning (BL) with cooperative learning (CL) (but only with science subjects: physics, mathematics, biology or chemistry). And all studies mentioned above showed the positive effects of blended learning on enhancing EFL and science students' academic performances. Among above studies, study 1, 2, 3, 10, and 15 illustrated that students have increased their learning motivation after they have studied with blended learning methods, whereas study 4, 9, 11, and 13 revealed that students have a positive attitude towards the use of blended learning methods. More importantly, students also showed their strong satisfaction towards the use of blended learning methods through study 3, 7, 9,

and 14 by stating that it is helpful, innovative, engaging and fun. All the studies make an important point to the researcher of the present study showing that in the process of collecting data, the researcher should not only focus on the effects of the proposed method, but should also notice other factors that may occur.

2.9 Summary

This chapter represented the review of relevant literature supporting the present study. It discussed English language teaching in Cambodia followed by definitions of listening comprehension, factors affecting listening comprehensions, models of listening comprehension, mobile assisted language learning, blended learning, theory of learning and teaching approaches as well as previous research studies of blended learning. It ended with summary of the literature review.

In the next chapter, details of the research methodology of the study such as: the preliminary study, the setting of the Study, the population and sample, the research design, instrument, the validating and revising instrument, the procedure, data collection, data analysis and the pilot study will be presented.

CHAPTER 3

METHODOLOGY

As mentioned in the title, this chapter presents the methods and procedures used to investigate the effects of Mobile-Blended Cooperative Learning (MBCL) on Cambodian EFL students' listening comprehension. The preliminary study, setting, the population and sample, research design, instruments, validating and revising instruments, research procedure, data collection, data analyses, and pilot study will be described. In addition to this, a summary will be discussed to conclude this chapter.

3.1 Preliminary Study

Preliminary study or needs analysis is one of the best ways to help the researcher understand more about the exact needs of the students so that the researcher can help them improve their ability based on their needs. In addition, needs analysis allows educators to understand the essential of the educational needs, as well as being fundamental to designing a syllabus that could be responsive to the needs of the students as well as the institution (Martins, 2017; Jinzhu, 2018). In order to get accurate results for a needs analysis, the questionnaire has to be carefully developed. The next sections will describe the questionnaire and interview questions development in details**.**

3.1.1 Questionnaire Development

The questionnaire was developed by the researcher to examine the needs of Cambodian students towards English instruction. The questionnaire consists of three parts: (1) students' general information and educational background, (2) students' perception of learning English, and (3) the use of technology in the classroom. There were 7 items in section (1), 4 items in section (2), and 5 items in section (3).The questionnaire was created by using the following procedures so as to be as effective and appropriate as possible:

1. The researcher studied how to develop a questionnaire.

2. The researcher set the objectives of the questionnaire and wrote the items for each part in English then translated to Khmer, so that the students would feel confident to read the Khmer version in case they were not sure of the questions.

3. The questionnaire was validated by three experts in the field of English Language Teaching using IOC (a detailed explanation is in 3.6 Validating and Revising Instruments).

4. The researcher revised and improved the questionnaire based on the obtained feedback from the experts.

3.1.2 Interview Questions Development

Interview questions were constructed by the researcher. The questionnaire comprised of 5 questions. In addition to this, the interviews lasted between 10 to 15 minutes and all the interview answers were recorded. It was allowed and permitted by the teachers. Having already constructed survey questionnaire, the researcher:

1. learned how to write interview questions.

2. determined the objectives of the questions and wrote the pre-determine items.

3. asked the 3 experts in the field of English Language Teaching to validate each pre-determine item using IOC (detailed explanation is in 3.6 Validating and Revising Instruments).

4. revised and improved the pre-determined items based on the experts' feedback.

3.1.3 Data Collection

The researcher studied the overview of the part time English program at a public university in Cambodia (University of Battambang) and decided to conduct the preliminary study there. Before conducting the preliminary study, the researcher requested information from the program coordinator regarding the program background, total number of classes, what levels and which textbooks. After that the questionnaire was conducted with 208 volunteer students (Female=144 and Male= 94) under the English part-time program at the university in November 2018. Most of them were non-English major students and their ages ranged from 17 to 24. This survey questionnaire was successfully collected under the assistance of the program coordinator.

On the other hand, the interview questions were distributed to 5 classroom teachers on a volunteer basis in December 2018 after the researcher figured out which skills the students really needed to improve. The interview concentrated on the teachers' teaching methodology and opinions of their students' English skills ability.

3.1.4 Data Analysis

Questionnaire data was analyzed descriptively using the Statistical Package for the Social Science (SPSS) version 20.0 and the interview answers were analyzed qualitatively.

3.1.5 Results of Preliminary Study

The results of the Preliminary Study are shown below, concentrating on the students' perception of learning English, the use of technology in the classroom, and the teachers' opinion from the interview.

    A. **Students' Perception of Learning English**

Table 3.1 showed the results of Cambodian students' perception of learning English. The results indicated that among four macro skills speaking is the most important and practical skill (67 %); however, listening is the most difficult skill (60 %) and 59 % of participants strongly agreed that they would like to improve this skill.

Table 3.1 Results of Cambodian Students' Perception in Learning English

	Numbers of Students	**Percentage**
Important and practical Skills		
Speaking	139	67 %
Listening	29	14 %
Writing	21	10 %
Reading	19	9 %
The most difficult skills		
Listening	124	60 %
Writing	44	21 %
Speaking	28	13 %
Reading	12	6 %
	Numbers of Students	**Percentage**
Desire to improve the most difficult skills		
Strongly agree	121	59 %
Agree	85	40 %
Disagree	2	1 %

B.   The Use of Technology in the Classroom

Table 3.2 revealed the results of the use of technology in the classroom. The results from multiple responses pointed out that the majority of students use mobile phones (96%), use laptops (40%), use desktop computers (4%), and use tablet (3%). Besides calling their friends or family, they use mobile phones to access some social media (73%) (Facebook, Youtube, Messenger, Instagram, and Email), learn English (70%) (reading, vocabulary, grammar, pronunciation and checking the dictionary), play games (22%), and do other things (7%). The students also mentioned that it is helpful to use mobile phones in their English class (50% agreed and 29% strongly agreed). Finally, the majority of participants would like their teacher to use mobile phones as a tool in their learning process (62% agreed and 35% strongly agreed).

Table 3.2 Results of the Use of Technology in the Classroom

	Numbers of Students	Percentage
The use of technology tools (Multiple response)		
Mobile phone	199	96 %
Laptop	82	40 %
Desktop	8	4 %
Tablet	6	3 %
Purpose of using mobile phone(Multiple responses)		
Social Media	152	73 %
Learning English	143	70 %
Games	46	22 %
Other	15	7 %
Helpfulness of using mobile phone in English class		
Strongly agree	60	29 %
Agree	104	50 %
Neutral	38	18 %
Disagree	5	2 %
Strongly disagree	1	1 %
Preference of using mobile phone as a tool to enhance English learning		
Strongly agree	72	35 %
Agree	128	62 %
Disagree	8	3 %

C. Teachers' Interviews

The results from the 5 teachers' interviews have shown that their students are not good at listening comprehension because of the little time spent on teaching listening skills in class and the students do not do extra practice themselves at home. For example, *Teacher 1: I could see that they may not review or have enough time to practice more at home. Teacher 2: I think they don't quite often practice. Teacher 3: the listening part in the course book is very short about 30mins for doing pre, main, and post listening.* Additionally, all teachers mentioned that they are happy to employ new teaching methods to enrich their students listening comprehension if the listening materials fit with their students' level and they could listen anytime and anywhere. For instance, *Teacher 1: If there is a new teaching method to improve students' listening comprehension, I am happy to use it and I believe that the students will have more chance of practicing. Teacher 2: With the help of new teaching method, I think they will be more comprehensible in listening. Teacher 3: With the help of new teaching method, it is the best way to improve their listening. It is really useful. Teacher 4: With the help of new teaching methods, they will improve their listening skills exactly. Teacher 5: I will integrate this new method in improving my students listening comprehension; it is a helpful and nice technique to improving their listening.*

Based on the results from the questionnaire and interview, it can be concluded that the students' listening comprehension should be improved. And more importantly, the research should be conducted with intermediate students because they start to use only English as the medium of instruction and the majority of students are at this level. Due to their busy schedule with undergraduate programs, most of them

prefer the afternoon class. For this reason, the research study should be on weekday afternoons.

3.2 Setting of the Study

The present study was conducted at the English for Adults Program (EA) of the University of Battambang (UBB) which is located in Battambang province, Cambodia. Battambang is the second largest city in the north-west of the Kingdom and is well-known for being the leading rice-producing province, as well as bordering with Thailand with the area of 115.44 km^2 and a total population of 152,117 (UNEP & IGES, 2018). Because many private and public companies and industries are established in this province, a large number of students are studying and working in Battambang.

There are many higher education centers in this province, but only one public university, that is the University of Battambang (UBB). The University of Battambang (UBB) is located on National Road 5, Sangkat Preaek Preah Sdach, Battambang City, Battambang Province. The university was founded in 2007 with the vision of providing opportunities for students living in rural areas, especially in north-west Cambodia, allowong access to higher education and services that contribute towards the development of their individual careers, as well as to that of local communities while at the same time reducing the knowledge gap between the rural and urban population (University of Battambang, 2016).

On the other hand, the English for Adults Program (EA) is a non-degree program which has been created by UBB in order to help students improve their English. The

students at UBB as well as the other universities can study in this program for a very reasonable fee.

3.3 Population and Sample of the Study

Non English major students who are studying in the English for Adults program (EA) at the Institute of Foreign Languages (IFL), University of Battambang (UBB) were selected for the present study. The English for Adults Program (EA) is the English part time program for students between the ages of 17 and 24. Even though it is under the control of IFL, it is open for the public to register and study as their part-time course as well. Additionally, the students are required to study from Monday to Friday and the class lasts for 90 minutes for a 12-week term, a total of seventy-eight hours per level. In one lesson, students learn four skills (reading, writing, listening, and speaking) using the Mega Goal textbook by Mc Graw Hill. In the present study, a class with 30 students was purposely selected from the five classes (175 students in total) of intermediate level. They are all native Cambodian speakers and English is their foreign language.

There were two reasons that the researcher decided to select this program and the intermediate students for the present study. First, the students in this program were a mixture of non-English major students (such as Marketing, Management, Banking, Accounting etc), so their English proficiency still needs to improve. Secondly, only English was allowed for the intermediate level compared to the beginner level where teachers and students are allowed to speak both Khmer and English. And the number of students in this level is also appropriate for the experiment compared to the advanced level because most students who reach advanced level are busy with their work or degree study so they usually postpone or dropout. For this reason, there are only 8-10

students in each advanced level class. Table 3.3 below illustrates a brief overview of the course book teaching in English for Adults program (EA).

Table 3.3 EA Course Book Overview

Text book	General level	Level of proficiency
Mega Goal 1	Level 1	Beginner
Mega Goal 1	Level 2	Beginner
Mega Goal 2	Level 3	Beginner
Mega Goal 2	Level 4	Beginner
Mega Goal 3	Level 5	Intermediate
Mega Goal 3	Level 6	Intermediate
Mega Goal 4	Level 7	Intermediate
Mega Goal 4	Level 8	Intermediate
Mega Goal 5	Level 9	Advanced
Mega Goal 5	Level 10	Advanced
Mega Goal 6	Level 11	Advanced
Mega Goal 6	Level 12	Advanced

3.4 Research Design

Selecting the research design is a stressful and challenging task for most researchers. Thus, the researcher employed both quantitative and qualitative methods in order to get full details and precise results in the present study. Using these methods enables the researcher to deeply understand and comprehend the phenomenon under investigation; and more importantly, the researcher can gain more insight information than using only qualitative or only quantitative research design (Leavy, 2017; Creswell, 2009). Since the current study was conducted to investigate the effects of Mobile-Blended Cooperative Learning (MBCL) to improve Cambodian EFL students' listening comprehension, the quantitative and qualitative methods were utilized under the embedded design model. The use of the embedded design model helps interpret data effectively where the qualitative data argues and supports the quantitative outcomes

from the experiments (Creswell, 2009). It means that the qualitative data explores how the participants react to and experience the treatment. Additionally, it helps explain the results and the discussion of the study. Figure 3.1 explains in summary how the embedded design process is implemented in this study.

| Quantitative Pre-test Data And Results | → | Quantitative Post-test Data and Results | → | Qualitative Interview Data and Results |

Figure 3.1 Embedded Research Design of the Present Study

As mentioned earlier that Mobile-Blended Cooperative Learning (MBCL) was used as the tool to enhance Cambodian EFL students' listening comprehension, the teaching procedure in the present study was face to face with some online materials. The online material stated here referred to the online learning website (MBCL website) developed by the researcher for doing their main listening tasks under the assistance of their mobile phone. As the researcher would like to investigate only the differences before, as well as after the experiment, the pre-experimental design with a single pre-test/post-test was implemented in this study as shown in Figure 3.2. The pre-test was assessed to check students' listening proficiency and followed by the post-test.

| **Pre-test** $\longrightarrow$ | **Treatment or intervention** | $\longrightarrow$ **Post-test** |
| O_1 | X_2 | O_2 |
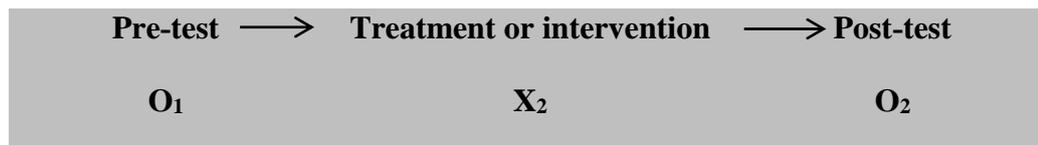
Figure 3.2 Single Group Pre-test/Post-test Design

3.5 Instruments

In order to investigate the listening improvement of Cambodian EFL students, the instruments were divided into two parts: (1) instructional instruments and (2) research instruments. The instructional instruments were developed for the Mobile-Blended Cooperative Learning (MBCL) activities and the research instruments were developed to collect both quantitative and qualitative data of the present study. The following section will describe each instrument in details.

3.5.1 Instructional Instruments

There were two instructional instruments used in this study, including (1) lesson plans for guiding the teacher in the process of teaching and (2) online learning website (MBCL website) for doing the listening exercises and connecting with classmates and the teacher after class as needed at any time anywhere.

3.5.1.1 Lesson Plans (MBCL Lesson Plans)

Lesson plans consisted of learning objectives, exercises, homework, tests and MBCL materials that were collaboratively designed with each topic. Lesson plans are important in the process of teaching and learning because they state the expectation of the students' performances and the teacher can go back to the objective after class to check whether or not the students could perform well based on the objective stated (Brown, 2007). More importantly, lesson plans are considered as a unified set of procedures covering a period of class time and are crucial for teachers because they represent steps in the curriculum, both before and after the presentation so that teachers can prepare effectively for the next class (Brown, 2007; McMullin, 1992).

Before writing the lesson plans, the researcher previewed all the course books in the intermediate level of the English for Adults program (EA) taught in Cambodia to see the objectives, content and detailed information of the books. This was so that the researcher could easily select the materials that fit the level and objectives of the books being taught there. The course books on the listening section mainly use authentic materials, for example, radio ads, messages on telephone, short and long interviews or personal conversations. After previewing the course books, the researcher decided to adapt and modify the Cambridge Preliminary English Test (PET) book 6 developed by Cambridge University Press (2010) to be the teaching materials because this book objectives and exercises go alongside the program objectives and course book; more essentially, the researcher only taught the listening section and other skills were the responsibility of the classroom teacher. The lesson plans consisted of four lessons which took one week to accomplish each lesson followed by assessment and homework tasks. Each step of producing the lesson plans are described as following:

1. The researcher learned about the formatting lesson plans and how to write them effectively, as well as about the course syllabus of the English for Adults Program (EA).

2. By using the PET book mentioned previously the researcher wrote the lesson plans by sequencing the contents with vocabulary, listening exercises, grammar usages, speaking practices, assessment, and homework.

3. Each lesson plans' objectives, contents, learning activities, and assessment were later examined and validated by 3 experts in the

field of English Language Teaching using IOC (detailed

explanation is in 3.6 Validating and Revising Instruments, see

Appendix J: IOC Results of Lesson Plans).

4. Finally, the lesson plans were revised based on the comments

from the experts (See Appendix I: Lesson Plans)

3.5.1.2 Online Learning Website (MBCL Website)

The online learning website (MBCL website) was one of the majors teaching and learning materials used in the present study. The researcher decided to use "Mobirise" for building the learning website. Mobirise is a free web design application that allows users to create and publish bootstrap or websites without coding and it is also accessible for Windows and Mac. Furthermore, it makes it easy to create small/medium websites, landing pages, online resumes and portfolios, it also make it easy for non-techies who are not familiar with the intricacies of web development and prefer to work as visually as possible (Mobirise Free Website Builder Software, 2019). More than that, it's mobile-friendliness fits with the researcher's objectives. In order to develop an online learning website using Mobirise, the researcher has learned many tools as follows.

1. The researcher learned how to use all features in Mobirise.

2. The researcher learned how to convert the text to spoken

language and edit the sound by using

http://www.fromtexttospeech.com/ and audacity because she

had to combine or control the audio speed before uploading on

Mobirise.

3. The researcher learned how to use "Wondershare Video Editor" in order to convert MP3 to MP4 as Mobirise does not accept the MP3 file when it is the free function one.

4. Finally, the researcher learned how to create the quizzes and homework by using a free online quiz maker called "FlexiQuiz".

5. After finishing the website development, it was validated by three experts in the field of English language teaching by using IOC (detailed explanation is in 3.6 Validating and Revising Instruments).

6. The researcher revised and improved the website based on the obtained feedback from the experts (See Appendix K: Overview of Online Learning Website).

7. The researcher piloted the website with 18 non-participating samples in a pilot study stage to ensure that it was appropriate for the students.

3.5.2 Research Instruments

There were three research instruments in the present study: (1) pre-test and post-tests to evaluate the listening comprehension proficiency of the students, (2) a questionnaire for investigating the students' opinions after the treatment, and (3) a semi-structured interview for investigating the students' opinions in detail after the treatment.

3.5.2.1 Pre-Test and Post-Test

Both pre-test and post-test were employed before and after the experiment to check the students' listening comprehension outcomes. Both pre-test and

post-test were adapted from the Preliminary English Test 7 established by Cambridge University Press (2012) and some items were modified because the students might not be familiar with the questions as it was in a British context. The reason that the researcher decided to adapt the test from the above institution was because this test is already a validated test and constructed by the Cambridge ESOL examination team and it was an intermediate level test.

Both pre-test and post-test consisted of 24 items testing different listening skills. Part 1 tested the students' ability to identify key information from a short exchange with 6 items. Part 2 consisted of 6 items testing the skills to identify specific information and detailed meaning. Part 3 also consisted of 6 items and it tested students' ability to understand and interpret information; this section also tested their spelling ability. Finally, part 4 tested their ability to identify attitudes and opinions of the speakers with 6 items as well. Because all the students were adults, the test format was not focused only on multiple choice and single short monologues, but also gap filling and true/false statements, as well as longer monologues and informal long dialogues (See Appendix A: Pre-Test and Post-Test and Appendix B: Test specification).

Although the test was already valid and reliable, the validity and reliability of the test still needed to be checked to make sure that it did fit with the Cambodian students' context. So, both the pre-test and post-test were validated by the three experts using the Index of item Objective Congruence (IOC) (detailed explanation is in 3.6 Constructing, Validating, and Revising Instruments, see Appendix C: IOC results of Pre-Test and Post-Test). To test the reliability coefficient, the researcher used test/retest methods and applied the Kuder Richardson 20 (KR-20) formula to calculate

each item. The scores of KR-20 range from 0 to 1 where 0 is no reliability and 1 is perfect reliability; the closer the score is to 1, the more reliable the test. "Tests that do not achieve reliabilities of 0.7 are normally considered to be too unreliable for use." (Fulcher & Davidson, 2007 p. 107)

$$\text{where:} \quad R = \frac{k}{k-1} \left\{ \frac{s^2 - \sum pq}{s^2} \right\}$$

k   = the number of items on the test

s^2 = the estimate of the variance of test scores

$\sum pq$ = the sum of the variances of all items

In this case, both pre-test and post-test were administered to a pilot sample of 18 Cambodian EFL students who were not included in the present study. The results from the test were calculated with the above mentioned equation and the results were 0.718 for the pre-test and 0.792 for the post-test. That mean both tests were reliable to use for the experiment (see Appendix D: Results and Reliability of Pre-Test and Post-test Scores).

Table 3.4 Summary of Pre-test/Post-test Listening Task

Part	Task Types	Skill Focus	Numbers of Questions
1	Picture multiple choice (Short informal monologues or dialogues)	Identify key information from short exchanges	6
2	Multiple Choice (Longer interview)	Identify specific information and detailed meaning	6
3	Gap filling (Longer monologue)	Identify, understand and interpret information	6
4	True/False (Longer informal dialogues)	Identify attitudes and opinions of the speakers	6

3.5.2.2 Questionnaire

The questionnaire was developed by the researcher to examine the opinions of the students on learning listening via Mobile-Blended Cooperative Learning (MBCL website). The questionnaire consisted of two parts: (1) students' personal information and (2) students' opinions toward MBCL to enhance listening comprehension with a five point Likert scale ranging from "Strongly Disagree" to "Strongly Agree". There were 4 items in section (1) and 20 items in section (2) (see Appendix E: Questionnaire). The questionnaire was developed to be most effective and appropriate as follows:

1. The researcher studied how to construct a questionnaire.

2. The researcher set the objectives of the questionnaire and wrote the items for each part in English then translated them to Khmer so the students would feel more confident to turn and read the Khmer version in case they were not sure about the questions.

3. The questionnaire was validated by three experts in the field of English Language Teaching by using IOC (detailed explanation is in 3.6 Validating and Revising Instruments and see Appendix F: IOC Results of the Questionnaire).

4. The researcher revised and improved the questionnaire based on the obtained feedback from the experts.

5. The researcher tried out the questionnaire with 18 non-participating samples in the pilot study stage to ensure that it was appropriate for the students.

3.5.2.3 Semi-structured Interviews

The semi-structured interview questions were constructed by the researcher and comprised of 6 questions. In addition to this, the interview was in the form of face-to-face interviews lasting around 10 to 15 minutes. To avoid missing some interview responses, the researcher requested to record the interviewees' voice while they were answering the questions (See Appendix G: Interview Questions). Similar to constructing the survey questionnaire, the researcher:

1. learned how to write semi-structured interview questions.

2. determined the objectives of the questions and wrote the pre-determine items as well as translated them into Khmer in case some student would like the interview in Khmer.

3. asked 3 experts in the field of English Language Teaching to validate each pre-determined item by using IOC (detailed explanation is in 3.6 Validating and Revising Instruments and sees Appendix H: IOC results of Interview Questions).

4. edited and modified the pre-determined items based on the experts' feedback.

5. tried out the interview questions with 8 non-participating students in the pilot study stage to ensure that it was appropriate for the students participating in the main study.

3.6 Validating and Revising Instruments

Validating and revising the research instruments are very important to ensure that all the instruments in the study are valid and appropriate for all the participants.

3.6.1 Experts Validating

To check whether or not all the instruments were valid and reliable, they were submitted to 3 experts after finishing the construction. In this step, the experts used the Index of item Objectives Congruence (IOC) for evaluating content validity of the test development at the item development stage. Each attribute or item was scored:

1 = The expert fully agrees that the item is appropriate and valid.

0 = The expert is uncertain as to whether or not the item is appropriate and valid.

-1 = The expert fully disagrees that the item is appropriate and valid.

The IOC of each item was calculated by using the following equation:

$$IOC = \frac{\text{Total score of each item given by all experts}}{\text{Total number of the experts}}$$

According to Laosap, Nimpitakpong, Kongkaew, and Jedsadayanmata (2012), items are considered to have good content validity if they gain an average score of more than 0.5; in contrast, the items are considered inappropriate, invalid, and in need revision if they gain an average score below 0.5. Additionally, all instruments were sent to the three experts, including one English University educator, an English for Adult program coordinator and an English teacher teaching at the English for Adult program at the University of Battambang.

Experts' Qualifications

The experts have to **have** the following criteria:

1. The experts must have been teaching English at a school or university.

2. The experts must have at least five-years experience in teaching at a public or private school or university.

3.6.2 Obtaining Feedback and Revising Instruments

After the validation, the researcher received the feedback concerning the validity of individual items. Then, the researcher analyzed and processed the obtain feedback in order to see which items should remain, and which should be deleted or revised. Finally, the researcher revised all research instrument items that were not valid. In order to raise the validity, uncertain and disagreed items were re-developed or modified.

3.7 Research Procedures

The figure below shows the process of the current study before, during, and after the intervention.
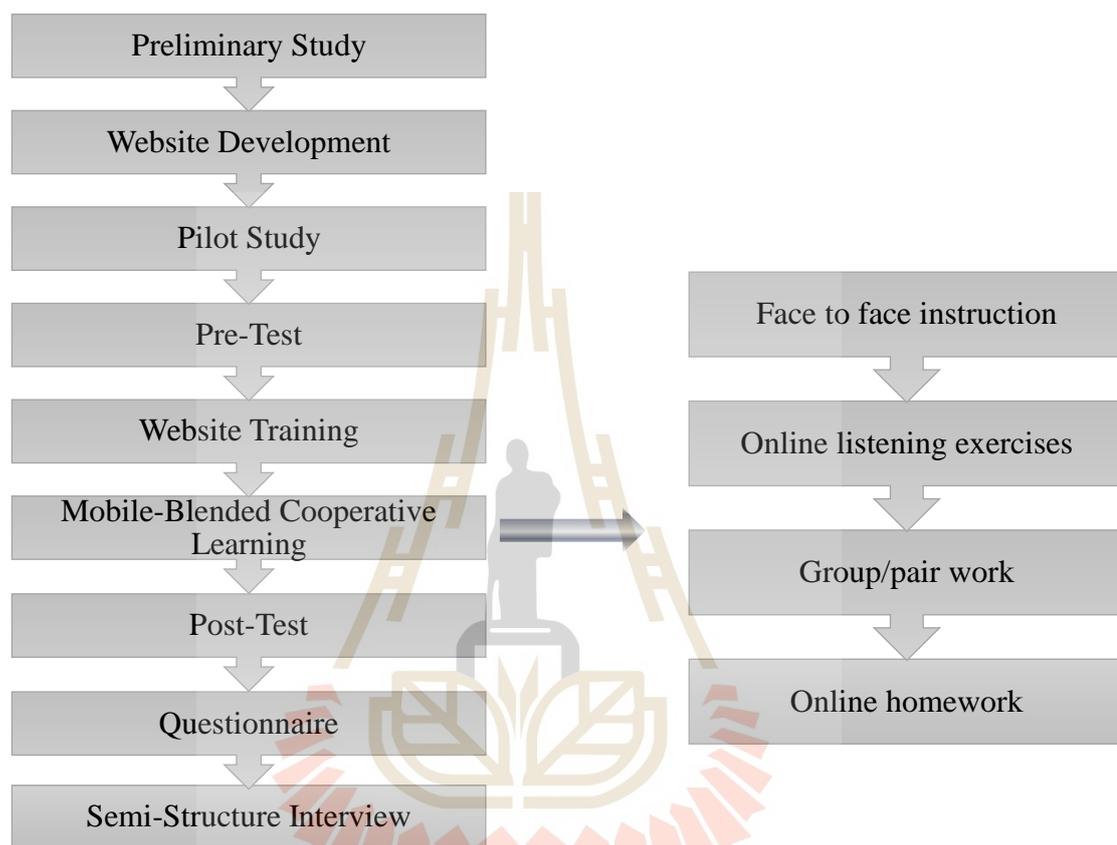
Figure 3.3 Research Procedures

Figure 3.3 indicated the research procedure before, during and after the experiment. First, before the experiment the researcher conducted the preliminary study (See 3.1 Preliminary study for a detailed explanations) followed by the website development as well as the pilot study. Then, the students did the pre-test and were trained to use the website through their mobile phones before the experiment. During the experiment, there were face to face interactions between teacher and students, students and students, online listening exercises, and online homework. After the

experiment was completed, they did the post-test, the questionnaire, and the semi-structured interview, respectively.

3.8 Data Collection

The Experiment took approximately 8 weeks from late April until early June 2020 because there were some public holidays, official mid-term and final exam during the process of the experiment. In addition to this, because of the COVID-19 pandemic, all schools and universities were closed, so data collection was conducted in a nonstandard classroom. Nonstandard classrooms here referred to a room that was not at the university or school. The researcher rented a meeting room at a coffee shop in which to conduct the whole data collection. All data was collected and evaluated in order to know about the quality and the effect of Mobile-Blended Cooperative Learning (MBCL) to measure the learning achievements after the experiment. To answer the research questions, the data was evaluated using both qualitative and quantitative methods.

3.8.1 Listening Pre-test and Post-test

All the students who participated in the present study were required to do the listening pre-test before engaging in the experiment process. They were asked to respond to the given questions by answering four multiple choice questions, true or false and gap filling. The following week after the last listening lesson was completed, they were asked to do the post-test and the items were in the same format as the pre-test.

3.8.2 Questionnaire

The questionnaire was delivered the same day after the post-test was completed. The test was made up of two sections with 24 items. In addition to this, the

number of the items and the arrangement of the questionnaire were described respectively. The first part was about the students' profiles and consisted of 4 items. Anther 20 items were asked about the students' opinions towards the use of MBCL.

3.8.3 Semi-Structured Interviews

The semi-structured interviews were conducted after the students had finished doing the questionnaire and continued to the next day depending on their comfort and convenience. 15 students in the present study were chosen to participate in this section based on their scores from the post-test results (low, medium, and high score) in order to give in-depth comments, feedback, and suggestions towards the use of MBCL. The reason why the researcher chose the 3 groups was because they might have different opinions of using MBCL based on the scores they get. The reason for doing the semi-structured interview was because students could give precise answers based on their experience. Each interview would last for 10-15 minutes since the questionnaire had already covered all the necessary information. Based on the data from the questionnaire responses, 6 questions were constructed. Furthermore, the emergent questions were proposed to gather insight and enrich the information.

3.9 Data Analysis

Both qualitative and quantitative methods were used to analyse the data in the present study. The data obtained from the semi-structured interview was analysed using qualitative method, while data from the questionnaire, pre-test and post-test were analysed quantitatively.

3.9.1 Qualitative Data Analysis

Interview data was analysed and described in a qualitative way. All interviews were recorded, transcribed, and categorized by each guided questions.

3.9.2 Quantitative Data Analysis

The present study used the Statistical Package for the Social Science (SPSS) version 20.0 to identify the effects of MBCL on enhancing Cambodian EFL students' listening comprehension and to examine the students' opinions toward the use of MBCL. Students' opinions toward the use of MBCL were analysed in terms of mean scores and standard deviations on a five-point Likert scale and were interpreted under the criterion below (adapted from Banditvilai, 2016):

4.51 to 5.00 =   Strongly agree

3.51 to 4.50 =   Agree

2.51 to 3.50 =   Unsure

1.51 to 2.50 =   Disagree

1.00 to 1.50 =   Strongly Disagree

To examine the effects of MBCL, a Paired-Sample T-Test with the significant level of 0.05 was used and descriptive statistics were applied to investigate the students' opinions towards MBCL.

3.10 Pilot Study

The pilot study was conducted on the first week of November 2019. A class of 18 students (Male=9 and Female=9) was selected. All students volunteered to participate in this pilot study. The age range of students was from 17-22. The pilot study lasted for

approximately one month and consisted of two lessons. Data collection procedures and data analysis of the pilot study were exactly the same as the description of the present study on section 3.7 Data Collection and 3.8 Data Analysis.

3.10.1 Results from Pre-test and Post-test

Pre-test and post-test were used to evaluate the students' English listening comprehension and compare their listening comprehension before and after the treatment. Table 3.5 shows the results of students' English listening comprehension outcomes after studying via Mobile-Blended Cooperative Learning. According to Table 3.5, the average score of the pre-test was 10.388 (SD=4.016); however, the average score of the post-test was 12.833 (SD=4.630). The findings indicated that the average score of the post-test was higher than the average score of the pre-test.

Table 3.5 Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pre-Test	10.388	18	4.016	0.946
	Post-Test	12.833	18	4.630	1.091

In order to investigate whether there was a significant difference between pre-test and post-test scores, both scores of the tests were compared by using a paired-sample T-test. The results revealed that both pre-test and post-test **scores** had significant differences at p=0.027 (Table 3.6). Therefore, the students' English listening comprehension had improved after they studied via Mobile-Blended Cooperative Learning. It corresponded to the first research question *"What are the effects of Mobile-Blended Cooperative Learning on EFL students' listening comprehension in Cambodian context?"*

Table 3.6 Paired Samples T-test, *p≤0.05

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Pre/Post-Test	-2.444	4.273	1.007	-4.569	-.319	-2.427	17	0.027

3.10.2 Results of Students' Opinions on the Use of MBCL

Table 3.7 shows that the students had a positive opinion on Mobile-Blended Cooperative Learning (MBCL) with the total mean score of M=4.265 and SD =0.626. The highest mean score was 4.777, whereas the lowest mean score was 3.277. The first three highest frequency statements were (1) *Learning English via MBCL, I do not only improved my listening comprehension, but I also improve vocabulary (M=4.777, SD=0.427); (2) Learning English via MBCL, I do not only improve my listening comprehension, but I also improve grammar (M=4.777, SD=0.427); (3) I prefer learning via MBCL (M=4.722, SD=0.460).* Though, the three lowest frequency statements were *(1) Learning English via MBCL, I can learn both online and offline with my teacher (M= 3.277, SD=0.669); (2) Learning English via MBCL, I can contact and ask my teacher questions easily and fast even outside class time (M=3.444, SD=0.921); (3) The contents in students' book and online materials are parallel (M=3.833, SD=0.785).* It can be assumed that the results correspond with the second research question *"What are Cambodian EFL students' opinions toward Mobile-Blended Cooperative Learning on listening comprehension?"*

Table 3.7 Students' Opinions towards the Use of MBCL on Listening
           Comprehension

No	Statement	N	M	SD
1	The objectives of the lesson are clearly stated.	18	4.333	0.485
2	Each content is clearly explained with examples.	18	4.666	0.594
3	All the audio files are clear.	18	4.388	0.916
4	All the audio files are in medium speed.	18	4.277	0.669
5	Learning English via MBCL is fun.	18	4.388	0.607
6	The contents in students' book and online materials are parallel.	18	3.833	0.785
7	The online materials are good and help me learn better.	18	4.388	0.978
8	Learning English via MBCL helps me to guess the meaning from context more efficiently.	18	4.555	0.615
9	Learning English via MBCL, I can contact and ask my teacher questions easily and faster even after class.	18	3.444	0.921
10	Learning English via MBCL, I can also learn outside the classroom at my own pace and I am able to finish each exercise on time.	18	4.166	0.383
11	Learning English via MBCL, I can learn both online and offline with my teacher conveniently	18	3.277	0.669
12	Learning English via MBCL, I am able to discuss with my classmates by using real world knowledge and solve the problems.	18	4.166	0.514
13	Learning English via MBCL, I can understand the target language easier than before.	18	4.111	0.676
14	Learning English via MBCL, I am able to develop my listening comprehension and reduce my anxiety.	18	4.555	0.511
15	Learning English via MBCL, I do not only improve my listening comprehension, but I also improve vocabulary.	18	4.777	0.427
16	Learning English via MBCL, I do not only improve my listening comprehension, but I also improve grammar.	18	4.777	0.427
17	Learning English via MBCL, I do not only improve my listening comprehension, but I also improve speaking	18	3.944	0.639
18	I prefer learning via MBCL.	18	4.722	0.460
	Total	**18**	**4.265**	**0.626**

3.10.3 Results from the Semi-Structured Interviews

Eight students were selected based on their post-test score to take part in the interview after they finished doing the questionnaire. Each student spent about 12 minutes to finish answering the interview questions. The interviews were recorded, and transcribed. They also took place at their convenience. The results of the semi-structured interviews fall into three themes: opinions, problems, and suggestions.

Firstly, the students had positive opinion toward Mobile-Blended Cooperative Learning (MBCL) in enhancing their listening comprehension. All students stated that they liked to learn with MBCL and felt it could improve their listening comprehension. Some reasons are follows: *"I like the environment that we can study anywhere we want.", "It is easy and freedom.", "It can improve my listening and grammar", "There are many lessons and easy to find.", "The content is clear and easy to understand.", and "I can improve my English skills."* This answer parallels with the questionnaire on section 2; for example, item 5, 7, 15, 16, and 17.

Secondly, the majority of students mentioned that they have some problems when they access the online learning website. For example, the majority of students indicated that, *"the internet connection is very slow and sometimes it doesn't work"*, some students said that, *"On my first day of studying I have problem with grammar practice, all my answer are correct, but my result failed."* Regarding to the internet problem, they are happy to use their mobile data.

Finally, the students gave some suggestions regarding the implementation of Mobile-Blended Cooperative Learning (MBCL). For instance, all the students suggested that they would like to learn via MBCL with other skills: "grammar,

speaking, writing, and reading". They also suggested that they would like their teacher to employ this methodology in class and study with it for the whole term.

3.10.4 Conclusion and Suggestions from the Students

After pilot study, the researcher has concerned on several issues that may occur during the real experiment based on the suggestions of the students:

1. The internet connection during the teaching and learning process was slow: *"the internet connection is very slow and sometimes it doesn't work"*, so the researcher will inform the students in advance to use their mobile data during the experiment.

2. The clear explanation of grammar should be used because some students are confused in some grammar practice; for instance, *"On my first day of studying I have problem with grammar practice, all my answer are correct, but my result failed."*

3. There should be additional explanations on doing listening exercises of lesson 3 because it is gap filling, so there should be a special criteria for completing the task, for example, abbreviation or capitalization. As the students stated that *"I was confused with section because I don't know what kind answers is accept"*

4. The students should be informed in advance that when the website is accessed by Android and IOS the software appears in different formats, so they know clearly how to use each format because the students who use IOS complained that *"I was confused and misunderstood the contents because it is different from my friend phone"*.

After the pilot study was completed some instruments were modified. For example, the duration of the pre-test and post- test are not enough for the students (40 mins for 24 items to 45 mins for 24 items) and 30 minutes is not enough to explain to the students in detail how to use the website, so 20 minutes was added. The questionnaire was changed from 18 items to 20 items because item 12 and 14 in Table 3.7 tests four different opinions, therefore they were divided into 4 statements. Lastly, the semi-structured interview was modified from 10mins to 15 minutes. Table 3.8 below illustrates the summary of the revision in each instrument.

Table 3.8 Revision of each Instrument/Activity after the Pilot Study

No	Instruments/ Activities	Before Pilot	After Pilot
1	Pre-test	40 mins, 24 items	45 mins, 24items
2	Website Training	30 mins	50 mins
3	Treatment	4 lessons, 90 mins for each lesson	4 lessons, 90 mins for each lesson
4	Post-test	40 mins, 24 items	45 mins, 24 items
5	Questionnaire	20mins, part1= 4 items part 2= 18 items	20 mins, part1=4 items part 2= 20 items
6	Semi-Structured Interview	5 mins to 10 mins for each interviewee	10 mins to 15 mins for each interviewee

3.11 Summary

In conclusion, this chapter presented the details of the preliminary study, setting of the study, population and sample, research design, instruments used, validation and revision instruments used, researcher procedures, data collection, data analysis as well as the pilot study. It also described the effective steps in writing the pre-test, post-test, questionnaire, and interview questions. In the next chapter, the results of data analysis, discussion, conclusion and recommendations will be presented.

CHAPTER 4

RESULTS AND DISCUSSION

This chapter presents the results and discussion of the present study. The first section presents the results of the students' pre-test and post-test scores towards the use of Mobile Blended Cooperative Learning (MBCL) on listening comprehension. Next, the findings of the questionnaire and the semi-structured interviews of the students' opinions toward the use of Mobile Blended Cooperative Learning (MBCL) are shown. Finally, the researcher discusses each result of the present study in line with other previous studies.

4.1 Results

In this section, the results of the present study will be explained in detail. Two themes will be described (1) the students' listening comprehension enhancement and (2) the results of the students' opinions towards the use of MBCL on listening comprehension. Quantitative and qualitative data from pre-test, post-test, questionnaire, and interviews are reported.

4.1.1 The Effects of MBCL towards Students' Listening Comprehension

The following results are to answer the research question: (1) what are the effects of Mobile-Blended Cooperative Learning (MBCL) on EFL students' listening comprehension in Cambodian context? The results from the study revealed that the students' listening comprehension had improved after learning with MBCL. This result

was measured by the pre-test and post-test for listening comprehension both before and after the experiment.

Table 4.1 Paired Samples Statistics of the Students' Pre-test and Post-test Scores

Paired Samples Statistics		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Post-Test	16.03	30	4.65	0.85
	Pre-Test	12.43	30	5.23	0.95

As shown in Table 4.1, the average scores of the students' pre-test were 12.43 (SD=5.23); however, the students' post-test average scores were 16.03 (SD= 4.65) respectively. The results indicated that the average scores of the post-test were higher than the average scores of the pre-test. In order to investigate whether there were significant differences between the pre-test and post-test scores, both scores of the tests were compared by using a paired-sample T-test. The paired sample T-test results were shown in Table 4.2.

Table 4.2 Paired Sample T-test of the Students' Pre-test and Post-test, *p≤0.05

Paired Samples Test								t	df	Sig. (2-tailed)
		Paired Differences								
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference					
					Lower	Upper				
Pair 1	Post - Pre	3.60	2.79	.511	2.55	4.64		7.04	29	*.000

$*p<0.05$

From Table 4.2, the paired sample T-test pointed out that the students' listening comprehension enhanced after using MBCL. In the present study, the students

took post-test at the end of the experiment and the results were increased at 3.60 (p=0.000), so the results of both pre-test and post-test were significantly different.

It could be concluded that the students' English listening comprehension improved after they had studied via MBCL. Particularly, the result suggested that when the students, re-accessed the MBCL website after learning in the classroom, they were able to perform well in their homework as well as in the next listening class.

4.1.2 Students' Opinions towards the Use of MBCL on Listening Comprehension

This section presents the results of the study in line with the research question (2) what are Cambodian EFL students' opinions toward the use of MBCL on listening comprehension? The results of the students' opinions were from both quantitative and qualitative data. The quantitative results were analyzed from the questionnaire responses; whereas, the qualitative results were from the semi-structured interviews.

4.1.2.1 Quantitative Results of the Students' Opinions

The questionnaire was designed to gather more information from the students towards the use of MBCL in improving listening comprehension. The questionnaire consisted of two parts: (1) the students' personal information with 4 items and (2) the students' opinions towards MBCL on enhancing listening comprehension with a five-point Likert scale, which includes 20 items.

A. Students' Personal Information

Firstly, the results were focused on the students' background information, years of English study, and the reasons for studying English. The number of years of English study and age will be presented as a mean score; however, gender and reasons for studying English will be presented as a percentage.

Table 4. 3 Students' Personal information

Students' Personal information							
Gender		Age Mean	Mean (English Study Year)	Reasons for studying English			
Male	Female			Commun ication	Career	University	Others
12 (40%)	18 (60%)	19	8	76.7 %	66.7%	43.3%	26.7%

As shown in table 4.3, there were 30 students participating in the present study, consisting of 18 females (60 %) and 12 males (40%). All participants were from the intermediate class as part of the English for Adults program at the University of Battambang (UBB), Cambodia. Their average ages were 19 years old with an average of 8 years of English study. They all had several reasons for studying English; for example, for communication (76.7 %), for career (66.7%), for studying at the university (43.3 %) and other purposes (26.7%) such as to go abroad, to experience and improve their English language.

B. Students' opinions towards MBCL on enhancing listening comprehension

This section points out the summary statistics of the students' opinions toward the use of MBCL on listening comprehension. The 20 items of part 2 in the questionnaire were interpreted based on the criteria mentioned in chapter 3: Methodology (3.9.2 Quantitative Data Analysis).

Table 4.4 Students' Opinions towards the Use of MBCL

No	Students' Opinion	M	S.D	Interpretation
1	The objectives of the lesson are clearly stated.	4.33	0.47	Agree
2	Each content is clearly explained with examples.	4.30	0.53	Agree
3	All the audio files are clear.	4.26	0.69	Agree
4	All the audio files are in medium speed.	3.76	0.67	Agree
5	The contents in students' book and online materials are parallel.	3.93	0.58	Agree
6	The online materials are good and help me learn better.	4.23	0.56	Agree
7	Learning English Via MBCL is fun.	4.56	0.50	Strongly agree
8	Learning English via MBCL helps me to guess the meaning from context more efficient.	4.03	0.71	Agree
9	Learning English via MBCL, I can contact and ask my teacher questions easily and fast even after class.	4.23	0.77	Agree
10	Learning English via MBCL, I can also learn outside the classroom at my own pace and I am able to finish each exercise in time.	4.40	0.56	Agree
11	Learning English via MBCL, I can learn both online and offline with my teacher conveniently.	4.10	0.48	Agree
12	Learning English via MBCL, I am able to discuss with my classmates by using real world knowledge efficiently.	4.13	0.68	Agree
13	Learning English via MBCL, I am able to solve real world problems easily.	3.73	0.78	Agree
14	Learning English via MBCL, I can understand the target language easier than before.	3.93	0.52	Agree
15	Learning English via MBCL, I am able to develop my listening comprehension.	4.40	0.49	Agree
16	Learning English via MBCL, I am able to reduce my anxiety.	3.96	0.71	Agree
17	Learning English via MBCL, I do not only improve my listening comprehension, but I also improve vocabulary.	4.40	0.49	Agree
18	Learning English via MBCL, I do not only improve my listening comprehension, but I also improve grammar.	4.13	0.77	Agree
19	Learning English via MBCL, I do not only improve my listening comprehension, but I also improve speaking.	4.26	0.58	Agree
20	I prefer learning via MBCL.	4.26	0.52	Agree
Total		**4.21**	**0.61**	**Positive Opinion**

Table 4.4 shows that all students agreed with all items (20 items) in part 2 of the questionnaires with the total mean scores of M=4.21 and SD = 0.61. It was clearly indicated that the students had positive opinions toward the use of MBCL on listening comprehension.

The mean scores of the students' opinions toward the use of MBCL can be categorized as the highest one (M=4.56, SD=0.50) and the lowest one (M=3.73, SD=0.78). The first three highest frequency statements were: (1) Learning English via MBCL is fun (M=4.56, SD=0.50); (2) Learning English via MBCL, I can also learn outside the classroom at my own pace and I am able to finish each exercise on time (M=4.40, SD=0.49); and (3) Learning English via MBCL, I am able to develop my listening comprehension (M=4.40, SD=0.49). Students rated these three items the highest since they did fun activities in class, they were able to do listening exercises assigned by the teacher and they had enough time to learn and finish each exercises. More detail of each item will be discussed in qualitative results.

The three lowest frequency statements were: (1) The contents in the students' books and online materials are parallel (M=3.93, SD=0.58); (2) All the audio files are in medium speed (M=3.76, SD=0.67); and (3) Learning English via MBCL, I am able to solve real world problems easily (M= 3.73, SD=0.78). These three items rated the lowest probably because the students were not really sure whether or not the contents of the listening exercises in their textbooks and the website were similar. Even though the students' English proficiency (intermediate level) are equal from one to another, their listening proficiency might not be the same. Lastly, they would probably not understand what real-world problems exactly mean in general and they did not ask any questions to clarify.

To conclude, these three lowest items do not have any impacts on the result of the study because the mean scores of the items were between 3.51 and 4.50 which can be interpreted as "agree" (Banditvilai, 2016). Therefore, all the Cambodian EFL students were keen to use MBCL and had positive opinions toward the use of MBCL on listening comprehension.

4.2.1.2 Qualitative Results of the Students' Opinions

Semi-structured interviews were used in the present study to get in-depth data of the students' opinions towards the use of MBCL on listening comprehension. Fifteen students were selected to be the interviewees based on their post-test score (lowest, medium, and highest score). The reason why the researcher decided to select three different groups of students was because these three groups would have different opinions on the use of MBCL because of their test results. The results will be presented in four different themes: (1) students' satisfaction, (2) listening enhancement, (3) problems, and (4) suggestions.

A. Students' Satisfaction towards MBCL

At the beginning of the interview, the students were asked about their personal opinions toward the use of MBCL. All students (N=15) responded that they like learning via MBCL for different reasons: the user friendliness, the convenience, it was fun as well as helpful.

Firstly, students thought that learning with MBCL was easy and user friendly. From the interviews, this reason was the most mentioned (N=14) by the students. The following statements are some examples stated by the students:

> **SS1:** *"I think MBCL is good for learners as they can learn both inside and outside class. The format is very good with big font size, big picture and clear sound."*

> **SS6:** *"I like MBCL because it is faster and easier more than copying the exercise in the notebook. Moreover, I can learn at school with teacher and practice more exercise at home. The website is easy to read and understand."*

> **SS8:** *"I think MBCL is good. Using MBCL doesn't waste my time. It is fast and I can learn wherever and whenever I want."*

> **SS13:** *"Using MBCL is good. It is easy to learn. Teacher gives clear instruction. Format is ok and easy to look, the font is big enough and the color is clear."*

It can be seen from the students' statements that they prefer learning environments where they can learn anywhere and anytime. Significantly, students desire to learn with a website which is not complicated and is accessible with any technology devices.

Secondly, the students (N=13) pointed out that MBCL is convenient and fun because they can learn both listening comprehension and play educational games like Kahoot with their classmates at the same time. This was reflected in the following claims of the students:

> **SS5:** *"I like MBCL because it is convenient and fun even though the listening exercises are easy to me. For Example, studying with MBCL is like playing a game that improves my listening skill and*

doing quizzes against time and passing a quiz is what make

learning with MBCL fun."

SS11: "*I think it is fun because it have various exercises which I*

can practice in class and alone at home and see the results

afterward."

SS13: *"Learning with MBCL is fun because we use technology to*

learn, especially Kahoot educational game and I can even learn

from home. And one more thing, after learning the lessons, I can

do the listening exercises and get the answer immediately, so feel

excited. Previously, when I learn listening skills with my own

teacher, I have to wait for everyone finishes doing their exercise

before I get the answer key. I feel bored to wait for the answers."

It can be assumed from the students' opinions that it is not only the

immediate answer keys of listening in the MBCL website, but it is also Kahoot game

that make students learn with fun and convenience.

Finally, MBCL is helpful as reported by the students (N=7). To

claim this reason, the following statements were declared:

SS4: *"I like MBCL because it is helpful. Even though the listening*

exercises are a bit easy for me, it is still helpful because it is like

reviewing what I have forgotten and I can also learn other skills

besides listening for example group work and speaking."

SS12: *"MBCL is helpful. When I do the listening quiz before, the*

teacher plays the audio for the whole class. It is hard to get the

meaning of the listening because there are some distractions. With

MBCL, it gives me space and time of doing listening exercises. I can find a nice place after class or probably my bedroom, put my headset on and listen carefully on the exercises. I get the answer afterward and I can always learn from my mistake."

So far, the students who got the highest scores in the post-test mentioned that the listening exercises were easy for them. However, they all were satisfied with the use of MBCL on enhancing their listening comprehension since it is user friendly, convenient, fun and helpful.

B. Listening Enhancement

Students were also asked whether MBCL helped them improve their listening or not. All students (N=15) reported that they had improved their listening in different ways: (1) MBCL is suitable for their current level (intermediate), (2) MBCL is a motivational learning tool, and (3) MBCL improved other skills.

Firstly, all students (N=15) stated that they had improved with their listening comprehension because MBCL was suitable for their current level (intermediate). This allowed them to explore different types of exercises (N=7), learning new listening strategies (N=4), being familiar with the foreign accent (N=10). To make it clear, the students provided the following statements:

SS2: *"In my opinion, MBCL is suitable for me because during the lesson I can find both easy and difficult exercises with multiple choices and gap filling."*

SS14: *"Even though I failed some exercises, it's suitable for me because it is intermediate level. I know the techniques of doing*

listening exercises and I can learn the native accent from the listening."

SS5: *"To me, it is suitable, but it seems lower than my listening ability because I can do all exercises."*

In brief, the three groups of students mentioned that the listening exercises in the MBCL website were suitable for them. In contrast, the three groups had different idea on suitability. The high scoring group claimed that the listening exercises were quite easy for them. The medium scoring group mentioned that they could find both difficult and easy exercises. And the low scoring group found that they sometimes got the poor result when they did the listening exercises.

Secondly, the students (N=12) improved their listening comprehension because MBCL was a motivational learning tool. Some examples of the comments are illustrated as follows:

SS2: *"After learning, I feel that I want to learn more because it is attractive and easier than traditional classrooms."*

SS12: *"I feel more motivated after learning with MBCL because it is easy for me to practice my listening and grammar before I go to sleep."*

SS13: *"MBCL increases my motivation in learning because it gives feedback immediately when I do the exercises."*

As can be seen, there were no significant different opinions on MBCL as the motivational learning tools among the three groups of students: low, medium, and high scores.

Last but not least, MBCL does not only improve the listening comprehension, it also improves other skills; for example, speaking (N=8), pronunciation (N=6), grammar (N=4), and vocabulary (N=3). This can be demonstrated from the students' interview answers as mentioned below:

> **SS2:** *"Moreover, I can improve my grammar, vocabulary, and speaking because the teacher has other activities for us to do after doing listening exercises, for example group presentation."*
>
> **SS13:** *"After I use MBCL, I improve my pronunciation and speaking because the teacher allows us to do group discussion which enables me to speak and build good relationships with my friends."*

To recap, these three groups of students had the same opinions that, besides improving the listening comprehension, they also improved with other English skills such as speaking, pronunciation, grammar, and vocabulary. Consequently, MBCL enabled them to build up good relationship with their classmates.

C. Problems Encountered while Using MBCL

At this point, the three groups of students encountered the same problem which is a poor internet connection. The poor internet connection blocked them from accessing the website and doing the listening exercises.

Secondly, although MBCL is comprehensive and user friendly, the students faced some difficulties with unfamiliar accents (N=1), vocabulary and grammar knowledge (N=3). When the students were unfamiliar with the answer and had limited vocabulary and grammar, they could not do the exercises well, especially the gap filling. For example:

SS5: *"I have problem with accent. I am not familiar. I also confuse the grammatical structure of some exercises."*

SS13: *"I have problem with listening exercise 3. I know the words to complete, but I can't spell and paraphrase them."*

At this point only the high scoring students and the low scoring students reported the problems. It can be noticed that although the high scoring group performed well in their post test scores, they had problems with the speakers' accents. In contrast with the high scoring group, the low scoring group had problem with limited vocabulary and grammar which made them get low scores in the exercises as well as the test.

Finally, the students (N=2) reported that they had problems with distraction from other social media installed on their phone, as Cambodian students like using many social media applications.

SS6: *"There are a lot of social media applications on my phone. When I get notifications, I often lose attention."*

SS14: *"The problem while using MBCL is distraction from social media. I have to register to do exercise again when I received the notification or call from other sources."*

From the results mentioned previously, only the low scoring group had problems with the distractions from social media. It is probably one of the reason that made them perform poorly in their post test.

D. Suggestions towards MBCL

Students were asked whether they had any suggestions towards MBCL. The suggestions from the students can be broadly categorized into themes: (1)

include other skills and (2) a more colorful website.

Firstly, the students suggested that they would like to learn other skills, for example: Reading comprehension (N=10), Grammar (N=5), speaking (N=4), writing (N=2) and vocabulary (N=2). The students mentioned that if these skills were included in MBCL, they could learn more anytime and anywhere. To make it clear, some examples of the students' suggestions are presented below:

> **SS2:** *"I would like to learn more skills via MBCL such as writing and reading. If MBCL included these skills, I could read anywhere and practice more."*
>
> **SS3:** *"I want to learn speaking via MBCL because there are not many websites to help improve speaking."*
>
> **SS8:** *"I would like to learn additional reading, vocabulary, and grammar via MBCL."*
>
> **SS10:** *"I would like to learn vocabulary and grammar via MBCL because the grammar and vocabulary already on the website only related to listening lessons."*

A large number of students suggested adding reading comprehension on the website; however, very few students suggested grammar, vocabulary, and speaking. It is probably because these three skills are already included in MBCL. Furthermore, writing skills were also not suggested as much because writing is not that easy to correct and give feedback online.

Finally, the students suggested that they would like to have a more colorful website (N=2). They claimed that a more colorful website would attract their attention. It could be illustrated from the following statements.

> **SS9:** *"I feel that the there are no colorful in the website. I want to have multiple color included in the website, so there will be more attractive than it is now."*
>
> **SS11:** *"To be honest, the color of the website in each page is good enough. I like it, but if there is the color picture in unit 1 exercises, it would be great."*

From the above opinions, it can be inferred that female students prefer colorful text and pictures on the website; whereas male students do not care about color as long as it is readable and easy to understand.

In summary, this section presented the results of students' satisfaction, listening enhancement, problems encountered by the students, and the students' suggestion towards MBCL. In the next section, the discussion of each result will be presented.

4.2 Discussion

The results of the present study suggested that MBCL could help improve Cambodian EFL students' listening comprehension. The following section is the discussion of the present study purposes and research questions.

4.2.1 The Effects of MBCL towards Students' Listening Comprehension

The first purpose of the present study was to investigate the effects of MBCL on EFL students' listening comprehension in a Cambodian Context. The results of the students' pre-test and post-test of the listening comprehension produced by MBCL will be discussed in this section. The results indicated that the average scores of the post-test (M=16.03) were higher than the pre-test (M=12.43). Therefore, there was a

statistically significant difference between the average scores of the pre-test and post-test at p=0.000 (p<0.05). It clearly revealed that the students' listening comprehension had improved after the implementation of MBCL. In accordance with the results mentioned, it can be assumed that MBCL had positive effects on the students' listening comprehension. There were several reasons why the students' listening comprehension had significantly improved. The following paragraph will explain the reasons in detail.

The first reason for the students' listening comprehension improvements might be from the Index of Item Objective Congruence (IOC). IOC is a useful evaluation method to test items at the development stage before the launch of pilot study (Zumbo, 2003). More importantly, verifying the test items using IOC can inform the researcher whether or not the test items are valid and appropriate for the target students (Muneerat & Chinokul, 2014). In the present study, three experts in the field of English language teaching have evaluated and approved all the instructional and research instruments as appropriate for the target students. That means all materials of the present study were suitable to apply to the target students of the intermediate class. The results of the IOC evaluation of the present study was consistent with the previous study mentioned above (Muneerat & Chinokul, 2014).

The second reason was probably from the pilot study with non-research participants, before the main experiment to confirm that the MBCL materials were efficient for improving listening comprehension and to ensure that there were no technical problems occurring during the process of teaching and learning. Therefore, the problems which occurred during the pilot study were revised and modified. As can be seen in Malmqvist, Hellberg, Mollas, Rose, &Shevlin (2019) a pilot study could help modify and improve the research instruments and design prior to the main experimental

study. According to Fraser, Fahlman, Arscott, & Guillot (2018) implementing the pilot study was to intensify the possibility of success in the main study. The consequence of the pilot study in line with the study of Fraser, Fahlman, Arscott, & Guillot (2018) was that it helped the researcher of the present study to make the materials more effectively for the main experimental study.

The third reason would come from the constructivist learning theory. Constructivism claims that students are actively engaged in their own learning process where they organize new knowledge on basic existing knowledge and interact with other students and solve the problems via conversation (Richards &Rodgers, 2014). The present study corresponds with Richards & Rodgers (2014) because the researcher applied constructivism, together with listening models to allow students to comprehend the listening using their prior knowledge and experience in all stages of listening tasks (pre, while, and post listening).

The fourth reason would probably be from the well prepared lesson plans. Based on Brown (2007) and Mcmullin (1992), lesson plan is considered as a unified set of procedures covering a period of class time and it is essential for teachers as it exemplifies steps in a curriculum before and after the instruction so that the teachers can prepare well for the next class. In the present study, the researcher carefully wrote the integrated lesson plans which corresponded to the students' level as well as the MBCL website.

The last reason could be from the uniqueness of the three features combined in the learning website (MBCL website) and the teaching approach: mobile, blended, and cooperative learning. These three features were integrated in the process of writing lesson plans and developing the MBCL website. The reason why these three elements

were included was because there have been numerous studies on individual feature showing that students' learning performances have increased in terms of academic outcome, motivation, and learning environment as stated in Banditvilai (2016); Al-Bataineh, Banikalef, & Albashtawi (2019) and Hosseinpour, Biria, & Rezvani (2019). The researcher had reviewed many previous studies, but the effects of MBCL on listening comprehension or on other language skills could not been found. This was probably because there were no published research studies on this topic. In this regard, the findings of the present study were not in line with any previous research studies.

In contrast, if the researcher looks at the individual features (mobile, blended, and cooperative learning) of the present study, it is consistent with all previous studies in Chapter 2: Literature Review. For instance, a study conducted by Kim (2014) found that students performed better after learning with mobile blended methods and more importantly it was useful and helpful for language learning. Another study of the effects of cooperative blended learning also claimed that students had higher learning achievements and motivation after the experiment (Sulisworo, Agustin, & Sudarmiyati, 2016). Consequently, the combination of the three (mobile, blended, and cooperative learning) also had positive effects on the students' language learning; particularly, listening comprehension as mentioned in the findings of the present study.

To conclude, the positive effects of the students' listening comprehension of the present study were assumed to be from the approval of valid materials using IOC from the three experts, the pilot study before the launch of the main study, learning theory (constructivism), well prepared lesson plans, as well as the three features combined in the learning website (MBCL website) that offered the students more opportunities to be exposed to both listening and other language skills (grammar,

vocabulary, and speaking) both online and offline. As a consequence, students can learn more themselves any time anywhere on their own schedule because they can re-access all the materials after class, plus additional listening homework. The following section will be discussed on the students' opinions towards the use of MBCL.

4.2.2 Students' Opinions towards the Use of MBCL on Listening Comprehension

The second purpose of the present study is to examine the students' opinions toward the use of MBCL on listening comprehension. Hence, the discussion of the finding from the questionnaire and semi-structured interviews are presented. The findings from both the questionnaire and interviews revealed that the students had positive opinions towards the use of MBCL. As reported from the questionnaire, the students liked learning via MBCL because (1) it is fun, (2) it can improve their listening comprehension and other skills and (3) it is convenient because they can learn anytime anywhere at their own pace. It can be interpreted that the students enjoyed learning with MBCL since it could improve their listening comprehension and provide them with different exercises and skills improvement. Both the questionnaire and interview findings are consistent, so the following themes are the detailed explanation of the students' opinions toward the use of MBCL.

A. Students Satisfaction towards MBCL

Students elaborated from the questionnaire that they liked learning listening with MBCL because it was fun (M=4.56). And the results from the interviews also indicated that all the students (N=15) liked learning listening with MBCL because it was user friendliness, convenient and, fun as well as helpful. The sense of user friendly might come from the format of the website use in their phone with big font size

and color. As mentioned by many students, the font size was big enough to read through their phones and the color of each page was bright enough for them to read and understand as well. As a result, this user friendliness would not make it feel difficult to engage in each task while using the MBCL website and it would make them pay more attention to learning English, especially listening comprehension. In accordance with this, the study conducted by Sulisworo &Toifur (2016) on the role of mobile learning on the learning environment shifting at high school in Indonesia claimed that mobile phones can help increase students learning performance, interest and responsibility because of being a user friendly device.

The sense of fun and convenience caused by the educational game (Kahoot) with scheduled exercises, helped construct a feeling that learning could occur anytime and anywhere. The students of the present study feeling happy and engaged more in the classroom activities when they played educational games individually and with teams. They had fun with the game and at the same time they improved their English knowledge. Specifically, the schedule exercises also made the students feel excited. As mentioned in the results, the time limitation in the listening exercises made them feel happy and want to do more exercises. The finding was consistent with the study of Gozcu &Caganaga (2016), who investigated the importance of using games in EFL classrooms with undergraduate students in Cyprus by implementing a game called "'Twister". The findings indicated that games had provided the learners an environment of fun, motivation and high learning performance. Besides, the students of the present study expressed their opinion in the interview that they could learn anytime and anywhere. First, they learned once in class with the teacher and friends, then they were able to replay the games, redo the exercises and complete their listening homework at

their own pace and anywhere they wanted as their mobile phones are portable. For instance, some students stated that they could even listen and do the listening exercises before they went to bed as well, as listen alone during their leisure time. It corresponded with the study of Martin, McGill, & Sudweeks (2013) that mobility of accessing learning anytime had an impact on the students' motivation and participation in mobile learning.

In addition, the students also mentioned that MBCL is helpful because they can learn listening with mobile blended learning and at the same time they can learn other skills using cooperative learning. As well as learning listening comprehension using their phones, the students were able to learn extra skills like grammar and vocabulary on the MBCL website. More importantly, they had an opportunity to work in pairs or groups where they could express their own thoughts on the previous listening exercises. There were several pieces of evidence to support this from the semi-structured interviews. MBCL was helpful because they could do many types of listening exercises with immediate results, have unlimited access to the website, improve their listening comprehension as well as other skills (grammar, pronunciation, and vocabulary). In addition to this, it enabled them to develop speaking skills and build up good relationships with their classmates when they did group work. Several previous studies (Kim, 2014; Hosseinpour, Biria, & Rezvani, 2019) also claimed that it is helpful to use mobile phones and blended learning as the English learning tool because it is fun and convenient to overcome their learning obstacles.

As a result the present study suggests that mobile-blended and cooperative learning (MBCL) can be included in developing listening comprehension to help the

students improve their academic performance in a fun, convenient, helpful, as well as user friendly manner.

B. Listening Enhancement

All students positively believed that learning with MBCL could help them improve their listening comprehension. The results from the questionnaire revealed that MBCL was able to help students improve their listening comprehension (M=4.40). In addition to this, the semi-structured interview results from the students (N=15) also indicated that MBCL was able to improve their listening comprehension because (1) MBCL is suitable for their current level (intermediate) and (2) MBCL is a motivational learning tool. It can be explained that the learning website was developed carefully based on the target students' level and the appropriate listening materials that corresponded with their textbook mentioned in chapter 3: Research Methodology. Hence, the students' learning motivation were from variety of listening exercises (multiple choices, gap filling and true/false statements) and the cooperative activities in the classroom where the teacher categorized the students into pairs and groups to work on the class activities as well as doing the individual listening exercises on the MBCL website. All of these materials and activities turned the boring classroom into an interesting and motivating environment.

The findings were in line with the study from Banditvilai (2016) and Ginaya, Rejeki, & Astuti (2018) that blended learning can increase learners' motivation and interest. Another study of Sulisworo, Agustin, &, Sudarmiyati (2016) also claimed that cooperative blended strategies can help increase learning achievements more than those taught using only face to face, as well as the learners' motivation. The findings from the present study found that it not only increased students' listening

comprehension, but also increased motivation as well as other skills (speaking, pronunciation, grammar, and vocabulary). Both the online learning website and in-class activities offer students listening tasks, grammar, and vocabulary, as well as the speaking activities at the post listening stage link to the main listening tasks where students can work cooperatively in pairs or groups.

C. Problems Encountered while Using MBCL

In addition to the positive opinions expressed toward the use of MBCL on listening comprehension, there were some problems encountered by the students in the semi-structured interview. Students expressed concern that they could not do their exercises well because of their mobile internet connection. When the internet connection appeared to be slow, the loading of each page took some time. This result corresponds with Jibrin, Musa, & Shittu (2017), who mentioned in the results of their study that the internet connection had a positive impact on the students' academic performance, while a lack of internet connection was their challenge. These problems can be found when integrating technology into language learning activities. In the present study, the students' internet data did not work well which made them get stuck at the beginning of the login page or in the middle of their listening practices as mentioned by many of the students. This internet access problem may have been because of the large number of mobile internet users in Cambodia, especially for online learning. As a result of the COVID-19 pandemic all students were learning online using their mobile data at the same time that the experiment was being conducted.

The second problem was the distraction. Students indicated that, while they were learning with the MBCL website, distractions blocked them from performing well in doing their listening exercises because they lost their concentration. This

distraction was mainly from their social media applications, like Facebook, Instagram, WhatsApp, or Telegram. This finding was in accordance with the study of Andersson, A., Hatakka, M., Grönlund, Å, & Wiklund, M. (2013) who studied reclaiming the students – coping with social media in 1:1 schools. The study was conducted with three Swedish schools by using surveys and interviews. The results revealed that the distractions from social media interrupted the students from completely engaging in learning.

The last problem was the linguistic features: an unfamiliar accent, a lack of vocabulary and grammar knowledge. Interview responses from the students' showed that they were not able to comprehend the listening exercises and finish them because they could not catch up with what the speakers said. Once the students understood nothing about the exercises, they were more likely to give up on doing those exercises. This finding was consistent with Buck (2001) who claimed that unfamiliar accents can make listening comprehension almost impossible. Regarding vocabulary and grammar knowledge, the students specified that they did not finish doing the listening exercises when they knew what words they should complete in the blank, but did not know how to spell them correctly. On the other hand, grammar knowledge was also a concern for them-some students mentioned that they sometimes confused some grammar points which are important to understand and interpret the meaning of the whole listening text. This finding was in line with Hanmouda (2013) and Hadijah &Shalawati (2016) who stated that limited vocabulary mastery and grammatical structures obstructed students' listening comprehension. Due to this finding, the researcher of the present study suggests that teachers should teach students vocabulary, grammatical structure, and

make them familiar with some common accents beforehand in order to successfully teach listening comprehension.

To sum up, this section discussed the reasons why the students had positive opinions toward the use of MBCL in learning listening comprehension. It would be because of the user-friendly, convenient, fun, motivational tool to improve their listening comprehension. Whereas some problems found by the students while they were using MBCL were: poor internet connection, distraction, and linguistic features. These problems will not have a big impact on students learning in the future if the teachers consider the suggestion of the researcher mentioned above.

4.3 Summary

This chapter presented the results and discussion of the present study. The effects of the use of MBCL on listening comprehension and the students' opinions toward the use of MBCL on listening comprehension were discussed in detail. The conclusion and recommendation of the study will be presented in the next chapter, respectively.

CHAPTER 5

CONCLUSION AND RECOMMENDATIONS

This chapter presents the conclusion of the findings from Cambodian EFL students who have learnt with Mobile-Blended Cooperative Learning to enhance listening comprehension, pedagogical and further study recommendations.

5.1 Findings

The present study aimed to (1) investigate the effects of Mobile-Blended Cooperative Learning (MBCL) on EFL students' listening comprehension in a Cambodian context, and (2) examining Cambodian EFL students' opinions toward the use of MBCL on listening comprehension. Based on the above objectives, the study was conducted to answer the following research questions:

1. What are the effects of Mobile-Blended Cooperative Learning (MBCL) on EFL students' listening comprehension in Cambodian Context?

2. What are Cambodian EFL students' opinions towards the use of (MBCL) on listening comprehension?

To answer these research questions, both qualitative and quantitative research methods were used in the present study. The quantitative research method was used to investigate the effects of Mobile-Blended Cooperative Learning (MBCL) on students' listening comprehension, as well as to examine the survey questionnaire on the students' opinions towards MBCL on listening comprehension. Qualitative research

methods were used to examine semi-structured interview questions on students'opinions towards MBCL on listening comprehension. Additionally, lesson plans, the online learning website, pre-test, post-test, questionnaire, and semi-structured interview were included in the study. The summary of the present study can be described as follows:

1. The scores of both the pre-test and post-test were compared and analysed using a paired sample T-test. Therefore, the results demonstrated that there was a significant difference between the pre-test and post-test scores at $p=0.000$ ($p<0.05$). It demonstrates that the students' listening comprehension has improved significantly.

2. The results of both the questionnaire and the semi-structured interview indicated that the students have a positive opinion towards the use of MBCL on listening comprehension (M=4.21, SD=0.61). It could be inferred that the students were keen on the use of MBCL as it enhanced their listening comprehension.

In short, MBCL was developed based on learning theories and teaching approaches; hence, the IOC validation, well-developed online learning website and lesson plans could help students enhance their listening comprehension. This can be shown from the average mean score of the post-test which is higher than the pre-test. Thus, the results from the questionnaire and semi-structured interview pointed out that students had positive opinions toward the use of MBCL because it was user friendly, fun, convenient, and a motivating tool for learning. Not only that, they also mentioned in the questionnaire that they had improved their vocabulary, grammar, pronunciation and speaking as well.

5.2 Recommendations from the present study

Reflecting on the significance of the study, there are two main recommendations of Mobile-Blended Cooperative Learning in the Cambodian classroom context: pedagogical recommendations and further study recommendations.

5.2.1 Pedagogical Recommendations

This section will provide some practical recommendations to EFL teachers who are willing to implement Mobile-Blended Cooperative Learning (MBCL) in their classroom. There are some practical implementations of Mobile-Blended Cooperative Learning methods in the classroom context, minor adjustments lead to the success of students' academic performance.

Firstly, the MBCL lesson plans developed by the researcher have proved to be effective, based on the students' performance on post-test results and their opinions toward the use of MBCL materials. They all increased their listening comprehension after the experiment and they have improved not only listening comprehension, but they also improved their vocabulary, grammar, and speaking. More significantly, they have positive opinions toward the use of MBCL materials. It is because the researcher has designed the lesson plans carefully by integrating the technology (mobile), blended learning, and teaching approach (cooperative learning) to achieve the learning goal. Therefore, the recommendation in terms of designing the lesson plans is to design the integrated skills lesson plans with blended and cooperative learning based on the objective set at the beginning of the lesson and to modify according to the specific skills and level focus. For example, the present study has focused on listening comprehension, so the design of lesson plans is a pre-listening task, main listening task, and post listening task. If teachers would like to teach reading, writing, speaking or other context

(advanced and beginner level), they should adapt and modify the lesson plans accordingly.

Secondly, if novice and experienced teachers would like to implement MBCL website in their classroom, but they do not feel confident or do not have any experience in developing their own website, they can use the website already on the internet and add some class activities that corresponds to their learning objective. When they choose the ready learning website, they must make sure that it is appropriate for their students' level or ability. The basic concepts of MBCL is to study with the teacher face to face at the start, practice online learning exercises, work in groups or in pairs, and do homework (refer to Figure 1.1 Mobile-Blended Cooperative Learning Overview Designed by the Researcher).

Finally, developing the MBCL model was a systematic process which the researcher thought carefully about to make it a new pedagogical innovation. It is not only blended learning, but three in one (mobile, blended learning, and cooperative learning). Thus, the policy maker or curriculum designer should make it more appealing in EFL education by utilizing MBCL as the main model to develop other skills (grammar, reading, writing, pronunciation, or speaking) and other contexts (beginner or advanced level).

Mobile-Blended Cooperative Learning (MBCL) can help students learn with fun, convenience, user-friendliness as they use this motivational tool. Hence, MBCL may promote lifelong learning an integrating technology tool supporting 21st century teaching methodology in the learning process. As it is now a COVID-19 pandemic era, teachers may consider using it in their classroom by modifying from face to face teaching at the start to online learning. More crucially, this new pedagogical innovation

will be an effective teaching method for a post-COVID-19 educational setting in the Cambodian context as there will be a new normal setting in every sector including education. If teachers are ready and familiar with MBCL, there will be interesting and fun classroom environments with students' engaged in learning.

5.2.2 Recommendations for Further Studies

The findings of the present study indicate that MBCL has improved students listening comprehension and students' motivation. More importantly, the results and limitations of the present study have raised many interesting questions and recommendations for further study.

Firstly, further study may explore the effects of Mobile-Blended Cooperative Learning (MBCL) on other language skills (reading, writing, speaking, or grammar). Based on the findings from the semi-structured interviews, the majority of students have suggested that they would like to enhance other language skills. So, other language skills should be used as the main variable in further studies.

Another possibility of further study would be to examine the students learning attitude through the exercises and how frequently they login to the website during and after class. In addition to this, further studies could look closely into the relationship between students' attitude toward their learning performance.

The last possibility is further research into different learning contexts (other school levels, proficiency levels or age groups) and other subject areas (pure science subjects) to allow students to experience a new learning environment and to evaluate if it is also effective for these groups of students.

This section has described two recommendations for pedagogical and further studies. Pedagogical implications consisted of careful consideration of designing and

adjusting MBCL lesson plans, implementing the MBCL website, utilizing MBCL model in other language settings. With respect to the recommendation for further studies, researchers are able to maximize their studies by investigating the effects of MBCL on other language skills, learning contexts and other subject areas. Another potential is to examine the attitude of students in relation to MBCL.

5.3 Conclusion

The present study was conducted (1) to investigate the effects of MBCL on EFL students' listening comprehension in a Cambodian Context and (2) to examine students' opinions towards MBCL on listening comprehension. In this study, an intermediate class with thirty students at the English for Adults program from the University of Battambang (UBB) were purposely selected. They were required to study listening comprehension via MBCL. After the official launch of the experiment, pre-test and post-test scores were collected and analysed to check for listening improvement. Thus, questionnaire and semi-structured interviews were used to authenticate their opinions towards MBCL on listening comprehension. The conclusion of the findings are based on pre-test, post-test, questionnaires, and semi-structured interviews, respectively. Pre-test and post-test scores were used to answer the first research question. There were significant differences between both tests at p=0.000 (p≤0.05). Questionnaire and semi-structured interviews were administered to answer the second research question whether students have positive or negative opinions toward Mobile Blended Cooperative Learning (MBCL). The mean score (M=4.21) showed that students had positive opinions toward MBCL on listening comprehension in terms of listening

improvement, convenience, fun, motivation, user-friendly website as well as the improvement of other skills (pronunciation, grammar, vocabulary and speaking).
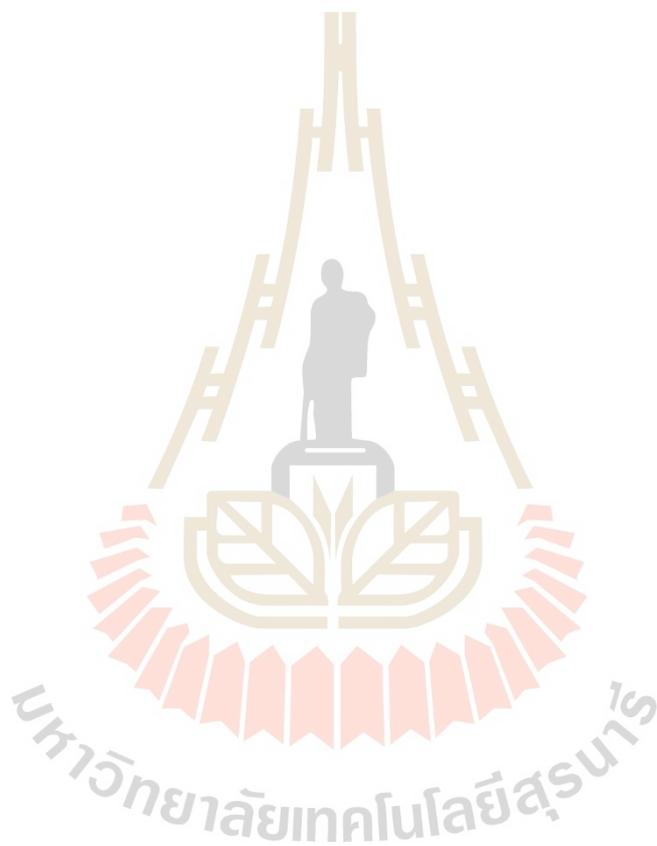
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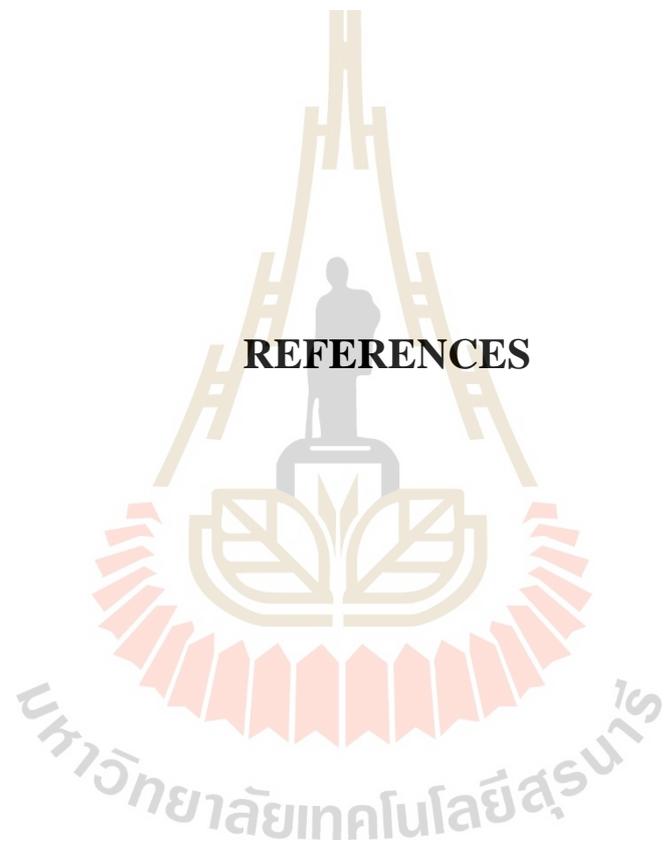
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APPENDICES
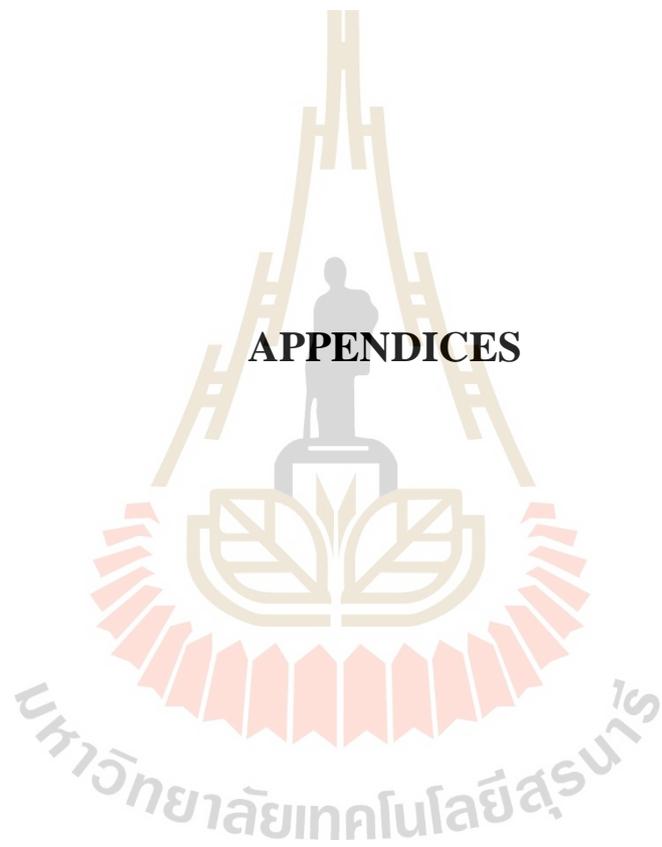
Appendix A: Pre-Test and Post-test

Pre-Test

Part 1: Listen to 6 short recordings below and circle the best picture for each question. You will hear each recording twice. Now you have 30 seconds to read each question.

1. Where will the friends meet?

2. What has the girl forgotten to bring?
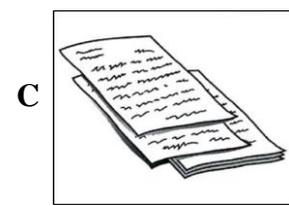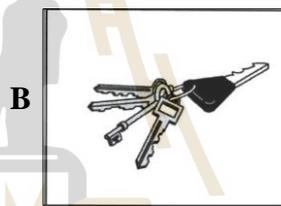
3. Which TV program is on at nine o'clock tonight?
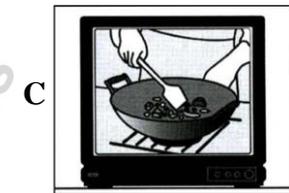
4. How will the man book the tickets for the show?
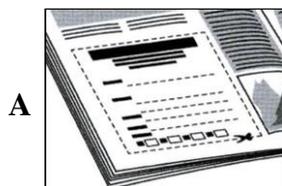
5. What will the man do this winter?
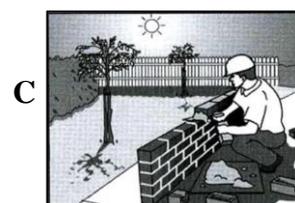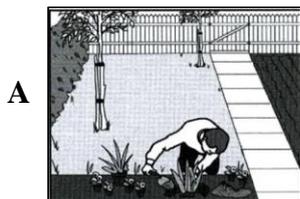
6. How does the man want the woman to help?
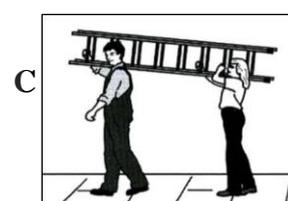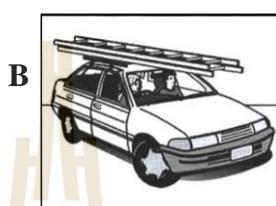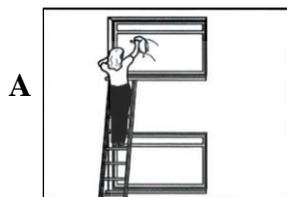
Part 2: Listen to an interview with Jack Williams, who is talking about a town named

Swanton. Circle the best answer for each question. You will hear the

recording twice. Now you have 60 seconds to read each question.

1. Where is the town of Swanton located?

A. near the sea

B. by a lake

C. on a hill

2. What does Jack like the most about living in Swanton?

A. There are opportunities for climbing nearby.

B. There is plenty of activity in the town.

C. There is interesting wildlife near the town

3. What does Jack say about entertainment in Swanton?

A. A music festival takes place in the town.

B. Its football club has done well this year.

C. An art center has recently opened.

4. Why is jack worried about the environment of Swanton?

    A. Because the water in the river is dirty

    B. Because there are few wild birds around today.

    C. Because pollution has destroyed the plants in one area

5. What does Jack say about the way Swanton has changed?

    A. He preferred the town when it was smaller.

    B. He thinks it is a more interesting place.

    C. He is sorry that there are fewer jobs available.

6. Why does Jack feel positive about the future of Swanton?

    A. Because there is a successful new shopping center.

    B. Because there will be a new airport soon.

    C. Because a new university is opening.

Part 3: Listen to a woman talking about a singing course she attended, and fill in the missing information below. You will hear the recording twice. Now you have 30 seconds to read each statement.

SINGING FOR BEGINNERS

Place: Brownstoke College

Course details:

- Lena Phipps, a very good former **(1)**……………………singer is the tutor.
- The maximum number of students per course is **(2)**……………………
- All classes start with exercises that help students to **(3)**…………………
- Students learn to sing **(4)**…………………, modern and pop songs.
- Accommodation is in single or twin rooms.
- Cooked breakfast, lunch and dinner are included.
- There is a very good lunch, especially **(5)**……………………………

Date the next course start: (6)……………………….., 24th September

Part 4: Listen to a conversation between a boy, Rolf and a girl, Maria about their

future job. Circle **True** for **correct** statement and **False** for **incorrect**

statement. You will hear the recording twice. Now you have 30 seconds to

read each statement.

1. Maria would like to travel a lot as part of her job.

    A. True   **B.** False

2. Maria is confident that she will be able to work for an airline.

    A. True   **B.** False

3. Rolf wants a job that connects with his degree.

    A. True   **B.** False

4. Maria and Rolf agree it is important to have a good salary.

    A. True   **B.** False

5. Maria hopes to work for several different companies

    A. True   **B.** False

6. Rolf's dream is to manage his own company one day.

    A. True   **B.** False

Post-Test

Part 1: Listen to 6 short recordings below and circle the best picture for each

question. You will hear each recording twice. Now you have 30 seconds to

read each question.

1. What did the thieves steal?

A   B   C
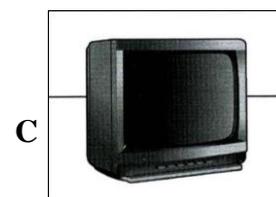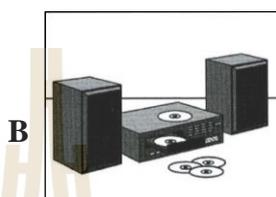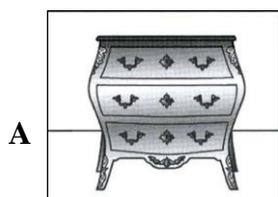
2. What present will they take?

A   B   C
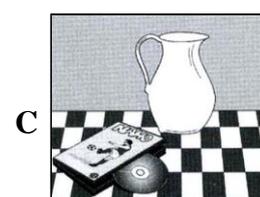
3. What will the woman eat tonight?

A   B   C
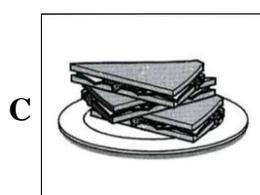
4. How much will the girl's ticket cost?

A £10.15   B £10.45   C £12.65
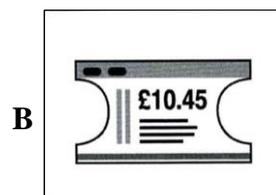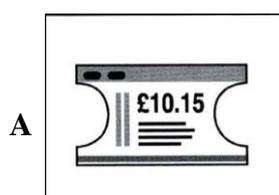
5. What is the grandmother's job now?

A

B

C
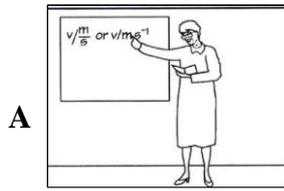
6. Which button has the boy lost?

A

B

C
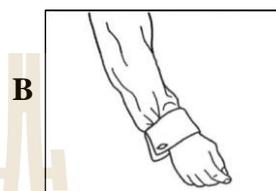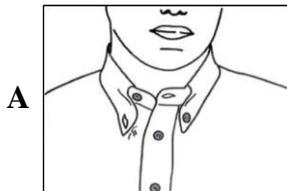
Part 2: Listen to an interview with Harry Park, who is talking about his adventure travel company. Circle the best answer for each question. You will hear the recording twice. Now you have 60 seconds to read each question.

1. Why did Harry first become interested in adventure travel? Because his father

  A. gave him adventure stories to read.

  B. worked in a travel company.

  C. talked a lot about the places he'd been to.

2. Why did Harry decide to start an adventure travel company? Because he…

  A. wanted to share his experience with others.

  B. thought he could make a lot of money.

  C. hoped to do more travelling himself.

3. Who suggested the name for Harry's company?

  A. a friend

  B. a customer

  C. his wife

4. What does Harry do when he visits a place? He tries to……

    A. give the local people jobs..

    B. take modern equipment

    C. avoid damaging the area.

5. What does harry say about doing dangerous things?

    A. It's a part of his job.

    B. It's frightening.

    C. It's enjoyable.

6. What is Harry's favorite place?

    A. a mountain

    B. a building

    C. a river
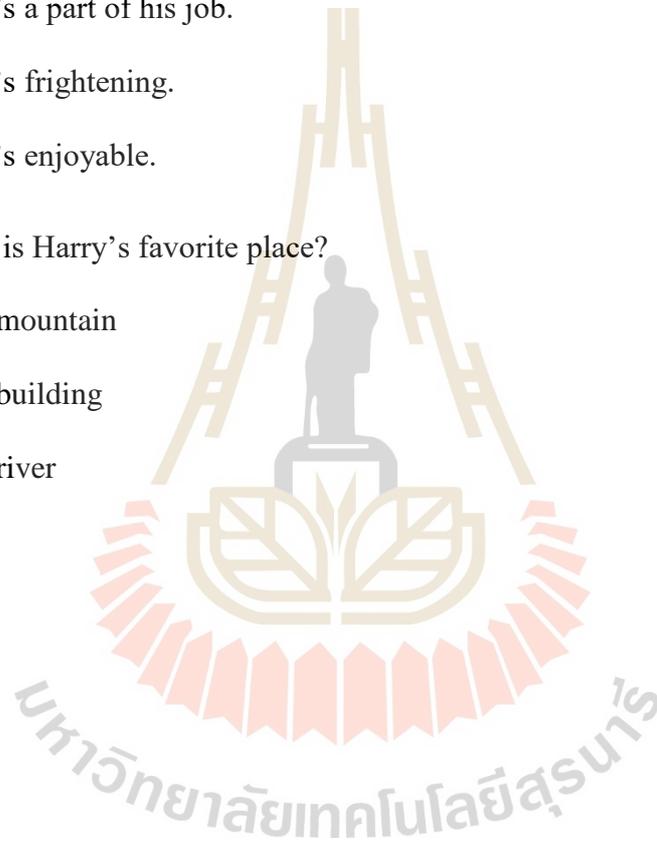
Part 3: Listen to a man telling some young people about a four-week study program

in a college and fill in the missing information below. You will hear the

recording twice. Now you have 30 seconds to read each statement.

STUDY PROGRAM

Course available on:
- English Literature
- 18th century **(1)**………………………
- Modern Architecture

Dates for all courses:
- Start date: 14th June
- End date: **(2)**…………………………
- Classes: every day except **(3)**…………

Course fees: £425 each

Reduce prices for (4)……………………………………

Included in price:
- Accommodation and food
- Use of the library
- Social activities
- Books

Not included in price:
- Extra **(5)**…………………
- Transportation

Available from college secretary:
- Registration forms
- A copy of the **(6)**………..for your course

Part 4: Listen to a conversation between Karl and his wife Jenny about the holiday
they have just had. Circle **True** for **correct** statement and **False** for **incorrect**
statement. You will hear the recording twice. Now you have 30 seconds to
read each statement.

1. Jenny and Karl are both happy to be home after their holiday.

   B. True   **B.** False

2. Jenny thinks the weather forecast they heard for their holiday was correct.

   B. True   **B.** False

3. Both Jenny and Karl liked the way their hotel served meals.

   B. True   **B.** False

4. Jenny thinks they had a better room on this holiday than last year.

   A. True   **B.** False

5. Karl was angry about the condition of the hotel sports equipment.

   B. True   **B.** False

6. Jenny and Karl are both keen to plan another holiday immediately.

   B. True   **B.** False

Appendix B: Test Specification

Test Specification

Students: Cambodian EFL Intermediate students

Educational context: Regular English Class (English for Adults Program)

Purpose of test: Summative evaluation

Type of test: Achievement

Response type(s): Picture multiple choice, multiple choice, gap filling, true/false

Scoring: 1 point for correct; 0 points for incorrect

Interpretation: Criterion-referenced; cut score = 50% (12 items correct)

Potential types of scoring reporting: Pass/fail, total score

Time: 45 minutes

Listening						
Techniques/ section	**Part 1** Short monologues/ dialogues	**Part 2** Long interview	**Part 3** Long monologue	**Part 4** Long informal dialogue	# of items	% of items
Picture multiple choice	6	-	-	-	6	25%
Multiple choice	-	6	-	-	6	25%
Gap filling	-	-	6	-	6	25%
True/False	-	-	-	6	6	25%
#of items	6	6	6	6	24	
% of items per section	25%	25%	25%	25%		100%

Appendix C: IOC Results of Pre-Test and Post-Test

Pre-Test

Description	Index of item Objectives Congruence (IOC)			
	n 1	**n 2**	**n 3**	**Total**
Part 1: Picture multiple choices				
Question 1	1	1	1	3
Question 2	1	1	1	3
Question 3	1	1	1	3
Question 4	1	1	1	3
Question 5	1	1	1	3
Question 6	1	1	1	3
Part 2: Multiple Choice				
Question 1	1	1	1	3
Question 2	1	1	1	3
Question 3	1	1	1	3
Question 4	1	1	1	3
Question 5	1	1	1	3
Question 6	1	1	1	3
Part 3: Gap filling				
Question 1	1	1	1	3
Question 2	1	1	1	3
Question 3	1	1	1	3
Question 4	1	1	1	3
Question 5	1	1	1	3
Question 6	1	1	1	3
Part 4: True/False				
Question 1	1	1	1	3
Question 2	1	1	1	3
Question 3	1	1	1	3
Question 4	1	1	1	3
Question 5	1	1	1	3
Question 6	1	1	1	3
			IOC> 0.5	**1**

Post-Test

Description	Index of item Objectives Congruence (IOC)			
	n 1	**n 2**	**n 3**	**Total**
Part 1: Picture multiple choices				
Question 1	1	1	1	3
Question 2	1	1	1	3
Question 3	1	1	1	3
Question 4	1	1	1	3
Question 5	1	1	1	3
Question 6	1	1	1	3
Part 2: Multiple Choice				
Question 1	1	1	1	3
Question 2	1	1	1	3
Question 3	1	1	1	3
Question 4	1	1	1	3
Part 2: Multiple Choice				
Question 5	1	1	1	3
Question 6	1	1	1	3
Part 3: Gap filling				
Question 1	1	1	1	3
Question 2	1	1	1	3
Question 3	1	1	1	3
Question 4	1	1	1	3
Question 5	1	1	1	3
Question 6	1	1	1	3
Part 4: True/False				
Question 1	1	1	1	3
Question 2	1	1	1	3
Question 3	1	1	1	3
Question 4	1	1	1	3
Question 5	1	1	1	3
Question 6	1	1	1	3
IOC> 0.5				**1**

Note: n 1 = expert 1, n 2= expert 2, n 3= expert 3

Appendix D: Results and Reliability of Pre-Test and Post-Test Score

Student ID	Pre-Test Score	Post-Test Score
SS1	16	15
SS2	16	12
SS3	15	18
SS4	15	14
SS5	14	11
SS6	14	19
SS7	13	21
SS8	11	12
SS9	10	8
SS10	10	14
SS11	10	12
SS12	8	13
SS13	7	21
SS14	7	10
SS15	6	11
SS16	5	5
SS17	5	7
SS18	5	8
KR-20	**0.718**	**0.792**
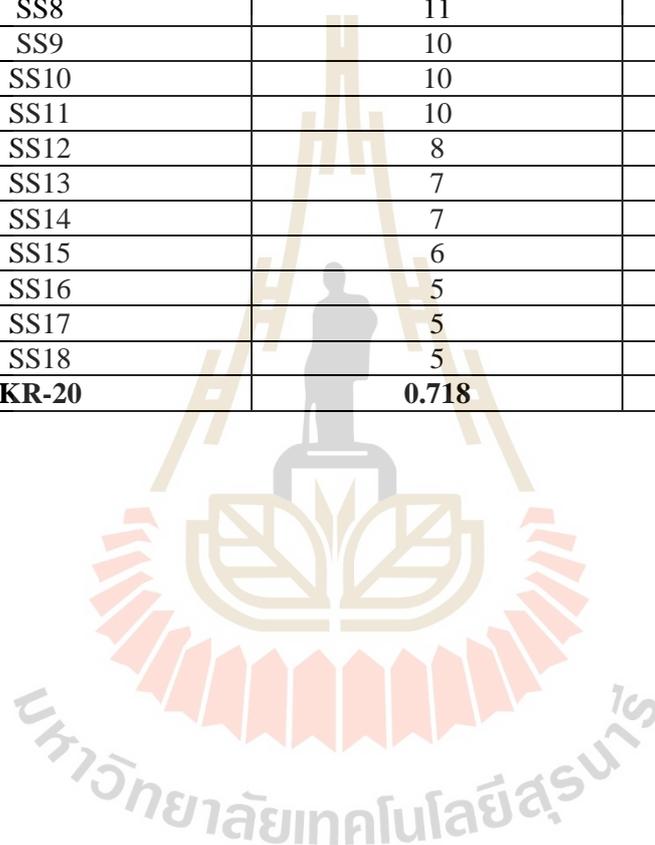
Appendix E: Questionnaire

English Version

This questionnaire is designed to gather data about students' opinions toward Mobile-Blended Cooperative Learning (MBCL). Please kindly spend a few minutes to fill out this questionnaire. All your responses to this questionnaire will be confidentially kept and used for academic purpose only. This questionnaire is divided into two parts.

Part 1: Students' personal information

Direction: Please provide your personal information by ticking (√) in the box.

1. Age (years old):

   1. ☐ 17   2. ☐ 18   3. ☐ 19   4. ☐ other (specify……...)

2. Gender: 1. ☐ Male   2. ☐ Female

3. How long have you studied English?

   1. ☐ 1 year   2. ☐ 2 years   3. ☐ 3 years   4. ☐ other (specify……...)

4. What is your purpose of studying English? (more than one answer is possible)

   1. ☐ communication   2. ☐ Career

   3. ☐ study in university   4. ☐ other (specify…………….)

Part 2: Students opinion toward Mobile-Blended Cooperative Learning

Direction: The statements below are about your opinion toward Mobile-Blended Cooperative Learning (MBCL) on enhancing your listening comprehension. Please read all the statements carefully and give a tick (√) on each response. Each response describes as following:

   1= Strongly disagree   2= disagree

   3= Unsure   4= Agree

   5= Strongly agree

No.	Students' Opinion	Self-Assessment				
		1	2	3	4	5
1	The objectives of the lesson are clearly stated.					
2	Each content is clearly explained with examples.					
3	All the audio files are clear.					
4	All the audio files are in medium speed.					
5	The contents in students' book and online materials are parallel.					
6	The online materials are good and help me learn better.					
7	Learning English Via MBCL is fun.					
8	Learning English via MBCL helps me to guess the meaning from context more efficiently.					
9	Learning English via MBCL, I can contact and ask my teacher questions easily and fast even after class.					
10	Learning English via MBCL, I can also learn outside the classroom at my own pace and I am able to finish each exercise on time.					
11	Learning English via MBCL, I can learn both online and offline with my teacher conveniently.					
12	Learning English via MBCL, I am able to discuss with my classmates by using real world knowledge efficiently.					
13	Learning English via MBCL, I am able to solve real world problems easily.					
14	Learning English via MBCL, I can understand the target language easier than before.					
15	Learning English via MBCL, I am able to develop my listening comprehension.					
16	Learning English via MBCL, I am able to reduce my anxiety.					
17	Learning English via MBCL, I do not only improve my listening comprehension, but I also improve vocabulary.					
18	Learning English via MBCL, I do not only improve my listening comprehension, but I also improve grammar.					
19	Learning English via MBCL, I do not only improve my listening comprehension, but I also improve speaking.					
20	I prefer learning via MBCL.					

Khmer Version

កម្រងសំនួរនេះត្រូវបានចងក្រងដើម្បីប្រមូលទិន្នន័យអំពីទស្សនៈរបស់សិស្សានុសិស្ស ទៅលើការរៀនដោយប្រើប្រាស់ Mobile-Blended Cooperative Learning (MBCL)។ សូមមេត្តា ចំណាយពេលវេលាពីរបីនាទីដើម្បីបំពេញកម្រងសំនួរនេះ។ រាល់ចម្លើយរបស់អ្នកនឹងត្រូវបាន រក្សាទុកជាការសំងាត់ និងប្រើប្រាស់ក្នុងការសិក្សាស្រាវជ្រាវប៉ុណ្ណោះ។ កម្រងសំនួរនេះបែង ចែកជា 2ផ្នែក។

ផ្នែកទី១: ប្រវត្តិរូបសិស្សានុសិស្ស

ការណែនាំ: សូមផ្តល់ប្រវត្តិរូបផ្ទាល់ខ្លួនរបស់អ្នកដោយគូសសញ្ញា (√) នៅក្នុងប្រអប់ខាងក្រោម។

១) អាយុ (គិតជាឆ្នាំ)

  ១. ☐ ១៧   ២. ☐ ១៨   ៣. ☐ ១៩   ៤. ☐ ផ្សេងៗ(បញ្ជាក់............)

២) ភេទ: ១. ☐ ប្រុស   ២. ☐ ស្រី

៣) តើអ្នកបានសិក្សាភាសាអង់គ្លេសអស់រយៈពេលប៉ុន្មានឆ្នាំហើយ?

  ១. ☐ ១ឆ្នាំ   ២. ☐ ២ឆ្នាំ   ៣. ☐ ៣ឆ្នាំ   ៤. ☐ ផ្សេងៗ(បញ្ជាក់............)

៤) តើអ្នកមានគោលបំណងអ្វីខ្លះក្នុងការសិក្សាភាសាអង់គ្លេស?(អ្នកអាចគូសលើសពី១ ចម្លើយ)

  ១. ☐ ទំនាក់ទំនងទូរទៅ   ២. ☐ មុខរបរ
  ៣. ☐ សិក្សានៅមហាវិទ្យាល័យ   ៤. ☐ ផ្សេងៗ (បញ្ជាក់..............)

ផ្នែកទី២ ទស្សនៈរបស់សិស្សានុសិស្សទៅលើការរៀនដោយប្រើប្រាស់ MBCL

ការណែនាំ:កម្រងសំនួរខាងក្រោមបង្ហាញពីមតិយោបល់របស់អ្នកក្នុងការប្រើប្រាស់ Mobile-Blended Cooperative Learning (MBCL) ដើម្បីបង្កើនជំនាញនៃការស្តាប់។ សូមអាន ប្រយោគទាំងអស់ដោយប្រុងប្រយ័ត្ន និងគូសសញ្ញា (√)ក្នុងចម្លើយនីមួយៗ។ អត្តន័យរបស់ ចម្លើយនីមួយៗត្រូវបានរៀបរាប់ដូចខាងក្រោម។

  ១= មិនយល់ស្របទាំងស្រុង   ២= មិនយល់ស្រប
  ៣= មិនប្រាកដ   ៤= យល់ស្រប
  ៥= យល់ស្របទាំងស្រុង

ល.រ	ទស្សនៈរបស់សិស្សានុសិស្ស	ការវាយតម្លៃផ្ទាល់ខ្លួន				
		១	២	៣	៤	៥
១	គោលបំណងរបស់មេរៀនបានរៀបរាប់យ៉ាងច្បាស់។					
២	មាតិការមេរៀននីមួយៗបានពន្យល់ជាមួយឧទាហរណ៍ច្បាស់ លាស់។					
៣	គុណភាពសំឡេងរបស់ Audio Files ច្បាស់ល្អ។					
៤	ល្បឿននិយាយរបស់ Audio Files លឿនល្មម។					

ល.រ	ទស្សនៈរបស់សិស្សានុសិស្ស	ការវាយតម្លៃផ្ទាល់ខ្លួន				
		១	២	៣	៤	៥
៥	មាតិកាក្នុងសៀវភៅសិស្សនិង ឯកសារអនឡាញ គឺស្របគ្នា។					
៦	ឯកសារអនឡាញមានគុណភាពល្អ ហើយអាចជួយខ្ញុំអោយ រៀនបានប្រសើរ។					
៧	ការរៀនភាសាអង់គ្លេសដោយប្រើប្រាស់ MBCL គឺស្រួល។					
៨	ការរៀនភាសាអង់គ្លេសដោយប្រើប្រាស់ MBCL ជួយខ្ញុំអោយ សន្និដ្ឋានពាក្យតាមបរិបទផ្សេងៗបានប្រសើរជាងមុន។					
៩	ការរៀនភាសាអង់គ្លេសដោយប្រើប្រាស់ MBCL ខ្ញុំអាច ទាក់ទង និងសួរសំនួរផ្សេងៗទៅកាន់ លោកគ្រូ អ្នកគ្រូរបស់ខ្ញុំ យ៉ាងងាយស្រួល និងឆាប់រហ័សទោះបីជានៅក្រៅម៉ោងសិក្សាក៏ ដោយ។					
១០	ការរៀនភាសាអង់គ្លេសដោយប្រើប្រាស់ MBCL ខ្ញុំអាចរៀន ក្រៅម៉ោងសិក្សាគ្រប់ពេលវេលាដែលខ្ញុំរៀន និងអាចធ្វើល ហាត់ទាន់ពេលវេលា។					
១១	ការរៀនភាសាអង់គ្លេសដោយប្រើប្រាស់ MBCL អាចរៀនទាំង ក្នុងថ្នាក់ និងតាមអ៊ិនធើណិត(អនឡាញ)ជាមួយ លោកគ្រូ អ្នក គ្រូរបស់ខ្ញុំយ៉ាងងាយស្រួល។					
១២	ការរៀនភាសាអង់គ្លេសដោយប្រើប្រាស់ MBCL ខ្ញុំអាចពិភាក្សា ជាមួយមិត្តរួមថ្នាក់ដោយប្រើចំណេះដឹងទូទៅយ៉ាងមានប្រសិទ្ធ ភាព។					
១៣	ការរៀនភាសាអង់គ្លេសដោយប្រើប្រាស់ MBCL ខ្ញុំអាចដោះ ស្រាយបញ្ហាផ្សេងៗដែលខ្ញុំជួបប្រទះបានងាយស្រួលជាងមុន។					
១៤	ការរៀនភាសាអង់គ្លេសដោយប្រើប្រាស់ MBCL អាចយល់ពី ភាសាតាមគោលបំណង (Target language) បានប្រសើរជាងមុ ន។					
១៥	ការរៀនភាសាអង់គ្លេសដោយប្រើប្រាស់ MBCL ញឹកញាប់ ខ្ញុំ អាចអភិវឌ្ឍជំនាញស្តាប់បានប្រសើរ។					

ល. រ	ទស្សនៈរបស់សិស្សានុសិស្ស	ការវាយតម្លៃផ្ទាល់ខ្លួន				
		១	២	៣	៤	៥
១៦	ការរៀនភាសាអង់គ្លេសដោយប្រើប្រាស់ MBCL ខ្ញុំអាចកាត់បន្ថយភាពភ័យខ្លាច និងការបារម្ភក្នុងការស្តាប់។					
១៧	ការរៀនភាសាអង់គ្លេសដោយប្រើប្រាស់ MBCL មិនត្រឹមតែអាចបង្កើនសមត្ថភាពនៃការស្តាប់ប៉ុណ្ណោះទេ ថែមទាំងបង្កើនសមត្ថភាព ផ្នែកវាក្យស័ព្ទថែមទៀតផង។					
១៨	ការរៀនភាសាអង់គ្លេសដោយប្រើប្រាស់ MBCLមិនត្រឹមតែអាចបង្កើនសមត្ថភាពនៃការស្តាប់ប៉ុណ្ណោះទេ ថែមទាំងបង្កើនសមត្ថភាព ផ្នែកវេយ្យាករណ៍ ថែមទៀតផង។					
១៩	ការរៀនភាសាអង់គ្លេសដោយប្រើប្រាស់ MBCL មិនត្រឹមតែអាចបង្កើនសមត្ថភាពនៃការស្តាប់ប៉ុណ្ណោះទេ ថែមទាំងបង្កើនសមត្ថភាព ជំនាញនិយាយ ថែមទៀតផង។					
២០	ខ្ញុំពេញចិត្តក្នុងការរៀនតាមរយៈការប្រើប្រាស់ MBCL។					

Appendix F: IOC Results of Questionnaire

No.	Description	Index of item Objectives Congruence (IOC)			
		n 1	n 2	n 3	Total
Part 1: Students' general information and educational background					
1	Age (years old): 1. ☐ 17 2. ☐ 18 3. ☐ 19 4. ☐ other (specify...)	1	0	1	0.66
2	Gender: 1. ☐ Male 2. ☐ Female	1	1	1	1
3	How long have you studied English? 1. ☐ one year 2. ☐ two years 3. ☐ three years 4. ☐ other (specify..)	1	0	0	0.33
4	What is your purpose of studying English? (more than one answer is possible) 1. ☐ communication 2. ☐ Career 3. ☐ study in university 4. ☐ other (specify)	0	1	0	0.33
Part 2: Students opinion toward Mobile-Blended Cooperative Learning					
1	The objectives of the lesson are clearly stated.	1	1	1	1
2	Each content is clearly explained with examples.	1	1	1	1
3	All the audio files are clear.	1	1	1	1
4	All the audio files are in medium speed.	1	1	1	1
5	The contents in students' book and online materials are parallel.	1	1	1	1
6	The online materials are good and help me learn better.	1	1	1	1
7	Learning English Via MBCL is fun.	1	1	0	0.66
8	Learning English via MBCL helps me to guess the meaning from context more efficient.	1	1	1	1

No.	Description	Index of item Objectives Congruence (IOC)			
		n 1	n 2	n 3	Total
9	Learning English via MBCL, I can contact and ask my teacher questions easily and fast even after class.	1	1	1	1
10	Learning English via MBCL, I can also learn outside the classroom with my own pace and I am able to finish each exercise on time.	1	1	1	1
11	Learning English via MBCL, I can learn both online and offline with my teacher conveniently.	1	1	1	1
12	Learning English via MBCL, I am able to discuss with my classmates by using real world knowledge efficiently.	1	1	1	1
13	Learning English via MBCL, I am able to solve real world problems easily.	1	1	1	1
14	Learning English via MBCL, I can understand the target language easier than before.	1	1	1	1
15	Learning English via MBCL, I am able to develop my listening comprehension.	1	1	1	1
16	Learning English via MBCL, I am able to reduce my anxiety.	1	1	1	1
17	Learning English via MBCL, I do not only improve my listening comprehension, but I also improve vocabularies.	1	1	1	1
18	Learning English via MBCL, I do not only improve my listening comprehension, but I also improve grammar.	1	1	1	1
19	Learning English via MBCL, I do not only improve my listening comprehension, but I also improve speaking.	1	1	1	1
20	I prefer learning via MBCL.	1	0	0	0.33
ICO>0.5					0.88

Note: n 1 = expert 1, n 2= expert 2, n 3= expert 3

Appendix G: Interview Questions

English Version

1. What do you think about Mobile-Blended-Cooperative Learning (MBCL)? Why?

2. How does Mobile-Blended-Cooperative Learning help you with your listening comprehension? Please give some examples.

3. In your opinion, is Mobile-Blended-Cooperative Learning suitable for your level? Why/Why not?

4. What problems do you encounter while you use Mobile-Blended-Cooperative Learning? Please give some examples.

5. Would you like to learn via Mobile-Blended-Cooperative Learning in other skills?

6. Do you have any comments or suggestions toward Mobile-Blended-Cooperative Learning?

Khmer Version

១. តើអ្នកគិតយ៉ាងដូចម្តេចចំពោះការរៀនដោយប្រើប្រាស់ Mobile-Blended Cooperative Leaning (MBCL)?ហេតុអ្វី?

២. តើការរៀនដោយប្រើប្រាស់ Mobile-Blended Cooperative Leaning (MBCL) ជួយ បង្កើន

   ការស្គាប់របស់អ្នកយ៉ាងដូចម្តេចខ្លះ?សូមផ្តល់ឧទាហរណ៍បញ្ជាក់។

៣. តាមគំនិតរបស់អ្នក តើការរៀនដោយប្រើប្រាស់ Mobile-Blended Cooperative Leaning (MBCL)សាកសមនិង សមស្របទៅនឹងកំរិតសមត្ថភាពរបស់អ្នកដែរឬទេ? បើសាកសម ហេតុអ្វី?បើមិនសាកសម ហេតុអ្វី?

៤. តើអ្នកបានជួបបញ្ហាអ្វីខ្លះដែរឬទេ នៅពេលអ្នករៀនដោយប្រើប្រាស់ Mobile-Blended Cooperative Leaning (MBCL)? សូមផ្តល់ឧទាហរណ៍បញ្ជាក់។

៥. តើអ្នកចង់រៀនជំនាញផ្សេងៗ តាមរយៈ ការរៀនដោយប្រើប្រាស់ Mobile-Blended Cooperative Leaning (MBCL)ឬទេ?

៦. តើអ្នកមានយោបល់ ឬការណែនាំ ចំពោះការរៀនដោយប្រើប្រាស់ Mobile-Blended Cooperative Leaning (MBCL) ដែរឬទេ?

Appendix H: IOC Results of Interview Questions

No.	Description	Index of item Objectives Congruence (IOC)			
		n 1	n 2	n 3	Total
1	What do you think about Mobile-Blended Cooperative Learning (MBCL)? Why?	1	1	1	1
2	How does Mobile-Blended Cooperative Learning help you with your listening comprehension? Please give some examples.	0	1	1	0.66
3	In your opinion, is Mobile-Blended Cooperative Learning suitable for your level? Why/Why not?	1	1	1	1
4	What problems do you encounter while you use Mobile-Blended-Cooperative Learning? Please give some examples.	1	1	1	1
5	Would you like to learn via Mobile-Blended Cooperative Learning in other skills?	1	0	1	0.66
6	Do you have any comments or suggestions toward Mobile-Blended-Cooperative Learning?	1	1	1	1
	IOC> 0.5				**0.88**

Note: n 1 = expert 1, n 2= expert 2, n 3= expert 3

Appendix I: MBCL Lesson Plans

Week 1: Unit 1-Daily Activities

Date: ___/ ___/ ___

- **Target students:** 30 Adult Students

- **Proficiency Level:** Intermediate

- **Skill focus:** Integrated skills (Listening and Speaking)

- **Teaching duration:** 1hrs 30mins

- **Abbreviation:** SS=students, T= teacher

- **Description:** This integrated skills lesson plan focuses on listening and speaking. Listening is the main focus in pre and main listening tasks followed by speaking at the end to have an additional check if the students are fully comprehending listening practice. Both bottom-up and top-down models are used in each procedure. Pre-listening: top-down models is used to activate their background knowledge, and the bottom-up model is used to check their understanding of vocabularies. Main-listening: Both bottom-up and top-down models are used to check students' comprehension and to work on students practice. It is not predictable which model they use first, it depends on their own learning styles. Post-listening: Bottom-up is used first for grammar teaching followed by top-down for speaking part. If they can discuss the listening context using their own idea, it means they successfully comprehend. Cooperative learning is used throughout the lesson plan for pair and group work. Additionally, students can log in to the listening website at any time anywhere until they feel satisfied that they understand. More importantly, every single time they log in the teacher could track their learning progress.

- **Objective:** At the end of the lesson students will be able to:

  - ➤ identify key information from short exchanges through picture choices.

  - ➤ do the listening exercises and discuss by using their own ideas.

  - ➤ explain how to use "used to" and do the exercise correctly.

  - ➤ interact with their group member through role playing.

Procedures	Techniques/Instructional Activities	Time	Materials/ Learning Setting
Opening	Greeting (Teacher and students)	5mins	
Pre-Listening	**Activate SS' background knowledge** ▪ SS are divided into a group of 5 based on the mixture of their proficiency. ▪ Some questions are written on the white board for SS to discuss in groups: (1) What can you see in the pictures? (2) Have you ever experienced something in the picture? ▪ SS share their ideas among their group members and T is the facilitator when necessary. ▪ Each group volunteer to shares their ideas after the discussion.	10 mins	- White board/ Markers - In class-Face to Face - Top-down - Cooperative learning
	Pre-teach vocabularies These activities help SS to be well-prepared for any unknown words when they do the main listening task. ▪ The vocabulary exercise is shown on the screen and they do it individually. ▪ SS compare the answer with another student sitting next to them. ▪ SS is asked to give their answer and T corrects in case the answer is incorrect.	10 mins	- PPT - In class-Face to Face - Bottom-up - Cooperative Learning
While-Listening	**Listening Exercises** ▪ SS individually go to the website link using their mobile phones ▪ SS read the instruction and questions then do the exercises. ▪ T facilitates and gives any explanation as needed. ▪ The answers to the questions will be automatically given on their mobile phone as soon as they submit their work. ▪ SS can ask T for clarification if they do not agree with the answer.	30 mins	- http://listeningeaintermediate.dx.am/ - MALL - Interactive model

Procedures	Techniques/Instructional Activities	Time	Materials/ Learning Setting
Post- Listening	**Grammar Teaching "Used to"** This is additional grammar to help SS understand more about sentence use in the previous task and to help them express their ideas easily in the speaking activity. ▪ SS read about "Used to" on their mobile phone and ask for more explanation as needed. ▪ SS do a short exercise through playing game on their mobile phone (this grammar game helps them to refresh their brain and to make them more active)	15 mins	- http://listeningeainterme diate.dx.am/ - https://kahoot.it/ - MALL - Bottom-up
	Speaking This part helps them to be able to express their own ideas in the situation from the main listening task and this helps them to be confident to speak in public in the future.	20 mins	- papers/ pens - In class- Face to Face - Interactive model - Cooperative learning
	▪ Cooperative Learning (CL) is used to random select students in groups of six. ▪ Each group chooses 2 situations from previous listening that they like. ▪ Each group discusses with their members using their own idea and imagining that they are in the situation. ▪ After the discussion, 3 volunteer groups act out the situation they chose, and the audients will ask some questions of them.		-
Homework	▪ SS individually do listening homework and submit on their mobile phone before the next class. ▪ The feedback and mark are shown to SS after submission.		- http://listeningeainterme diate.dx.am/ - MALL - Interactive model
Evaluation	▪ T evaluates the SS performance through their results from their exercises in the class and homework scores as well as the score from post-test at the end of the course. ▪ At the end of the class, SS can give self-evaluation slip to T if they wish. They can write what they understand, not understand and the problem they face, so the TT is well prepared for the next class.		- In class- Face to Face

Vocabulary Quiz of Unit 1

Complete the sentences by using the correct vocabularies.

spare time	half past	queue	sleeves
comfortable	quarter	empty	

1. I hope you find this trip a little more………………………. than the last.

2. Sam wore a collared shirt left open at the neck with the long………………

3. He spends his……………………. visiting schools to warn students off drugs.

4. It was a……………………..to seven when we left Pall Mall.

5. The…………………..to get in here is longer than you'd guess.

6. The parking lot in the back of the school is almost…………………

7. It was………………………….. two o'clock when the knock came.

Week 2: Unit 2-Life and Career

Date: ___/ ___/ ___

- **Target students:** 30 Adult Students

- **Proficiency Level:** Intermediate

- **Skill focus:** Integrated Skills (Listening and Speaking)

- **Teaching duration:** 1hrs 30mins

- **Abbreviation:** SS=students, T= teacher

- **Description:** This integrated skills lesson plan focuses on listening and speaking. Listening is the main focus in pre and main listening tasks followed by speaking at the end to have an additional check if the students are fully comprehending listening practice. Both bottom-up and top-down models are used in each procedure. Pre-listening: top-down models is used to activate their background knowledge, and the bottom-up model is used to check their understanding of vocabularies. Main-listening: Both bottom-up and top-down models are used to check students' comprehension and to work on students practice. It is not predictable which model they use first, it depends on their own learning styles. Post-listening: Bottom-up is used first for grammar teaching followed by top-down for speaking part. If they can discuss the listening context using their own idea, it means they successfully comprehend. Cooperative learning is used throughout the lesson plan for pair and group work. Additionally, students can log in to the listening website at any time anywhere until they feel satisfied that they understand. More importantly, every single time they log in the teacher could track their learning progress.

- **Objective:** At the end of the lesson students will be able to:

  ➢ identify specific information and detailed meaning through multiple choice questions.

  ➢ describe each character in the main listening task using their own words.

  ➢ do the "Question tag" exercise correctly and distinguish the answer from different statements.

  ➢ role play the interview using their own ideas.

Procedures	Techniques/Instructional Activities	Time	Materials/ Learning Setting
Opening	Greeting (Teacher and students)	5mins	
Pre-Listening	**Activate SS' background knowledge** ▪ T shows three key words (career, life, and interview) on the screen to help SS think of some ideas for the topic ▪ SS personally think of some possible related words and write on their book ▪ SS can also discuss with another SS next to them. ▪ Finally, SS guess the possible context of the lesson from all related words on the board.	10 mins	- PPT - In class- Face to Face - Top-Down
	Pre-teach vocabularies This part will help SS to understand some key words that may help them during the main listening task. ▪ Pictures are used to elicit some important vocabularies from SS and to check if they know all the important key words. ▪ SS participate in this activity orally. ▪ The correct answers are given later using PPT.	10 mins	- PPT - In class- Face to Face Bottom-up
While-Listening	**Listening Exercises** ▪ SS individually go to the website link using their mobile phones ▪ SS read the instructions and questions then do the exercises. ▪ T facilitates and gives any explanation as needed. ▪ The answers to the questions will be automatically given on their mobile	30 mins	- http://listeningeaintermediate.dx.am/ - MALL - Interactive model

Procedures	Techniques/Instructional Activities	Time	Materials/ Learning Setting
	phones as soon as they submit their work. ▪ SS can ask T for clarification if they do not agree with the answer.		
Post-Listening	**Grammar Teaching "Question Tags"** This grammar part will help student to easily understand the listening context because they will discuss listening using their own ideas in the next part. ▪ SS read about "Question Tags" and do a short exercise online using their mobile phones with their partner. ▪ T gives more explanation and feedback of the answers if needed.	15 mins	- http://listeningeaintermediate.dx.am/ - MALL - Bottom-up - Cooperative Learning
	Speaking This part allows SS to express their ideas and interact with their partner ▪ CL is used to categorize the SS in a group of two. ▪ SS discuss and express their ideas with their partner about the characters in the interview. ▪ Then SS make up their own interview situation and role play as the real interview.	20 mins	- papers/ pens - Interactive model - Cooperative learning
Homework	▪ SS individually do listening homework and submit on their mobile phones before the next class. ▪ The feedback and marks are shown to SS after submission.		- http://listeningeaintermediate.dx.am/ - MALL - Interactive model
Evaluation	▪ T evaluates the SS performance through their results from their exercises in the class and homework scores as well as the score from post-test at the end of the course. ▪ At the end of the class, SS give a self-evaluation slip to the T if they wish. They can write what they understand, not understand and the problem they face, so the TT is well prepared for the next class.		- In class-Face to Face

Week 3: Unit 3-Visiting Museums

Date: ___/ ___/ ___

- **Target students:** 30 Adult Students

- **Proficiency Level:** Intermediate

- **Skill focus:** Integrated skills (Listening and Speaking)

- **Teaching duration:** 1hrs 30mins

- **Abbreviation:** SS=students, T= teacher

- **Description:** This integrated skills lesson plan focuses on listening and speaking. Listening is the main focus in pre and main listening tasks followed by speaking at the end to have an additional check if the students are fully comprehending listening practice. Both bottom-up and top-down models are used in each procedure. Pre-listening: top-down models is used to activate their background knowledge, and the bottom-up model is used to check their understanding of vocabularies. Main-listening: Both bottom-up and top-down models are used to check students' comprehension and to work on students practice. It is not predictable which model they use first, it depends on their own learning styles. Post-listening: Bottom-up is used first for grammar teaching followed by top-down for speaking part. If they can discuss the listening context using their own idea, it means they successfully comprehend. Cooperative learning is used throughout the lesson plan for pair and group work. Additionally, students can log in to the listening website at any time anywhere until they feel satisfied that they understand. More importantly, every single time they log in the teacher could track their learning progress.

▪ **Objective:** At the end of the lesson students will be able to:

➢ differentiate and interpret the information through gap filling.

➢ explain the listening context through discussion on post-listening task.

➢ do exercise and distinguish "Future: Will vs. Be going to".

➢ organize listening in context through in class presentation.

Procedures	Techniques/Instructional Activities	Time	Materials/ Learning Setting
Opening	Greeting (Teacher and students)	5mins	

Pre-Listening	**Activate SS' background knowledge**
	▪ SS answer some questions about historical places:
	  1. Do you know any museums in your country or other countries?
	  2. Can you name some of them? Have you been there?
		10 mins	- PPT
			- In class-Face to Face
			- Top-down

	Pre-teach vocabularies ▪ SS work in pairs and complete the vocabulary exercise on PPT before they do the main listening activity. ▪ T arranges the group using CL (1 strong SS with a slow SS) ▪ T corrects for the whole class.	10 mins	- PPT - In class-Face to Face - Bottom-up - Cooperative learning
While-Listening	**Listening Exercises** ▪ SS individually go to the website link using their mobile phones. ▪ SS read the instruction and questions then do the exercises. ▪ T facilitates and gives any explanation as needed. ▪ The answers to the questions will be automatically given on their mobile phone as soon as they submit their work. ▪ SS can ask T for clarification if they do not agree with the answer.	30 mins	- http://listeningeaintermediate.dx.am/ - MALL - Interactive
Post-Listening	**Grammar Teaching** **"Will Vs. Be going to"** ▪ SS read about "will vs. Be going to" and ask T if they need more explanation. ▪ To change classroom environment, T uses Kahoot.com and asks SS to do the quiz to check if they are very active.	15 mins	- http://listeningeaintermediate.dx.am/ - https://kahoot.it/ - MALL Bottom-up
	Speaking ▪ T uses CL to categorize the SS in a group of five.	20 mins	- papers/pens - In class-Face to Face - Interactive model - Cooperative learning

Procedures	Techniques/Instructional Activities	Time	Materials/ Learning Setting
	▪ Each group chooses their favourite historical place and discusses with their members ▪ A representative from each group will give a presentation in front of their class ▪ T acts as the facilitator and live dictionaries as needed.		
Homework	▪ SS individually do listening homework and submit on their mobile phone before the next class. ▪ The feedback and mark are shown to SS after submission.		- http://listeningeaintermediate.dx.am/ - MALL
Evaluation	▪ T evaluates the SS performance through their results from their exercises in the class and homework scores as well as the score from post-test at the end of the course. ▪ At the end of the class, SS give a self-evaluation slip to T if they wish. They can write what they understand, not understand and the problem they face, so the TT is well prepared for the next class.		- In class- Face to Face

Vocabulary Quiz of Unit 3

Read each meaning carefully and complete it with the appropriate vocabularies

(a) Fantastic	(b) Architecture	(c) Permanent	(d) Exhibition
(e)Basement	(f) Delight	(g) Spaceship	

1. ………………. (n): the floor of a building which is partly or entirely below ground level.

2. ………………(n): a public display of works of art or items of interest, held in an art gallery or museum or at a trade fair.

3. ……………..(adj): extraordinarily good or attractive.

4. ……………….(n): a vehicle used for travel in space.

5. ………………(n): the art or practice of designing and constructing buildings.

6. ……………… (v): please (someone) greatly.

7. …………….(adj): lasting/intended to last/remain unchanged indefinitely.

Week 4: Unit 4-Life at University

Date: ___/ ___/ ___

- **Target students:** 30 Adult Students

- **Proficiency Level:** Intermediate

- **Skill focus:** Integrated skills (Listening and Speaking)

- **Teaching duration:** 1hrs 30mins

- **Abbreviation:** SS=students, T= teacher

- **Description:** This integrated skills lesson plan focuses on listening and speaking. Listening is the main focus in pre and main listening tasks followed by speaking at the end to have an additional check if the students are fully comprehending listening practice. Both bottom-up and top-down models are used in each procedure. Pre-listening: top-down models is used to activate their background knowledge, and the bottom-up model is used to check their understanding of vocabularies. Main-listening: Both bottom-up and top-down models are used to check students' comprehension and to work on students practice. It is not predictable which model they use first, it depends on their own learning styles. Post-listening: Bottom-up is used first for grammar teaching followed by top-down for speaking part. If they can discuss the listening context using their own idea, it means they successfully comprehend. Cooperative learning is used throughout the lesson plan for pair and group work. Additionally, students can log in to the listening website at any time anywhere until they feel satisfied that they understand. More importantly, every single time they log in the teacher could track their learning progress.

▪ **Objective:** At the end of the lesson students will be able to:

➢ predict the attitude and opinion of the speakers through True/False statement tasks

➢ do exercises and differentiate "Can, could, may, or might" accurately.

➢ defend and express their opinion in group discussion.

Procedures	Techniques/Instructional Activities	Time	Materials/ Learning Setting
Opening	Greeting (Teacher and students)	5mins	

Pre-Listening	**Activate SS' background knowledge**
	▪ SS answer questions about university life:
	  1. Do you have difficulty in choosing a course or doing the university work?
	  2. If so, who are you going to discuss it with?
		10 mins	- PPT
			- In Class-Face to Face
			- Top-down

	Pre-teach vocabularies ▪ SS match the vocabularies with their meaning before they do the main listening activity. ▪ T corrects the answer orally for the whole class.	10 mins	- PPT - In Class-Face to Face - Bottom-up
While-Listening	**Listening Exercises** ▪ SS individually go to the website link using their mobile phones ▪ SS read the instruction and questions then do the exercises. ▪ T facilitates and gives any explanation as needed. ▪ The answers to the questions will be automatically on their mobile phone given as soon as they submit their work. ▪ SS can ask T for clarification if they do not agree with the answer.	30 mins	- http://listeningeaintermediate.dx.am/ - MALL - Interactive model
Post-Listening	**Grammar Teaching** **"Can, Could, May, Might"** ▪ SS read about "Can, Could, May, Might" and try to differentiate each verb. ▪ SS do a short exercise online using their mobile phone about "Can, Could, May, Might". ▪ T gives more feedback to the answers if needed.	15 mins	- http://listeningeaintermediate.dx.am/ - MALL - Bottom-up
	Speaking ▪ T uses CL to categorize the SS in a group of two. ▪ Each group discusses and expresses their opinion about the characters in the conversation.	20 mins	- papers/ pens - In class-Face to Face - Interactive model - Cooperative learning

Procedures	Techniques/Instructional Activities	Time	Materials/ Learning Setting
	▪ Some groups share their opinions in class ▪ T acts as the facilitator and live dictionary as needed.		
Homework	▪ SS individually do listening homework and submit on their mobile phone before the next class. ▪ The feedback and marks are shown to SS after submission.		- http://listeningeaintermediate.dx.am/ - M-learning - Interactive model
Evaluation	▪ T evaluates the SS performance through their results from their exercises in the class and homework scores as well as the score from the post-test at the end of the course.		- In class- Face to Face
	▪ At the end of the class, SS can give a self-evaluation slip to T if they wish. They can write what they understand, not understand and the problem they face, so the TT is well prepare for the next class.		

Vocabulary Quiz of Unit 4
Read each word and match it with the correct meaning.

| No	Words	Meanings	Answer
1	Expect (v)	A. Very interested, eager, or wanting (to do) something very much	1.
2	Delay (v)	B. Extremely bad or unpleasant	2.
3	Be in trouble	C. To fail to do something/ to fail to be or go somewhere	3.
4	Dull (adj)	D. To think or believe something will happen, or someone will arrive	4.
5	Awful (adj)	E. In a problematic situation or in a state of hardship.	5.
6	Miss doing things	F. To cause someone or something to be slow or late	6.
7	Keen (adj)	G. Lacking interest or excitement	7.
		H. Excite the curiosity or attention of (someone)	

Appendix J: IOC Results of MBCL Lesson Plans

No	Description	Index of item Objectives Congruence (IOC)			
		n 1	n 2	n 3	Total
	Week 1: Unit 1-Daily Activities				
1	Target students are clearly stated	1	1	1	1
2	Students' proficiency Level is clearly stated.	1	1	1	1
3	Skills focus and teaching time are clearly stated.	1	1	1	1
4	Objectives of the lesson are clearly stated.	1	1	1	1
5	Pre-listening stage is clearly explained.	1	1	0	0.66
6	While-listening stage is clearly explained.	1	1	1	1
7	Post-listening stage is clearly explained.	1	1	1	1
8	Homework is clearly stated.	1	1	1	1
9	Evaluation/Assessment is clearly stated.	1	1	1	1
10	Learning Setting is clearly stated	1	1	1	1
	IOC>0.5				**0.96**
	Week 2: Unit 2-Life and Career				
1	Target students are clearly stated	1	1	1	1
2	Students' proficiency Level is clearly stated.	1	1	1	1
3	Skills focus and teaching time are clearly stated.	1	1	1	1
4	Objectives of the lesson are clearly stated.	1	1	1	1
5	Pre-listening stage is clearly explained.	1	1	0	0.66
6	While-listening stage is clearly explained.	1	1	1	1
7	Post-listening stage is clearly explained.	1	1	1	1
8	Homework is clearly stated.	1	1	1	1
9	Evaluation/Assessment is clearly stated.	1	1	1	1
10	Learning Setting is clearly stated	1	1	1	1
	IOC>0.5				**0.96**
	Week 3: Unit 3- Visiting Museum				
1	Target students are clearly stated	1	1	1	1
2	Students' proficiency Level clearly stated.	1	1	1	1
3	Skills focus and teaching time are clearly stated.	1	1	1	1
4	Objectives of the lesson are clearly stated.	1	1	1	1
5	Pre-listening stage is clearly explained.	1	1	0	0.66

No	Description	Index of item Objectives Congruence (IOC)			
		n 1	n 2	n 3	Total
6	While-listening stage is clearly explained.	1	1	1	1
7	Post-listening stage is clearly explained.	1	1	1	1
8	Homework is clearly stated.	1	1	1	1
9	Evaluation/Assessment is clearly stated.	1	1	1	1
10	Learning Setting is clearly stated	1	1	1	1
IOC>0.5					**0.96**
Week 4: Unit 4- Life at University					
1	Target students are clearly stated	1	1	1	1
2	Students' proficiency Level clearly stated.	1	1	1	1
3	Skills focus and teaching time are clearly stated.	1	1	1	1
4	Objectives of the lesson are clearly stated.	1	1	1	1
5	Pre-listening stage is clearly explained.	1	1	0	0.66
6	While-listening stage is clearly explained.	1	1	1	1
7	Post-listening stage is clearly explained.	1	0	1	0.66
8	Homework is clearly stated.	1	1	1	1
9	Evaluation/Assessment is clearly stated.	1	1	1	1
10	Learning Setting is clearly stated	1	1	1	1
IOC>0.5					**0.93**

Note: n 1 = expert 1, n 2= expert 2, n 3= expert 3

Appendix K: Overview of Online Website (MBCL Website)

You are going to do the listening exercises individually. Read the instruction carefully.

Exercise 1

Exercise 2

You are going to **do the exercise** with your partner **after** the explanation of your teacher in class.

Can, Could, May, Might

Exercise

Feel free to contact me at any time

Nangsamith Each
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Email: nangsamith@mail.com
FB: Nangsamith Each

Your Name

Phone

Email
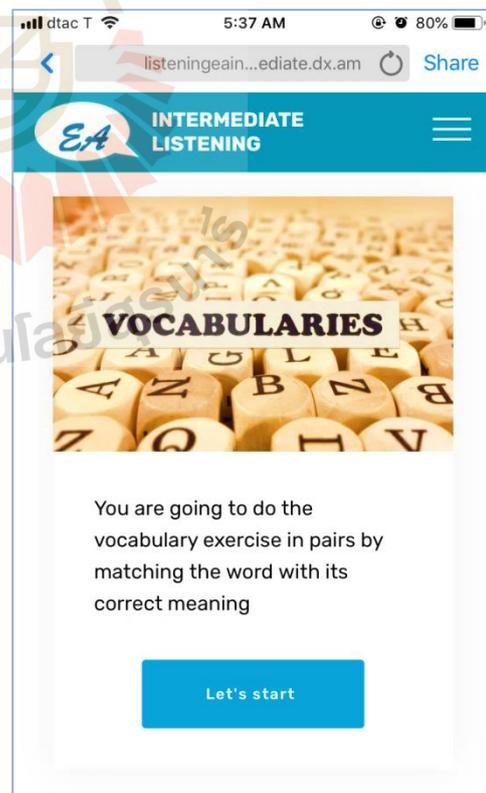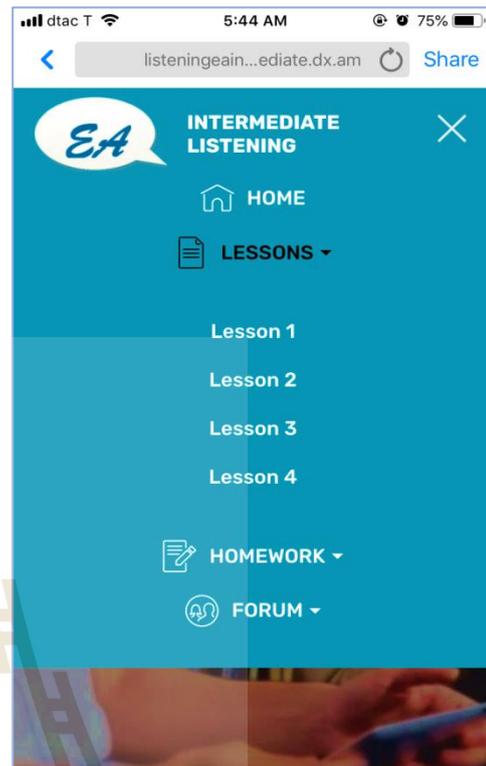
Message

EA Intermediate Listening
Private group

Joined | Invite Members | Search | More

Write something...

Photo

Nangsamith Each updated the description.
October 7, 2019 at 10:26 AM ·

This group is created for learning purpose only.

Seen by everyone

Like | Comment

Nangsamith Each updated the group cover photo.
October 7, 2019 at 10:25 AM ·

Appendix L: Classroom Activities during Experiment

In class instruction and online listening exercises

Group discussion and presentation

Semi-structured interview

CURRICULUM VITAE

Nangsamith Each was born on April 06, 1993 in Battambang, Cambodia. She graduated from the University of Battambang (UBB) in 2015 with Bachelor of Art in English Education.

Upon gratuation, Nangsamith began her teaching career as an English instructor at the University of Battamabng as well as a part-time English teacher at U. S. A. International School, Camobodia. She taught English for Communication to undergraduate students and Adult English Program to high school students

In 2017, she was awarded SUT scholarship to study Master's degree in English Language Studies (ELS) at School of Foreign Languages, Suranaree University of Technology, Nakhon Ratchasima, Thailand. Her research interests include Teaching English to Speaker of other Languages (TESOL), Mobile Assisted Language Learning, Teaching Methodology and Language Testing.