

The Effects of Mobile-Blended Cooperative Learning on EFL Students' Listening Comprehension in Cambodian Context

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Abstract

The integration of advanced technology in education allows students to learn physically and virtually, especially in this turbulent time, the COVID-19 pandemic. Due to the fact that listening is the most challenging skill, EFL students need more time and opportunities to be exposed to listening in the spoken contexts both inside and outside of the classroom. Therefore, this study aims to investigate the effects of Mobile-Blended Cooperative Learning (MBCL) to enhance Cambodian EFL students' listening comprehension. Both quantitative and qualitative methods were used. A pre-test and post-test were implemented to measure the students' scores before and after using MBCL. Furthermore, a questionnaire was also used to examine the students' opinions toward the use of MBCL, semi-structured interviews were also used to gain in-depth

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| information from the questionnaire. The results showed that students enhanced their listening comprehension after learning with MBCL. Additionally, students also had positive opinions toward the use of MBCL on listening comprehension. The reasons for their positive opinions came from the user-friendly website, convenience, fun, motivation as well as improving other skills. During this COVID-19 pandemic, the implementation of MBCL can help students learn the English language conveniently, especially listening comprehension, if the teachers are flexible and are able to offer appropriate materials. |
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1. Introduction

Listening plays the most crucial role in communication because listening takes between 40-50%, whereas speaking only 25-30%, reading 11-16%, and writing 9% (Gilakjani & Ahmadi, 2011). Even though listening is considered the most important aspect in developing language skills, it is 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 (Altuwairesh, 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 as 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 makes them skip this skill. Therefore, Cambodian EFL students still have problems with communicative competence (Igawa, 2008). Moreover, to identify if the listening was really the problem of Cambodian EFL students, the researcher conducted the needs analysis and the results revealed that 60% of Cambodian students faced difficulties in listening comprehension and they would like to improve it.

The growth of modern technology tools makes learning 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. Some researchers who investigated the effect of mobile assisted language learning on listening comprehension stated that mobiles could enhance students' listening comprehension as well as

positive opinion towards the use of mobile technology (El-Desouky, 2015; Kodir Al-Baekani & Ridwan, 2018; Keezhatta & Omar, 2019). 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 et al., 2018). There were numerous studies on blended learning claiming that it is a tool to enhance students language skills (reading, writing, speaking, listening, and grammar), promote learner autonomy, and increase motivation (Mubarok, 2015; Banditvilai, 2016; Ginaya et al., 2018; Bader Al-Bataineh et al., 2019). Both the technology tools (mobile phones) 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).

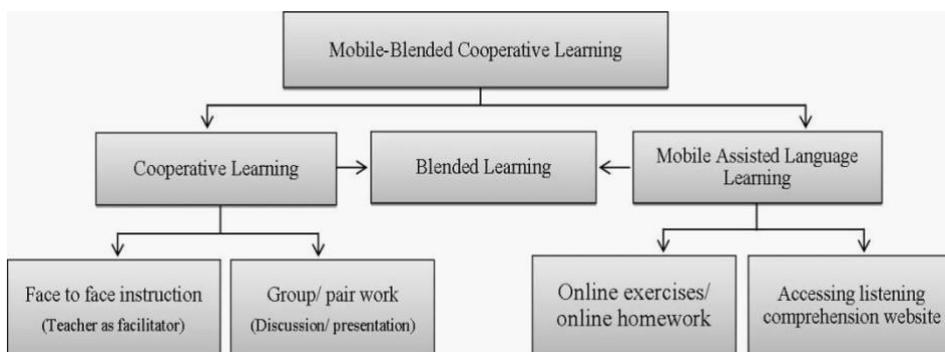
CL is not only concerned with group work, but also involves conscious thoughts, wary to variation elements and parts of group work which share goals and benefits to all the group members (Soumia, 2016, p. 24).

Some researchers revealed in their studies that cooperative learning had a larger effect on improving students' language skills and it is more effective than traditional learning methods (Kirbaş, 2017; Yavuz & Arslan, 2018)

In spite of extensive research studies, research on combining the three: Mobile Assisted Language Learning (MALL), Blended Learning (BL), and Cooperative Learning (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 and their opinions toward the use of MBCL. The overview of the present study is illustrated in figure 1, Mobile-Blended Cooperative Learning Overview, to show the clear picture of the activities presented in the study.

Figure 1

Mobile-Blended Cooperative Learning Overview Designed by the Researcher



1.1 Research Questions

There are two research questions in this study:

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 toward the use of Mobile-Blended Cooperative Learning (MBCL) on listening comprehension?

2. Literature Review

2.1 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) defined listening comprehension as the complex process where speech codes in the form of sound, takes place in real time and the listeners have no time to review like they do with 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) stated 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 try to interpret to spoken language (Solak & Erdem, 2016). 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.

2.2 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 the most essential and the latest learning approach in language education where applications and websites are facilitated in learning activities (Ali et al., 2019; Nuraeni et al., 2020). 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 a fixed definition for MALL through conducting research, conferences or seminars. Utilizing portable devices through its mobility, portability, accessibility and practicality in education is the definition of MALL (Ahmed, 2015; Keezhatta & Omar, 2019, Nariyati et al., 2020; Ali et al., 2019). 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), suggested 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 toward academic process and learning objectives. 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, 2013; Miangah & Nezarat, 2012). Besides, Gholami and Azarmi (2012) illustrated 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. A number of researchers claimed that mobile and communication technologies for language learning can strengthen lecturers’ and students’ relationships, enrich learning processes, and promote ownership (Osman, 2013; Keezhatta & Omar, 2019). With many advantages of mobile assisted language learning across 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.

2.3 Blended Learning (BL)

There are many experts trying to define the definitions of Blended Learning (BL), all coming 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) described 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 students’ 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 et al., 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).

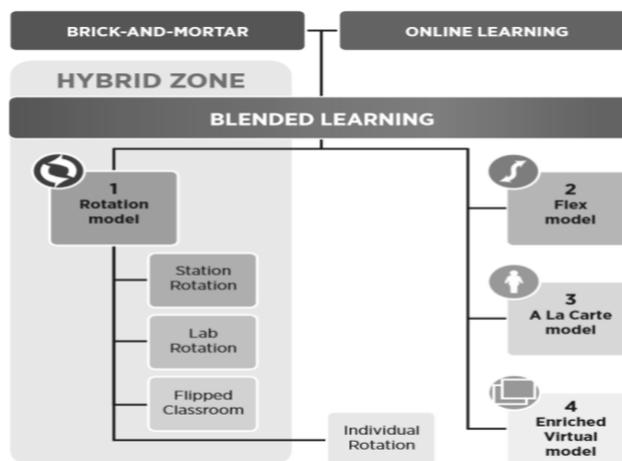
2.4 Models of Blended Learning (BL)

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). 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.

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 combines the Mobile Assisted Language Learning (MALL) as the tool to assist in teaching listening comprehension to Cambodian EFL students.

Figure 2

Blended Learning Model (iNACOL, 2015)



2.5 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; Zhang, 2010; Crandall, 1999). Jacobs et al. (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) stated 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, 2014). 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; Brown, 2007). 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 classrooms since it improves students' language proficiency in terms of collaboration not competition.

3. Methodology

3.1 Participants

Because of COVID-19 pandemic, a class with 30 non-English major students who enrolled in the English for Adults Program (EAP) at the Institute of Foreign Languages (IFL), University of Battambang (UBB) in Cambodia in the academic year 2019 were purposely selected from the five classes (175 students in total) of intermediate level. There were 18 females and 12 males and their ages ranged from 17 to 24. They shared the same first language (Khmer) and have been learning English as a foreign language for 8 years on average.

3.2 Instructional and Research Instruments

There were six instruments employed in the present study and they were divided into two types.

3.2.1 Instructional Instruments

MBCL Lesson Plans were designed and constructed by the researcher based on the objectives of the course and students' course

book. They were categorized into three stages: pre-listening, while listening, and post listening.

MBCL Website was one of the majors teaching and learning materials used in the present study. It was developed by the researcher using Mobirise, Audacity, fromtexttospeech, Wondershare Video Editor, FlexiQuiz, and Kahoot program. The contents and exercises were adapted and modified from the Cambridge Preliminary English Test (PET) book 6 by Cambridge University Press (2010). The MBCL website consisted of 4 lessons and each lesson had 2 listening exercises together with vocabulary and grammar exercises as well as listening homework.

3.2.2 Research Instruments

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. There were 24 items testing different listening skills with multiple choice responses, gap filling, and true/false statements: identifying key information from a short exchange (6 items), identifying specific information and detailed meaning (6 items), understanding and interpreting information (6 items), and identifying attitudes and opinions of the speakers (6 items).

The questionnaire was developed by the researcher to examine the opinions of the students on learning listening via Mobile-Blended Cooperative Learning. 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.

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.

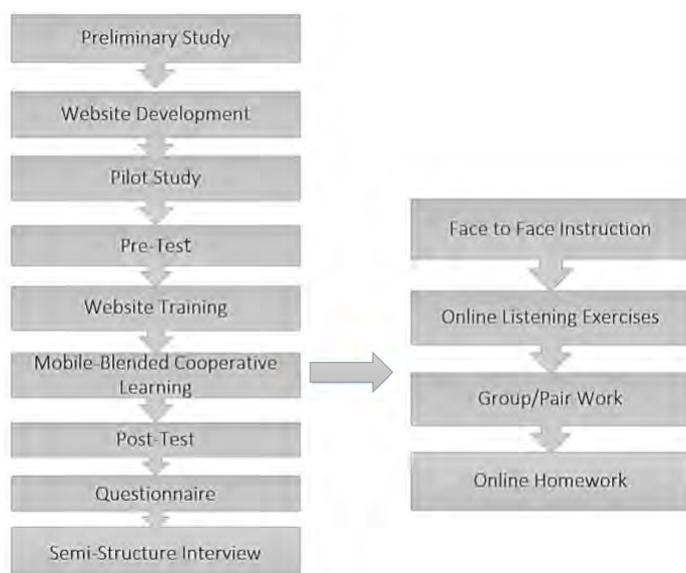
All the instruments were checked and validated using Index of Item Objective Congruence (IOC) by 3 experts in the field of English language teaching who has at least five-year experience in teaching at a

public or private school or university. The average scores of each instrument (pre-test and post-test= 1, questionnaire and interview questions=0.88) from the three experts were greater than 0.5. There is no hesitation in affirming that the instruments are valid. Moreover, small revisions of the language use were made based on experts' comments and suggestions. On the other hand, to establish the reliability of the pre-test and post-test, a pilot study was used. After piloting, the researcher used KR-20 adopted from Fulcher and Davidson (2007) to calculate the level of reliability. The result was greater than 0.70; therefore, the tests were reliable.

3.3 Data Collection

Figure 2

Data



Collection Process

The experiment took approximately 8 weeks from late April until early June 2020. 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 classroom here refers to a room that was not at the university or school. To answer the research questions, the data was evaluated using both qualitative and quantitative methods. All the students who participated in the present study were required to do the listening pre-test before engaging in the experiment process. After the pretest, they were trained to use the MBCL website. After that, they all learnt by using MBCL to enhance their listening comprehension. 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. The questionnaire was delivered the same day after the post-test was completed. 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. Figure 3 shows about the data collection process in the present study.

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

4. Results

4.1 Result from Pre-test and Post-test Scores

Table 1

Paired Sample T-test of the Students' Pre-test and Post-test

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

* $p \leq 0.05$

According to Table 1, the mean difference of pre-test and post-test was 3.60 and the p value was lower than 0.05. Therefore, there was a significantly different between pre-test and post-test. It could be concluded that the students' English listening comprehension improved after they had studied via MBCL.

4.2 Results from Questionnaire

The questionnaire was administered after students completed the post-test to examine their opinions toward the use of MBCL on listening comprehension. Table 2 revealed that all students agreed with all items (20 items) in the questionnaire 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 ($M=3.73$, $SD=0.78$).

Table 2

Students' Opinions toward the Use of MBCL

| No | Students' Opinions | Mean | 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 the students' books 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 efficiently. | 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 on 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 | 3.93 | 0.52 | Agree |

| | | | | |
|----|---|-------------|-------------|-------------------------|
| | target language easier than before. | | | |
| 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 |

4.3 Results from the Semi-structured Interviews

The results of the semi-structured interview will be presented in three different themes: students' satisfaction, listening enhancement, and problems.

4.3.1 Students' Satisfaction towards MBCL

All students (N=15) responded that they like learning via MBCL for different reasons: the user friendliness, convenience, fun as well as helpful. Students can learn both listening comprehension and play educational games like Kahoot with their classmates at the same time. 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.

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.

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.

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.

4.3.2 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 including speaking (N=8), pronunciation (N=6), grammar (N=4), and vocabulary (N=3). There are some evidences from their speeches.

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.

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

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.

4.3.3 Problems Encountered while Using MBCL

Students encountered the same problems with poor internet connection (N=9), unfamiliar accents (N=1), vocabulary and grammar knowledge (N=3), and distraction from other social media (N=2). The poor internet connection blocked them from accessing the website and doing the listening exercises. 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.

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

5. Discussion

5.1 The Effects of MBCL toward Students' Listening Comprehension

In the present study, the average score of students' post-test was higher than pre-test, 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.

First, it might be from the Index of Item Objective Congruence (IOC) of the three experts in the field of English Language teaching. 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). The successful performance on the test allows valid generalizations about achievement to be made. Second, it was probably from the pilot study with non-research participants, before the main experiment, confirmed 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. According to Fraser et al. (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 et al. (2018) was that it helped the researcher of the present study to make the materials more effectively for the main experimental study. Third, it would probably be from the well-prepared lesson plans with cooperative learning activities.

Based on Brown (2007) and McMullin (1992), a 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. Finally, it 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); Bader Al-Bataineh et al. (2019) and Hosseinpour et al. (2019).

The researcher had reviewed many previous studies, but the effects of MBCL on listening comprehension or on other language skills could not be 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 the previous studies. 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 et al., 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 from the present study were assumed to be from the approval of valid materials using IOC from the three experts, also the pilot study before the launch of the main study, well prepared lesson plans with cooperative learning activities, as well as the three features

combined in the learning website (MBCL website), offered the students more opportunities to be exposed to both listening and other language skills (grammar, vocabulary, and speaking) both online and offline.

5.2 Students' Opinions toward the Use of MBCL on Listening

5.2.1 Students' Opinions toward MBCL

The results from both questionnaire and semi-structured interviews revealed that Cambodian EFL students had positive opinions toward the use of MBCL because it was user friendly, convenient and, fun as well as helpful. Firstly, user friendly might come from the format of the website use in their phone with big font size and color as well as the accessibility of learning at anytime and anywhere. In accordance with this, the study conducted by Sulisworo and 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. More importantly, the accessibility of learning at anytime and anywhere corresponded with the study of Martin et al. (2013) that ability to access learning anytime had an impact on the students' motivation and participation in mobile learning. Secondly, the 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 felt happier, that learning was fun, exciting, and engaged more in the classroom activities when they played educational games individually and with teams. These findings are consistent with the study of Gozcu and 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 with an environment of fun, motivation and high learning performance. Finally, 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 (speaking, grammar, pronunciation, and vocabulary) using cooperative learning having the opportunity to work in pairs or groups where they could express their own thoughts on the listening exercises and build up good relationships with their

classmates. Students could also do many types of listening exercises with immediate results, have unlimited access to the website. Several previous studies (Kim, 2014; Hosseinpour et al., 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.

5.2.2 Listening Enhancement

All students positively believed that learning with MBCL could help them improve their listening comprehension because MBCL is suitable for their current level (intermediate) and it 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. Hence, the students' learning motivation were from variety of listening exercises (multiple choices, gap filling and true/false statements) and the cooperative 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 et al. (2018) that blended learning can increase learners' motivation and interest. Another study of Sulisworo et al. (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.

5.2.3 Problems Encountered while Using MBCL

In addition to positive opinions, students expressed the problems in the interview that they encountered while using MBCL. Firstly, students mentioned that they could not do their exercises well because of their mobile internet connection. Their 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. This internet access problem might come from 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. This result corresponds with Jibrin et al. (2017) and Nuraeni et al (2020), 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. Secondly, 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 et al. (2013) with three Swedish schools by using surveys and interviews and the results revealed that the distractions from social media interrupted the students from completely engaging in learning. Finally, students claimed that they were not able to comprehend the listening exercises and finish them because of an unfamiliar accent, a lack of vocabulary and grammar knowledge. 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 findings was in line with Hanmouda (2013) and Hadijah and 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. However, clearly the benefits of using MBCL still outweighs the drawback of using it. MBCL can be used to help Cambodian students improve their listening comprehension.

6. Conclusion

The present study was conducted to investigate the effects of MBCL on EFL students' listening comprehension in a Cambodian Context and to examine students' opinions toward MBCL on listening comprehension. The results revealed that students have improved their listening comprehension after studying with MBCL. From the questionnaire and semi-structured-structured interviews, students had positive opinions toward MBCL on listening comprehension in terms of listening enhancement, convenience, fun, motivational tool, user-friendly website as well as the improvement of other skills (pronunciation, *LEARN Journal: Vol.14, No.2 (2021)*

grammar, vocabulary and speaking). More importantly, this new pedagogical innovation “MBCL”, will probably be a good teaching methodology for the post-COVID-19 pandemic educational setting in Cambodia 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 and no more struggling in teaching EFL students in any circumstances. MBCL may promote lifelong learning as it integrating technology tools and 21st century teaching techniques in the process of learning.

7. Recommendations

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

1. Classroom teachers should design the integrated skills lesson plans with cooperative learning activities based on the objective, specific skills and level focus.
2. If the novice as well as experienced teachers would like to implement MBCL in their class, they may use the ready-made website and add some cooperative activities if they have no experience in developing their own website.
3. As MBCL is a new pedagogical innovation, 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 and other contexts.
4. Further study may explore the effects of Mobile-Blended Cooperative Learning (MBCL) on other language skills (reading, writing, speaking, or grammar).
5. Further study should examine the relationship between students’ attitude toward their learning performance.
6. Further study may focus on 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.

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