Using Mobile Assisted Language Learning (MALL) Approach for Developing Prospective Teachers' EFL Listening Comprehension Skills and Vocabulary Learning

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Abstract

The aim of this research was to investigate the effectiveness of using Mobile assisted language learning (MALL) approach in developing EFL prospective teachers' EFL listening comprehension skills and vocabulary learning. The design of the research is a mixed research methodology. It combines both quantitative and qualitative methods of inquiry. The participants of the study consisted of thirty students enrolled in third year English section at Faculty of Education, Benha University, Egypt. They were tested before and after the intervention. They were taught through Mobile assisted language learning program. The instruments of the research included an EFL listening comprehension skills test, vocabulary test, a semi-structured interview and self-report survey. Results of the research revealed a statistically significant difference between the mean scores of the study participants in the pre and post administration of the EFL listening comprehension skills and vocabulary learning in favor of the post administration. These results were ascribed to Mobile assisted language learning.

Keywords: EFL Listening Comprehension Skills- Vocabulary Learning- Mobile Assisted Language Learning Approach.

Introduction

Language is one of the most significant factors that provides communication between people. The ability to provide a clear communication requires good language skills. Four essential skills (listening, speaking, reading, and writing) can be discussed in language skills development. It depends on the
development of these skills for the individuals to communicate in an accurate, clear and effective manner. Thus, language skills are not independent from each other, although they are explained from different aspects (Bilican, Kutlu, and Yildirim, 2012).

Listening is considered one of the most essential skills for both communication and language learning. It facilities the other language skills: speaking, reading and writing and provides the basis for developing them. Thus, developing the students' listening skills is directly related to putting forward the factors that take a part in the listening process. As a result, there are three approaches to teach listening skills, top-down, bottom-up, and interactive models. In the top-down processing, listeners get the gist and main ideas of the listening passage. In bottom-up processing, listeners focus on individual words and phrases, and achieve understanding by combining the details together to build up the whole content. Therefore, listening is considered as interactions between the top-down and bottom-up processing (Al-Yami, 2008, Barani, 2011, Harmer, 2001, Kutlu and Aslanoglu, 2009, Kuo, 2009).

Yamada, et al. (2011) clarify that listening comprehension is not simply a meaning-reception process but rather a process that actively establishes meaning and is aided by the preexisting knowledge of the listener. Therefore, it requires learners to listen with awareness of purpose. Also, Martínez (2010) indicates that listening comprehension is a complex and active process in which the listener must discriminate between sounds, understand vocabulary and grammatical structures, interpret stress and intonation, retain what was gathered, and interpret it within the immediate as well as the larger sociocultural context of the utterance.

Listening comprehension is defined as an activity in which listeners employ a variety of mental processes to comprehend information from oral texts. Listeners focus on related aspects of aural input, construct meaning from messages, and relate what they hear to existing knowledge. Students face key problems
when listening to English as a foreign language such as: hearing sounds; understanding intonation and stress; coping with redundancy and noise, predicting, understanding colloquial vocabulary; understanding different accents; and using visual and aural environment clues. The causes of these problems may be related to learners who do not perceive certain sounds, the interference of English system of stress, intonation, and rhythms, learners try to understand every single word, they cannot guess what's going to say for easier perceiving and they are not familiar with the vocabulary used in colloquial speech (Kao, 2006, McBride, 2007).

Therefore, Goh (1999) identified the factors that influence learners' listening comprehension such as vocabulary, prior knowledge, speech rate, type of input and speaker's accent. Also, Goh (2000) identified that language learners' listening comprehension problems related to perception, parsing and utilization. He suggested that the problems could have been the results of some related factors such as sound-script and word-referent processes were not automatized; poor sound representation of familiar words; failure to use appropriate comprehension tactics; a lack of appropriate schematic knowledge or insufficient prior knowledge.

In addition, learning a foreign language involves memorization and practice of a large number of vocabulary words. Vocabulary is considered a basic communication tool for language learners. Vocabulary learning process is clarified by various factors including not only explicit and implicit techniques or individual and group based activities but also motivation and learning strategies. It includes complex processes such as the acquisition of words, pronunciations, meanings, as well as their stylistic, morphological and syntactic properties (Barania, Mazandaranib, and Rezaie, 2010, ÇELİK and TOPTAŞ, 2010, Kalyuga, Mantai, and Marrone, 2013, Mahmoudia, Samad and Abdul Razak, 2012).

Wang, XianJiaotong and Xing (2014) indicate that vocabulary is an essential component of language and the most
important part of foreign language knowledge. Although listening, speaking, reading and writing are the skills that language learners need to master. Vocabulary is central to all these four skills, because it is hard to develop any of the four skills without sufficient vocabulary. Also, vocabulary learning is a fundamental component of foreign language acquisition. Therefore, Hu (2011) argued that without grammar very little can be conveyed, and without vocabulary nothing can be conveyed.

Zahedia and Abdi (2012b) clarified that without a sufficient vocabulary, one cannot convey message effectively or express ideas in both oral and written forms. It plays a significant role for communication, because communication would be stopped if people hear or read words they fail to understand. The greater vocabulary students master, the better they perform their language. Thus, by having limited vocabulary, the students will find difficulties mastering English skills. Without words, there would be no language structures. Words are the building blocks of a language since they label objects, actions, ideas without which people cannot convey the intended meaning. Therefore, Zahedia and Abdi (2012a) conducted a study to confirm the effect of semantic mapping strategy on learners' vocabulary learning.

Nation (2001) in his taxonomy distinguishes the aspects of vocabulary knowledge, the sources of vocabulary knowledge and learning processes. He classifies the vocabulary learning strategies into three general groups, planning, sources, and process. Thus, vocabulary learning is a principal issue for English learning because vocabulary comprises the basic building blocks of English sentences. As a result, learning new vocabularies is an important part of learning a new language. According to Nation (2006) learners should know at least 5000 lexical items to understand English texts because, students do not have the opportunity to speak and use all of the vocabularies in class. This
leads to some problems for language teachers and learners. The problem faced a language teacher is how to teach this large number of vocabulary during the limited time of the class.

Also, Nation (2005) clarified that teachers can teach individual words explicitly, but teaching vocabulary is one of the least efficient ways of developing learners' vocabulary knowledge. In addition, learners face a lot of difficulty in the language learning process. They should memorize and learn the large amount of words of the language they are learning. This urges language teachers and researchers to look for alternative ways to traditional classroom teaching of vocabulary and change vocabulary learning into a lifelong learning which is not limited to the classroom and adapt it to the needs of learners. They should make learning interesting for students and make them responsible for their own learning. One of the ways that can help teachers in teaching vocabulary is using different technologies available to students.

Vocabulary learning is one of the major challenges foreign language learners face during the process of learning a language. Thus, Purfallah and Gholami (2014) explored the impact of applying critical thinking strategies (CTSs) and raising awareness on EFL learners' vocabulary learning.

Therefore, Goh (1999) and Park (2004) indicate that vocabulary knowledge is crucial for listening comprehension. In listening comprehension, the meaning of a text or a passage is not just detected in the sentences themselves, but is derived from the previous knowledge stored in the listener's mind and the processes the listener decodes. Listening comprehension is an active and conscious process in which the listener constructs meaning by using cues from contextual information and from existing knowledge, while relying upon multiple strategic resources to fulfill the task requirements. Al-Jarf (2012) clarified that through using mobile learning in listening, students could listen to an audio lesson and repeat anywhere, and as many
times as they needed. They could study and review their lessons in the car, on the bus, and/or on the plane.

According to listening in a foreign language, two levels of activity are involved: the recognition level and the selection level. At the recognition level, a listener identifies words and phrases in their structural inter-relationships, which involve time sequences, logic, and modifying redundant terms and phrases while developing the line of thought. At the selection level, the listeners pay attention to those elements containing the gist of the message. They have to concentrate on certain sound groups, whereas others are aurally perceived without being retained (Ashraf, Motlagh and Salami, 2014, Goad, 2012, Hirschel and Fritz, 2013, Khazaie and Ketabi, 2011, Kuo, et.al., 2014, Lin, 2006).

Therefore, with the rapid growth of wireless and mobile learning technology, the use of mobile phone and other portable devices are now beginning to have an impact on language teaching and learning throughout the world. Similarly, the development of language learning technologies recently has tended to be mobilized, portable, and personalized. These trends have led to learning forms changing from traditional classroom learning to electronic learning (E-learning), mobile learning (M-learning). Among these learning forms, mobile learning is effective and flexible, can overcome restrictions of time and space, and enable learners to study whenever and wherever possible (Begum, 2011, Chen and Chung, 2007, Walters, 2012).

Due to the rapid advancements in mobile communication and wireless technologies, mobile phones are the most powerful communication medium that can act as a learning device despite its technical limitations. With such a learning device the learner controls the learning process and progress in his/her own space based on his/her cognitive state. Learning through the mobile phone provides learners with the opportunity to learn when they are in the bus, or outside. In fact, learners can learn every time and everywhere they are. Mobile devices provide both portability and connectivity. As for connectivity, designing the
mobile system must have capability of being connected and communicated with the learning website using the wireless network of the device to access learning material including short message service (SMS) and mobile e-mail. Portability enables learners to move mobile devices and bring learning materials (AbuSa'aleek, 2014).

Therefore, in language learning, the features of mobile technologies such as texting, voice and video recording, access to the Internet and cameras, enable the learners to enhance their communicative skills and access to authentic materials. The rapid use of mobile technology has attracted the attention of researchers and paved the way of emerging the field of Mobile-Assisted Language Learning (MALL) to support the process of language learning. MALL describes an approach to language learning that is enhanced through use of a mobile device. MALL is a subset of both Mobile Learning (m-learning) and Computer-assisted language learning (CALL) (Miangah and Nezarat, 2012, Nash, 2007).

MALL draws on the attributes of enhanced mobility, access and flexibility afforded by mobile technologies. It offers learning that is potentially independent of location, time and space, accommodating students’ preferences and schedules. It enables language learning that can be informed by the context in which it is occurring. Thus, mobile learners are now able to interact and communicate with the context in which a mobile learning task is taking place. Thus, MALL focuses on developing innovative learning approaches. The popularity of mobile and wireless information and communication technologies (ICT) has provided good opportunities which match this emerging trend in language teaching (LT). With the help of these technologies, students are able to learn at anytime and anywhere. Using mobiles beyond their traditional uses such as podcasts, mp3 applications, and even learning apps seems to be a real challenge at this point (Abbasi and Hashemi, 2013, Al-Shehri, 2011, Chen, Hsieh & Kinshuk, 2008, García Laborda,
Kukulska-Hulme (2005) and Lee (2005) confirm the growing popularity and advancing functionality of using mobile technologies in teaching and learning languages. Taki and Khazaei (2011) clarify that mobile phones are not only able to support formal and informal learning but also to complete the process of learning via computers. Also, Miangah and Nezarat (2012) indicate that MALL deals with the use of mobile technology in language learning. In contrast to classroom learning, in MALL there is no need for the learners to sit in a classroom or at a computer to get learning materials. In fact, MALL can be considered an ideal solution to language learning barriers in terms of time and place.

MALL deals with the use of mobile technology in language learning. Students do not always have to study foreign language in a classroom. They may have the opportunity to learn it using mobile devices when they desire and where they are. MALL has started to move learners and teachers out of the classroom setting into the real world. By using mobile phones, teachers can provide a rich learning environment for learners. It could be argued that MALL involves the use of any portable learning materials, so it includes books, audio-cassettes, audio-CDs, and portable radios and DVD players (Azara and Nasiri, 2014, Derakhshan, 2011, Kukulaska-Hulme and Traxler 2005).

Therefore, MALL is a branch of technology-enhanced learning which can be implemented in numerous forms including face-to-face, or on-line modes. It is a teaching method which uses the mobile phone technology as a way of stressing learner centeredness and autonomy. It is defined as learning anywhere and anytime. With the availability of lightweight mobile devices such as mobile phones and personal digital assistants (PADs), MALL has become a popular learning medium. Thus, MALL should be implemented in the classroom, taking the presence of learners as a paramount factor into consideration. Therefore, advancements in wireless technology have supported

Nation (2001) and Thornton and Houser (2005) indicate that one of the most used features of mobiles in language learning is short message services - SMS. Kukulska-Hulme (2005) indicates that MALL is 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.

Therefore, MALL has many advantages for EFL university students in learning English. One of the advantages could be the possibility to download certain English applications and programs that may help learners to improve their language skills, their language systems like grammar and vocabulary. If a learner uses these applications, this might aid their English language experience. Also, there are many free electronic PDF books, some of which relate to the English language. MALL has just started to move learners and teachers out of the classroom setting into the real world (Almasr, 2012, Muhammed, 2014, Nachoua, 2012).

Caudill (2007), Donaldson (2011) and Hoskyns-Long (2009) clarify that MALL as an educational method is new and more flexible than previous e-Learning applications. Learners can have the opportunity to review course materials or correspond with instructors or colleagues at anyplace. As MALL is rapidly becoming one of the latest trends of e-learning. Today, more students are learning on the move rather than sitting in traditional classrooms. It can enable learners to listen to classroom lectures, guest speakers, or corporate updates at their own convenience and pace. There are two key components making MALL possible: advances in both mobile digital technology and wireless networks, and technological advances
making mobile devices more available and affordable to the average person.

Although listening is a passive skill, it needs to be an active and demanding process of interpreting information from sound and picture clues. Therefore, Kim (2013) clarifies that in order to become proficient listeners, students need to be exposed to authentic and meaningful listening materials. From this point of view, mobile apps for listening can be an effective tool for college learners who do not have many opportunities to listen to authentic materials and to be exposed to a foreign language outside of the classroom.

In addition, vocabulary learning is one of the major challenges foreign language learners face during the process of learning a language. One way to assist students in becoming independent learners during the process of vocabulary learning is instructing them to use their mobile phone. Thus, the activities focusing on vocabulary learning via mobile phone differ from one research project to another, depending on the level of language proficiency of the learners. Sending e-mail or SMS to students is a common way of learning new vocabulary based on the lessons covered in the classroom. As a result researchers such as Kennedy and Levy (2008), Thornton and Houser (2005) and Chen, Hsieh & Kinshuk (2008), Stockwell (2010), and Tabatabaei and Goojani (2012) confirmed the effectiveness of using SMS to learn vocabulary.

Context of the problem

In the past, listening comprehension taught in the EFL classroom has made use of audio materials such as English tapes, CDs, radio broadcasts, and such may benefit students by providing target language input. These resources were the most available ones, yet they cannot provide the visual cues that authentic objects, speakers' facial expressions and gestures, or other clues give to hearing and comprehension. Because of this lack, one resource that has often been used more recently to provide listening input is video or DVD (Kuo, 2009).
El-Koumy (2000) clarifies that though listening to English as a foreign language has recently become an important communication activity, it is still largely neglected in Egyptian schools and universities. This neglect is largely due to the fact that no agreement exists regarding what listening entails, and how it can be taught. Also, Ali (2010) clarified that language learners faced several problems in listening such as the lack of control over the speed at which speakers speak, the listeners' limited vocabulary, inability to concentrate and problems of interpretation. Rezaei and Hashim (2013) indicate that teachers, especially in EFL contexts, often are not aware about the process of listening and learners' problems in listening comprehension. As a result, the common practice in the class is that teachers focus on the outcome of the listening rather than listening itself i.e. the process of listening.

In addition, learning new vocabulary is an integral part of learning a new language. Because of the limited class hours, students do not have the opportunity to speak and use all of the words in class. This causes some problems for language teachers and learners. The problem faced a language teacher is how to teach this large number of vocabulary during the limited time of the class. They can focus and teach individual words explicitly, but teaching vocabulary is one of the least efficient ways of developing learners' vocabulary knowledge. However, explicitly teaching vocabulary constitutes an integral part of a well-balanced vocabulary program. The problem that learners face when exposed to explicit teaching of vocabulary is the difficulty of the language learning process. They should memorize and learn the large amount of words of the language they are learning. This urges language teachers and researchers to look for alternative ways to traditional classroom teaching of vocabulary and change vocabulary learning into a lifelong process which would exceed the limits of the classroom and would be adapted to the needs of learners. They attempt to make learning interesting for students and make them more responsible for their own learning (Alemi, Sarab and Lari, 2012).
In light of the researcher's experience in teaching at university level, and the review of related studies (i.e. Al Alili (2009), Ali (2010), Amin, Aly and Amin (2011a-b), Al-Jarf (2012) and Gaber (2015) it could be noticed that students faced problems in listening comprehension and vocabulary learning. In addition, both teachers and students are exam-oriented and since exams are in the form of pencil and paper, some teachers completely neglect teaching listening comprehensions skills. Other times teachers change listening comprehension tasks into reading passages by reading the transcript orally to the students or by giving them a written copy to read and answer questions.

To document the problem, the researcher conducted a pilot study on twenty students from third year students enrolled in English section at Faculty of Education, Benha University, Egypt. The pilot study consisted of an EFL listening comprehension skills test, and vocabulary test. The results of both tests revealed that students have difficulties in listening comprehension and vocabulary learning because they are trying to understand every word, they get left behind trying to work out what a previous word meant, they just do not know the most important words, they do not recognize the words that they know and they have problems with different accents. The students are accustomed to the traditional method of teaching listening in which they simply listen to a spoken message in order to answer some comprehension questions at the end.

**Statement of the Problem**

In spite the importance of EFL listening comprehension skills and vocabulary learning, third year students enrolled in English section at Benha Faculty of Education have difficulties in listening comprehension and learning vocabulary. The present research aims at examining the effectiveness of Mobile Assisted Language Learning (MALL) Approach in developing EFL listening comprehension skills and vocabulary learning among prospective teachers at Faculties of Education.
Questions of the Study

1. What are the features of a program based on (MALL) Approach in developing EFL listening comprehension skills and vocabulary learning among prospective teachers at Faculties of Education?

2. How far is a program based on (MALL) Approach effective in developing EFL listening comprehension skills among prospective teachers at Faculties of Education?

3. How far is a program based on (MALL) Approach effective in developing EFL vocabulary learning among prospective teachers at Faculties of Education?

Review of Related Studies

Foreign language learning can be considered from the four aspects of listening, speaking, reading, and writing. Among these aspects, listening is an important capability of social interaction, and it has been found that people receive new messages more efficiently via listening than reading. With the advance of mobile technologies and multimedia, instructional materials for English listening have been developed in a variety of forms. For example, MP3 players have become a new mobile device for learning via listening; moreover, several web2.0 media, such as YouTube, have become popular channels that provide audio and video materials for language learning. Thus, the popularity of various mobile devices and wireless networks have enabled individual students to use those emerging learning materials or channels anywhere and at any time (Frigaard, 2002, Hsu, et al., 2013).

Because of the effectiveness of using MALL in improving listening comprehension and vocabulary learning, many researchers conducted several studies related to listening comprehension, vocabulary learning and MALL such as the following:

Due to the importance of listening comprehension as an essential language skill, several researchers conducted studies to improve it such as; El-Koumy (2000) determined the relative impact of skills-based and whole language approaches on the
listening comprehension of English as foreign language (EFL) students with low and high listening ability levels. Park (2004) investigated how learners of English comprehend aurally authentic video clips with three modes of captions, partial, full, and no-caption modes. Abdelhafez (2006) investigated the effects of a suggested training program in some Metacognitive Language Learning Strategies (MLLS) on developing listening and reading comprehension of first year EFL students. Al-Yami (2008) investigated the effectiveness of scaffolding interactive activities in developing English listening comprehension skills of sixth grade elementary schoolgirls in Jeddah. Kuo (2009) examined and analyzed the effects of YouTube video clips as teaching material for EFL students on their listening comprehension performance. Al Alili(2009) determined whether Arabic-speaking EFL learners' listening comprehension of an unfamiliar text would vary as a function of being exposed to one of two possible advance organizers to activate their background knowledge. Amin, Aly and Amin (2011a) explored the effectiveness of using explicit language learning strategy-based instruction in developing secondary school students' EFL listening comprehension skills. Also, Amin, Aly and Amin (2011b) investigated the correlation between EFL students’ strategic listening and their listening comprehension skills.

In addition, language learning has been taking advantage of Information Technology. One of the most attractive technologies is mobile phones which represent a revolutionary approach in education. In this respect, the use of a mobile device in language learning can be supported and based on a variety of learning theories and methodological approaches. Moreover, some researchers found that mobile technologies supported language learning in different areas such as vocabulary learning and listening comprehension skills as follows:-

Baleghizadeh and Oladrostam (2010) improved the grammatical knowledge of EFL students through using mobile phones while listening and speaking. Al-Jarf (2012) described the effects of using self-study MP3 L2 English lessons on oral skill
development. Hsu, et al. (2013) investigated the effects of different display modes of video captions on mobile devices, including non-caption, full-caption, and target-word modes, on the English comprehension and vocabulary acquisition of fifth graders. Kim (2013) demonstrates the effects of MALL in listening skills. Azara and Nasiri (2014) investigated Iranian EFL learner's attitudes toward the effectiveness of MALL on their listening comprehension. The participants of the study were four intact classes among a group of EFL learners. Hwang, et al. (2014) designed learning activities supported by a mobile learning system for students to develop listening and speaking skills in English as a foreign language (EFL). Gaber (2015) investigated the effectiveness of using mobile assisted language learning to develop EFL listening skills and learner autonomy among secondary school students.

Therefore, the type of activities focusing on vocabulary learning via mobile phone differs from one research project to another, depending on the level of language proficiency of the learners. Sending e-mail or SMS to students is a common way of learning new vocabulary based on the lessons covered in the classroom. In order to confirm the effectiveness of MALL in learning vocabulary, researcher conducted studies to improve vocabulary learning through MALL as follows:-

Kennedy and Levy (2008) confirmed the potential of SMS messages particularly for helping language learners build their command of vocabulary. Hu (2011) indicates that vocabulary learning with mobile phones allows learners to be exposed to the distributed vocabulary items on the regular basis, which can be a complementary approach to vocabulary learning, as in the traditional paper-based vocabulary learning. Almi and Lari (2000) investigated the effectiveness of short message service (SMS) on Iranian university students' vocabulary learning and retention. Chang (2008) examined the effectiveness of SMS study reminders to influence student achievement, student learning behaviors, and the perceptions and experiences of students in a self-regulated vocabulary learning project. Also, Lu (2008)
clarified the effectiveness of SMS vocabulary lessons of limited lexical information on the small screens of mobile phones.

In addition, Zareia, and Khazaie (2011) explored how short-term memory of males and females can respond to the English language vocabulary learning contents (verbal or visual) presented to them via mobile phone. Derakhshan and Kaivanpanah (2011) provided evidence for the effectiveness of SMS on university students’ vocabulary learning. Motallebzadeh, Beh-Afarin and Daliry Rad (2011) used short message service to help Iranian intermediate EFL learners to retain English collocations. Alemi, Sarab and Lari (2012) clarified that mobile phones as new addition to information and communication technologies have created new ways to help learners in the process of foreign language learning and they investigated the effectiveness of SMS on Iranian university students’ vocabulary learning and retention.

Also, Yousefzadeh (2012) investigated the superiority of mobile-based collocation words learning in comparison with classical paper-based collocation words learning. Also, in their study, Agca and Özdemir (2013) investigated the effect of the multimedia content integrated to learning materials using 2D barcode technology to vocabulary learning and students' ideas about this new learning environment. Khodashenas and Amouzegar (2013) focused on the impact of MALL on Iranian English as a foreign language (EFL) learners’ vocabulary learning. Shams (2013) investigated the effectiveness of using hybrid learning in developing Iranian EFL learners' autonomy in vocabulary learning. Jalilifar, Mehrabi, and Mousavinia (2014) clarified the effect of enlisting the vocabulary instruction with the printouts of concordance lines on learning and retention of Iranian EFL students. Wu (2014) investigated the effectiveness of smartphones on helping college students learn English vocabulary. Shahriarpour and Kafi (2014) applied digital games to develop learning English vocabularies especially through video games.
Therefore, it can be concluded that listening comprehension and vocabulary learning are a complex and gradual process. Vocabulary learning is one of the major challenges foreign language learners face during the process of learning a language. Because of this reason it will be appropriate to use different approaches and activities. The important point of the vocabulary learning is the necessity of learning the words with different aspects. If a student’s vocabulary knowledge is richer, then s/he can better understand the structure of the foreign language. Also, students need to listen carefully to understand meaning and know a lot of words. Therefore, mobile assisted language learning (MALL) is one of these approaches that help students develop their listening comprehension and vocabulary learning skills.

Hypotheses of the Study

Based on the related studies and research questions, the following hypotheses were formulated:

1. There is a statistically significant difference at the .05 between the mean score of the study participants in EFL listening comprehension skills on the pre-and post-administration of the EFL listening comprehension skills test in favor of the post-administration.
2. There is a statistically significant difference at the .05 between the mean score of the study participants in EFL listening comprehension sub-skills on the pre-and post-administration of the EFL listening comprehension skills test in favor of the post-administration.
3. There is a statistically significant difference at the .05 between the mean score of the study participants in vocabulary learning on the pre-and post-administration of the vocabulary test in favor of the post-administration.

Methodology

A. Participants

Subjects of the research consisted of thirty students (N=30). They were chosen from third students enrolled in
English section at Benha Faculty of Education, Egypt. The participants represented one group which taught through using Mobile Assisted Language Learning (MALL) program.

B. Design

The present research is a partially mixed research methodology. It combines both quantitative and qualitative methods of inquiry to help in bridging the gap between quantitative and qualitative research. To conduct the quantitative analysis the pre- post experimental group design was used. The study sample was tested before and after conducting the experiment. In addition a qualitative analysis of the students' performance is provided.

C. Instruments

In order to fulfill the purposes of the study, the following instruments were designed.

A. An EFL Listening Comprehension Skills Test

The EFL listening comprehension test was prepared by the researcher to measure listening comprehension skills among third year students enrolled in English section at Benha Faculty of Education, Egypt. It was used as a pre-post test. The test is a multiple choice test, consisting of three parts ranging from short to long talks. Part A includes (30) short conversations between two persons (a man and a woman), and at the end of each conversation the narrator asks a question and the students were asked to read the four possible answers and choose the suitable one. Part B consists of two conversations between two persons and the students were asked to listen carefully to the conversations and answer the questions (four questions for each conversation). Part C contains three long talks between two persons. In this part the students were given hints at the beginning of each conversation about what the conversation will be about and then they were asked to listen carefully and answer the questions (four questions for each conversation). The total mark of the test is 50 marks (1) mark for the right answer and (0) for the wrong one) (See appendix A).
B. An EFL Vocabulary Test

The EFL vocabulary test was prepared by the researcher to measure vocabulary learning among third students enrolled in English section at Benha Faculty of Education, Egypt. The test was composed of 50 multiple-choice items. It was used as a pre-test and post-test to evaluate the students' achievement in English vocabulary learning. In order to obtain reliable results, the pre-test and post-test were suggested to be identical. The test comprised of three parts. Part A featured multiple-choice questions whereby students first understand the meaning of a given word and then find a word substitute for it. In part B, students were asked to answer the fill in the gap style questions by choosing an appropriate word to complete each sentence. In part C tested word formation and students were asked to put the correct word forms in the blanks. In this part, students had to find a suitable form of the word for each sentence based on the statements. The total mark of the test is 50 marks (1) mark for the right answer and (0) for the wrong one. (See appendix B).

C. Semi-Structured Interview

The interview was constructed to examine the importance of MALL among third students enrolled in English section at Benha Faculty of Education, Egypt, and its effectiveness in developing EFL listening comprehension skills and vocabulary learning. The interview took the format of face to face semi-structured interview. The researcher interviewed students one time at the beginning of the study, a second time in the middle, and a third time at the end of the study, to gain greater insight on their listening comprehension skills and vocabulary learning development throughout ten weeks. The researcher generally asked the pupils about their participation in the program. She used open ended questions to avoid responding with yes-no (See Appendix C). Seven pupils participated in the interview and their responses were video recorded. The interview lasted for one hour. At the beginning of the interview, the researcher greeted the pupils and asked them to give brief self-introduction as a way to set the goal for the interview. Then, she told them the purpose
of the interview and their own roles. If pupils did not understand any question, she could simplify it or change it. At the end of the interview, the researcher thanked the pupils for their participation.

D . Self- Report Survey

The researcher used Kim (2013)'s self-report survey for the study sample to gain general information about the participants at the beginning of the study and examine students' perspectives toward using mobile phone app in English listening and vocabulary. The survey consisted of open-ended questions and was carried to find out what were the participants' perspectives about mobile phone apps for improving English listening skills and vocabulary learning. It contained six questions to answer freely: The first and second questions were about the thoughts and ideas of students' most or least favorite parts to use the smart phone apps in improving their listening skills and vocabulary learning. The third and fourth questions focused on the effective or ineffective aspects when listening to English on smart phones using the apps. Concerning the fifth question, it was asked to give suggestions for a more effective way to apply the app in class activity. (See Appendix D).

Determining the Validity of the Research Instruments

The EFL listening comprehension skills test, vocabulary test, the interview and the survey were submitted to a jury member (see appendix E), they were asked to determine the validity of the instruments in terms of clear instructions, items and its suitability for the students' level. They indicated that the tests, the interview and the survey instructions were clear and suitable for students' levels and background knowledge. Therefore, the tests, interview and the survey were considered valid measures of listening comprehension skills and vocabulary learning (Face Validity). To ensure the content validity of the tests, interview and the survey, they were developed in the light of a systematic and accurate review of literature and previous studies. This accurate and systematic review determined the
general form of the tests, interview and survey questions and methods of correction. Therefore, the content of the tests, the interview and the survey was representative of the skills that were intended to be measured. Thus, the tests, the interview and the survey were valid and having a content validity.

Determining the Reliability of the Research Instruments

The reliability of the instruments was measured by using the test-retest method. The instruments were administered to a group of third students enrolled in English section at Benha Faculty of Education, Egypt. Then, they were administered to the same group again after two weeks. The Pearson correlation between the two administrations was (0.89) at the 0.01 level. Therefore, the instruments were reliable.

Mobile Assisted Language Learning Program

For achieving the purpose of the research, the researcher designed a program based on Mobile Assisted Language Learning Approach. After assessing third students' enrolled in English section at Benha Faculty of Education, Egypt listening comprehension skills and vocabulary learning, the study sample was required to attend Mobile Assisted Language Learning approach (See appendix F).

Objectives of Mobile Assisted Language Learning Program

The program aimed at developing EFL listening comprehension skills and vocabulary learning among third students enrolled in English section at Benha Faculty of Education, Egypt.

Content of Mobile Assisted Language Learning Program

The topics chosen for the program were selected from books and studies enriched with topics that motivate students. The program contained variety of topics, situations and discussions designed for developing listening comprehension
skills and vocabulary learning. They were suitable for the third students enrolled in English section at Benha Faculty of Education, Egypt such as Al-Jarf (2012), Donaldson (2011), Derakhshan (2011), Kukulska-Hulme and Traxler (2005), Lu (2008), Wu (2014), and Levy and Kennedy (2005).

Mobile Assisted Language Learning "MALL" Program Framework

The treatment began on 12th October 2015 and continued through 14th December 2015. The researcher met the students for two hours per week for ten weeks and also communicated with them via SMS messages and e-mails through the mobile phones. Week (1) was used for pre-testing and week (10) was used for post testing. Each session was devoted to the following: introduction, objectives, procedures, the role of the researcher and student and finally the performance. During the instructional procedures, different sessions had different learning goals and different methods were applied.

The program was taught to the study sample by the researcher herself. It lasted ten weeks with fourteen instructional sessions and each session lasted for two hours. At the beginning of the program, the researcher introduced to the students what they are going to do. First, she told them about the objectives of the program and what they are supposed to gain as a result of their participation in the program (Goal Setting). After that she told them about the importance of listening comprehension skills and vocabulary learning. Then, she began to introduce the concept of Mobile Assisted Language Learning "MALL" program and its importance for language learning and EFL listening comprehension skills and vocabulary learning.

Following the introduction of the program, the rest of the program were instructional sessions through which the EFL listening comprehension skills and vocabulary learning were introduced. At the beginning of each session the researcher told students the objectives of the session, the researcher's role, the student's role, the instructional materials that will be used, the
activities they will perform and ways of evaluating their progress. At the end of each session, the researcher gave students some activities related to what they had learned in order to be sure that they mastered the skills in each session (formative evaluation). At the end of the program, the researcher assessed the students' achievement after implementing the program using the EFL listening comprehension skills test and vocabulary test (summative evaluation).

The procedures of the Program

In order to implement the program, there are certain steps:

- The researcher should set the mobile phone profile to allow learners choose appropriate audio/video file formats, such as mp3, wma, , and mp4, that are supported by their mobile phones.
- The students used Smart phones with Internet service to access the course on a mobile Web site.
- Presenting some online materials related to listening comprehension and vocabulary learning from website such as http://www.freeenglishnow.com. Giving the students lessons' URL.
- Providing students with instructions on how to download lessons.
- Every week students download spoken English lesson in MP3 format & lesson scripts from the internet to their pocket PC, iPhone, cell phone or MP3 players.
- Students used mobile phones for a number of learning activities including podcasting, digital storytelling, and collaborative conversations.

Based on, Bergum (2011) there are some possible strategies to use the mobile phone in EFL classroom for teachers and students as follows:

- Downloading required e-books, software and dictionaries from mobile Internet for reading practice
• Using the online dictionaries for looking through word meaning.
• Using translation dictionaries for definition of a word.
• Developing reading, listening and speaking skill through the recorded short stories.
• Practicing pronunciation by recording audio materials.
• Receiving text messages from teachers with class content.
• Sending SMS in short and crispy sentence for grammar practice and teacher can later do correction by SMS reply.
• Students can get feedback from teachers via SMS. Homework and some tests can also be delivered in this way.
• Recording students' speeches in cell phone voice recorder options and later use it for speaking and pronunciation tests.

Findings of the Study

A. Quantitative Analysis of the Findings

The findings of the research are presented in the light of the hypotheses of the research using the Statistical Package for Social Sciences (SPSS). The findings are stated as follows:

Findings of Hypothesis (1)

The first hypothesis states "there is a statistically significant difference between the mean score of the study participants in EFL listening comprehension skills on the pre-and post- administration of the EFL listening comprehension skills test in favor of the post- administration ". Table (1) presents the students' mean scores, standard deviations, t -value and level of significance of the pre and post assessment of the study sample in EFL listening comprehension skills.

Table (1) shows that the study sample outperformed in the post administration of the overall listening comprehension skills, where "t-value" is (17.344) which is significant at the (0.01) level. Thus, the first hypothesis was supported.
Findings of Hypothesis (2)

The second hypothesis states "there is a statistically significant difference between the mean score of the study participants in EFL listening comprehension sub-skills on the pre-and post-administration of the EFL listening comprehension skills test in favor of the post-administration ". Table (2) presents the students' mean scores, standard deviations, t-value and level of significance of the pre and post assessment of the study sample in EFL listening comprehension sub-skills (i.e. listen for specific information, listen for drawing conclusion, listen for expression of agreement, listen for emphatic expression of surprise, listen for making inference and listen for making prediction).

The second hypothesis has the following sub-hypotheses

- There is a statistically significant difference between the mean score of the study participants in EFL listen for main idea on the pre-and post-administration of the EFL listening comprehension skills test in favor of the post-administration.
- There is a statistically significant difference between the mean score of the study participants in EFL listen for specific information on the pre-and post-administration of the EFL listening comprehension skills test in favor of the post-administration.
- There is a statistically significant difference between the mean score of the study participants in EFL listen for drawing conclusion on the pre-and post-administration.
of the EFL listening comprehension skills test in favor of the post- administration.

- There is a statistically significant difference between the mean score of the study participants in EFL listen for expression of agreement on the pre-and post-administration of the EFL listening comprehension skills test in favor of the post- administration.

- There is a statistically significant difference between the mean score of the study participants in EFL listen for emphatic expression of surprise on the pre-and post-administration of the EFL listening comprehension skills test in favor of the post- administration.

- There is a statistically significant difference between the mean score of the study participants in EFL listen for making inference on the pre-and post-administration of the EFL listening comprehension skills test in favor of the post- administration.

- There is a statistically significant difference between the mean score of the study participants in EFL listen for making prediction on the pre-and post-administration of the EFL listening comprehension skills test in favor of the post- administration.

Thus, table (2) indicated that the study participants were much better in the post application than the pre administration in EFL listening comprehension sub-skills where "t" value is (8.343) for listen for main idea, (9.283) for EFL listen for specific information, (12.252) for listen for drawing conclusion, (11.981) for listen for expression of agreement, (12.332) for Listen for emphatic expression of surprise, (7.642) for listen for making inference and (8.426) for listen for making prediction which is significant at the level of significance. Therefore, the second hypothesis was confirmed.
Findings of Hypothesis (3)

The third hypothesis states that there is a statistically significant difference between the mean score of the study participants in vocabulary learning on the pre-and post-administration of the vocabulary test in favor of the post-administration. Table (3) presents the students' mean scores, standard deviations, t-value and level of significance of the pre and post assessment of the study sample in vocabulary learning.

Table (3): "t" test between the mean scores of the study sample in the post administration of the Vocabulary Learning

<table>
<thead>
<tr>
<th>Item</th>
<th>Assessment</th>
<th>N</th>
<th>Mean</th>
<th>S.D</th>
<th>T-Value</th>
<th>D.F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vocabulary Learning</td>
<td>Pre</td>
<td>30</td>
<td>24.500</td>
<td>5.329</td>
<td>12.211</td>
<td>29</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>30</td>
<td>40.838</td>
<td>5.565</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table (3) shows that the study sample outperformed in the post administration of the vocabulary learning, where "t-value" is
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(12.211) which is significant at the (0.01) level. Thus, the third hypothesis was supported.

B. Qualitative Analysis of the findings

For investigating the participants' views and experiences of EFL listening comprehension skills and vocabulary learning via MALL, a number of interview questions was administered. The pre-treatment interview was done prior to the program with seven of the participants, whose ideas and attitudes, based on the initial analysis of their responses to MALL, were presented. The participants were asked about the effect of cell-phone based audiobooks versus CD-ROM/audio-cassette based audiobooks on their listening comprehension. Most all of the participants mentioned that MALL is really useful because of ease of access. It is portable and can be used anywhere, anytime, and learners have more opportunity to negotiate meaning with their teachers and their peers.

At the beginning of the program, the students were afraid of listening and their vocabulary knowledge was limited. After participating in the MALL program, they are interested in it. They listen carefully and understand the ideas of the listening texts. They are being able to get the main idea of the listening text, infer the information, anticipate outcomes and draw conclusions about what they listen to. Therefore, to understand how students perceived the importance of MALL in developing listening comprehension skills and vocabulary learning, some interview questions were asked. An excerpt from the researcher's transcripts provided insight into the students' perception about the activities in MALL program. According to interview, five participants expressed that they liked the experiences of using their own mobile phones for listening and learning vocabulary and enjoyed the convenience and flexibility that mobile phones bring to them for listening and vocabulary learning.

Students (1): I don't like listening at all or remembering vocabulary. Now, I have my mobile phone and
can listen at anytime and anywhere. I can also learn new vocabulary.

Most students did not like carrying a book all the time for learning but students in the research admitted mobile phones enhanced their vocabulary learning. They all agreed that mobile phones can help them remember more words than before. The ability of carrying mobile phones was proved to be an advantage for vocabulary learning. The students felt more at ease to learn vocabulary with mobile phones because they can have full control of learning without taking a heavy book with them. The students pointed out this mobile application improve his motivation to memorize English words. The learner stated that she can remember more words while listening to the materials on mobile phone.

**Students (2): I really enjoyed learning through mobile phones.**

The student enjoyed her experience of learning vocabulary on her own mobile phone.

**Students (3): I am very happy when I use it.**

**Students (4): I love my phone.**

**Students (5): I think my listening will be improved and my vocabulary also.**

Two participants saw no benefit for using mobile devices in learning. One stated that he found using mobile devices is sort of wasting time inside the class. The other participant said that mobile devices used only for entertainment. They stated that they never used them for learning.

In addition, the researcher attempted to investigate students' thoughts and attitudes toward smart phone apps on listening and vocabulary more closely through using self-report survey. The participants of the study were asked to answer the six open-ended questions. According to the first question, the favorite part in using the apps on the smart phone to improve listening skills and vocabulary learning, most of the students
responded positively. The students’ responses include the following:

**I can listen when I communicate; it is convenient and interesting; It is good to access anytime and anywhere; it is good to expand my listening skills and vocabulary in comfortable ways; I get used to listening to English authentic materials and It is fun and motivational to use the apps for my listening skills.**

Regarding the responses of the second question, the least favorite aspects of using the smart phone apps, the students’ ideas are presented as follows:

**I prefer to use textbooks in classes, it is difficult to understand while listening to authentic materials in the apps and it is not helpful since I can’t have listening script.**

The third question, how effective it is to use the smart phone apps to develop listening skills, student’s response as follows:-

**It is useful to learn a variety of English expression and vocabulary; I can listen anytime and anywhere so that I can improve my listening skills; I can self-study through the Apps and I have more confident in listening authentic materials after using the app on my smart-phones.**

On the other hand, some students clarified that it is ineffective to use the smart phone apps, their responses focused on the following:-

**It is difficult to understand the contents on the radio programs, the apps do not provide listening scripts so I cannot check my understanding and the talk is too fast to get messages including expressions and vocabulary.**

According to the fifth question, students made suggestions for MALL as follows:-

**The app should provide listeners with expressions and vocabulary; the contents should be meaningful and**
interesting to learners; university should provide an internet access for each student to be able to surf the internet at any time whenever needed and all teachers should be trained on using MALL in their teaching.

It can be concluded that, the smart phone app would be a more efficient way to improve listening comprehension skills. The findings were consistent with Kim (2013)'s study and Nash (2007)'s that mobile device allowed learners to integrate the world outside with the authentic materials and give more positive attitudes for language learning.

**Discussion of the Results**

The primary purpose of this study is to develop EFL listening comprehension skills and vocabulary learning among third year students enrolled in English section at Faculty of Education, Benha University, Egypt through using program based on MALL. The program included variety of tasks and activities for helping students to enhance their EFL listening comprehension skills and vocabulary learning. The results of the study investigated that, the program proved to be statistically and educationally significant in developing EFL listening comprehension skills and vocabulary learning among third year students enrolled in English section at Faculty of Education, Benha University, Egypt.

Listening comprehension activities provide students with the aural component of the target language to help them better hear the intricate sounds, pronunciations, and content and develop their abilities to communicate with others in a target language. Educators try to help students enhance their listening skills by assigning them videotape, audiotape or computer-based activities to complete either at home or in the language lab setting. With these materials, students can practice hearing vocabulary words, sentence structures, and dialogues in the target language. It was clarified that students would comprehend an aural passage and acquires vocabulary best when they had access to MALL program. These findings are consistent with Jones (2003).
Therefore, learning vocabulary via SMS helped the participants to enhance their vocabulary knowledge in the post-test. Vocabulary learning via SMS helped students to retain more vocabulary compared to those who used a dictionary for vocabulary learning. This implies that using SMS helps to transfer vocabulary items into students' long-term memory. Since students are used to spend a lot of time using their mobiles, so having words on their mobiles might have encouraged them to review the vocabularies on a more regular basis. These results are consistent with Alemi, Sarab and Lari (2012).

Obviously, the most important skill in learning English is vocabulary. Learners usually learn English vocabularies by means of rote learning. Therefore, it can be so boring for them because there is lack of motivation for learners who want to continue memorizing vocabularies. Students show the mobile device usage as innovative and funny applications in vocabulary learning. Mobile learning environment created curiosity for students and made the vocabulary learning activity more attractive with motivating them in positive way. Learning happens when the learner is not at a fixed, predetermined location, or when the learner takes advantage of the learning opportunities offered by mobile technologies. It is recognized as an interactive type of technology-based learning in which learners are actively involved in interesting and useful learning activities by interacting and collaborating via a mobile device like a cell phone or PDAs. These results are consistent with Soleimania, Ismailb and Mustaffac (2014).

It can be concluded that MALL is increasingly offering students a range of opportunities for vocabulary practice and learning over and above pencil and paper activities. Thus, vocabulary has a central role in language learning, and language learners should know a large number of words to be successful in language learning or to have a successful communication in it. It also has a vital role in the four skills (listening, speaking, reading, and writing). These findings are consistent with Alemi, Sarab and Lari (2012), Bruton (2007) and Schmitt (2000).
Conclusions

Mobile learning technology has a rapid pace of development in learning. The demand for using technology in English learning and the need of learners to use a foreign language through MALL will inevitably increases. Students can take the advantage of using mobiles in their spare time to learn English when and where they are.

The results of the study revealed that the participants' EFL listening comprehension skills and vocabulary learning developed after the implementation of MALL. The effectiveness of MALL may be due to the various activities, tasks and strategies the researcher presented to the students. It can be concluded that in order for students to put efforts and time on studying new vocabulary items they should be responsible for their learning. Moreover, the method of teaching should have the capacity to encourage them to review and study the taught words on a more regular basis and take advantage of students' interest in using the device used for vocabulary learning (in this case mobile phone). A smartphone is built on a mobile operating system, with more advanced computing capability and connectivity than a regular phone. English lessons are set up on four basic skills in learning a foreign language. These are listening, speaking, reading, and basic writing skills. Teachers try to teach all these skills as a whole but vocabulary learning is a part of this teaching and also it is prerequisite for language learning. Vocabulary learning and teaching is very important as a part of foreign language knowledge (Agca and Özdemir, 2013).

Therefore, MALL creates diverse possibilities for innovative instructional methods to be carried out in the general classroom in more effective and efficient ways. MALL provides students with rich, real-time, convenient, and contextual learning opportunities, no matter whether they are inside or outside the classroom. Also MALL is not only one of the main language learning resources for students, but it also contributes to the learning and utilization of new language skills.
Recommendations of the Study

In the light of previous results, the following recommendations could be presented:

- Teachers of English language should be trained on using MALL while teaching English to their students in different educational stages.
- English language teacher should emphasize the development of the students' listening comprehension skills and vocabulary learning in the early educational stages to develop them in the following stages.
- Curriculum designers should make use of MALL when designing English language courses.

Suggestions for Further Research

Based on the findings of the present research, the following implications for further research were suggested:-

- Investigating the effectiveness of MALL in English language learning among secondary school students.
- Clarifying the influence of MALL on other language skills such as writing and speaking.
- Clarifying the influence of MALL on improving reading comprehension and motivation towards it.
- Investigating the effect of MALL on decreasing students' speaking anxiety.
- Clarifying the effect of using other strategies on developing students' EFL listening comprehension skills and vocabulary learning.

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