## Ali Sabah Jameel Al-Khayyat

# The Effect of Using Mobile Assisted Language Learning (MALL) in Developing University Students' English Language Achievement

## Ali Sabah Jameel Al-Khayyat/University Of Anbar- College of Arts-Department of English

### **Abstract**

The mobile phone has penetrated deeply into all fields of human life. It becomes our partner that cannot enjoy our time without it. It has become an essential tool of student's life. The present study aims to reveal the effect of using the mobile as assisted language learning inside and outside the classroom, also to measure its effect on students' language achievements. The participants of the study were from Department of Geography (2<sup>nd</sup> grade) – college of Arts- University of Anbar who study English language as ESP subject. To achieve this aim, the following questions were set:

- 1- Is there a statistically significant difference at  $(\alpha = 0.05)$  in the mean scores between the experimental and control groups due to the teaching method?
- 2- Is there a statistically significant difference at  $(\alpha = 0.05)$  in the mean scores between the male and the female students of the experimental group in the posttest?

To answer the questions and collect the data of the study, "Google Translation APP", pre and posttests were used. The findings of the study reveal that there was a statistically significant differences at  $(\alpha=0.05)$  in the mean scores between the two groups and for the favor of the experimental group. Also, there was a statistically significant differences at  $(\alpha=0.05)$  in the mean scores between the male and female students for the favor of the male students.

**Keywords:** MALL, University students, Language achievements, ESP.

## Ali Sabah Jameel Al-Khayyat

أثر استخدام الموبايل المساند لتعلم اللغة في تطوير تحصيل طلبة الجامعة فراستخدام الموبايل المساند لتعلم اللغة الانكليزية

على صباح جميل الخياط/ جامعة الأنبار كلية الآداب قسم اللغة الانكليزية

## المستخلص

لقد أخترق الموبايل وبعمق في جميع مناحي حياة البشر. لقد أصبح شريك حياتنا التي لا يمكن الاستمتاع بها بدونه. لقد أصبح جهاز رئيسي في حياة الطلبة. تهدف الدراسة الحالية إلى كشف أثر استخدام الموبايل كمساعد لتعلم اللغة داخل وخارج الصف، كذلك قياس أثره على تحصيل الطلبة. كانت عينة الدراسة من طلبة الصف الثاني بقسم الجغرافيا في كلية الآداب بجامعة الانبار الذين يدرسون اللغة الانجليزية كمادة لإغراض خاصة. لتحقيق هدف الدراسة، تم وضع الأسئلة التالية: 1 هل يوجد فرق ذات دلالة إحصائية عند مستوى الدلالة (0.05 = 0) في درجات الوسط الحسابي بين المجموعة التجريبية والضابطة يعزى إلى إستراتيجية التدريس؟

2- هل يوجد فرق ذات دلالة إحصائية عند مستوى الدلالة (0.05) في درجات الوسط الحسابي بين الطلبة الذكور والإناث في المجموعة التجريبية؟

لغرض إجابة أسئلة الدراسة وجمع البيانات، تم استخدام برنامج تطبيقي جوجل للترجمة، و اختبار قبلي و اختبار بعدي. كشفت نتائج الدراسة أن هنالك فرق إحصائي عند مستوى الدلالة ( $\alpha=0.05$ ) في درجات الوسط الحسابي بين المجموعة التجريبية والضابطة ولصالح التجريبية. كذلك وجود فروق ذات دلالة إحصائية بين الطلبة الذكور والإناث ولصالح الذكور.

الكلمات المفتاحية: استخدام الموبايل المساعد في تعلم اللغة، تحصيل الطلبة، و اللغة الانجليزية لإغراض خاصة.

## Ali Sabah Jameel Al-Khayyat

### 1.0 Introduction

The computer assisted language learning (CALL) and the mobile assisted language learning (MALL) have become essential tools in the teaching and learning process. There are three major theories which supported the use of CALL and MALL in pedagogical situation: the situated learning theory, the sociocultural learning theory, and the cognitive theory (Al-Khayyat, 2015: 192).

### 1.1 Statement of the Problem

From the researcher's experience in teaching ESP for non-departmental university students, he realized that most students are engaged using mobile phone most of their time. Based on the researcher's previous researches on conducting the effect of the electronic devices and computer on developing students' language achievement, and in order to invest the effect of mobile in teaching ESP students the English language, he has reviewed the literature concerning using smartphone in teaching and learning language, so the notion of this research has emerged. Learning English need to practice the language for long time. Thus, learning via mobile program may be a useful way which allows ample time for students to practice the language with providing feedback either form the teacher or/ and the peers. The study tries to prove if the MALL has an effect on developing students' achievement in English language as the CALL programs do or not.

## 1.2 Questions of the Study

The research is trying to answer the following questions:

- 1- Is there a statistically significant difference at  $(\alpha = 0.05)$  in the mean scores between the experimental and control groups due to the teaching method?
- 2- Is there a statistically significant difference at  $(\alpha = 0.05)$  in the mean scores between the male and the female students of the experimental group in the posttest?

## Ali Sabah Jameel Al-Khayyat

## 1.3 Aim of the Study

The main aim of the study is to investigate the effect of using mobile phone messenger applications (MPMA) in developing students' English language achievement (the 4 skills).

## 1.4 Significance of the Study

The study hopes to present solutions to overcome the problems of teaching limited time, big number of students, learners' lack of motivation, fear of learning foreign language, fear of calculated risk-taking in learning foreign language, and other learning obstacles that hinder students from learning the English language. Mobile phone has many features such as: it is available for all students, it is small to be carried and not heavy, it doesn't require technological experience, students can install free learning applications, it can access to internet via sim-card that facilitate the process of sharing, sending and receiving data at any time. Thus, using MALL to teach the English language is hoped to be a good and successful experience for the ESP students and all foreign language students.

## 1.5 Limitations of the Study

The generalizations of the outcomes of the study are limited to the following:

- 1- The sample is limited to the second grade students at Department of Geography College of Arts.
- 2- The results of the study are limited by the time of the period in which the study was conducted (first semester of the academic year 2017-2018).
- 3- The location of the study was the University of Anbar, College of Education, Department of Geography.
- 2. Literature Review

### 2.1 Facts

The researcher believes that the implementation of mobile in the pedagogical contexts is still in its primary stages. Most studies (including the present study) that tackle using the M-learning are characterized by: small scale pilot sample, short-term period, lack

## Ali Sabah Jameel Al-Khayyat

the ability to reach large number of participants and long time period practicing. Kukulska- Hulme and Shield (2008) state that the increase of the internet service has increased the use of mobile at all aspects of life, and even at primary schools.

### 2.2 MALL Theories

There are many theories that enhance using mobile in pedagogical contexts. Keskin and Metcalf (2011: 205) present a chart which explains the learning theories related to MALL. They found that the learning theories that have good connection with M-learning include: "behaviorism, cognitivism, constructivism, situated learning, problem- based learning, context awareness learning, conversational learning, lifelong learning, informal learning, activity theory, connectivism, navigationisim, and location-based learning (P.203). All these theories are related to learning, and modern researches.

When learning is integrated with technology has a great effect on developing learners' motivation, team-work, and increase the students' language achievement (Al-Khayyat, 2016:280).

### 2.3 Definition of Terms

- 1) MALL: It refers to the Mobile assisted language learning. It refers to the use of Tables, smart phones, cell phones, etc, in learning a foreign language.
- 2) University students: It refers to the students who study at second grade, Department of Geography- college of Arts, University of Anbar during the academic year 2017-2018 / second semester.
- 3) English language Achievement: It refers to the achievement of the students at English language subject which the students study it as ESP subject.

## 2.4 Teachers and M-Learning.

The researcher observed that the rapid spread of technology, internet service, mobile devices have encouraged teachers in general and language teachers in specific to take a calculated risk – taking and use the mobile as a tool in teaching the English language.

## Ali Sabah Jameel Al-Khayyat

Ahn (2018: 2) reviews the findings of several studies which investigate the effect of MALL in teaching and learning English language, such as:

- 1- Kevin and levy (2008), Stockwell (2010), Tafazoil and jam (2015), and Chakir (2018)), find that the outcomes have proved that using mobile has developed and enhanced students' vocabulary.
- 2- Chen and HSU (2008), Fomami and Hedayati (2010), Huang and Liu (2011) find that MALL has developed student's reading comprehension.
- 3- Guerrero et at. (2010), Wang and smith (2013) find that MALL has developed students' grammar.
- 4- Azar and Nasiri (2014), Rahimi and Soleymani (2015) find that MALL has developed students' listening skills.
- 5- Demouy and kukulska-Hulme (2010), Kukulska-Hulme and shield (2007), Liu (2009) find that MALL has developed students' speaking skills

Weng and Chen (2015) find new idioms that associate with MALL, they are as follow:

- 1) 4 A's: "Anywher; Anytime; Anyway; and Achievement).
- 2) RAIL: "Real-Pearson Pronunciation; Adaptive- Testing, Instant translation and Language- Drills"
- 3) SIDE: "Supplementary, Interesting, Dual-purpose, and Effortless".

It can be concluded that learning English language via mobile can be anywhere, anytime, and it provides good pronunciation opportunity, also instant translation and different kinds of exercises, and it provides adaptive and interesting test. All these aspects lead to successful achievement.

### 2.5 Previous Related Studies.

Ahn (2018) conducts a study to provide an overview of Korean college students' experiences in using Smartphone apps for English Language Learning (SAELL) and to investigate factors affecting the students' intention to use SALL, gender and academic major differences in acceptance of SAELL and the obstacles of using it.

## Ali Sabah Jameel Al-Khayyat

The participants were 675udents. The results reveal that Smart phones have become an essential tool for Korean college students. Also, students' obstacles are technical, pedagogical, and psychosocial factors.

Chakir (2018) conducts a study to investigate the effectiveness of mobile phones in EFL contexts. Also, to investigate students' and teachers' attitudes towards using MALL in teaching English Language. The participants were 60 Moroccan students at high school MALL, pretest and posttest and an attitudinal questionnaire were used to collect the data. The results revealed that there was significant difference between the two groups, and for favor of the experimental group, and there was positive attitude towards using MALL in teaching and learning English language.

Tayan (2017) conducts a study to investigate students' and university instructors' perceptions towards MALL program as a tool to be used in teaching and learning English Language as ESP Subject. The participants were 191 students at first year Business English Program at Middle Eastern University. Interviews with English instructors, and questions were used to collect the data of the study. The results revealed that there was positive attitude and a receptiveness towards MALL, and it considered a useful instruction instrument to support English language teaching.

Helwa (2017) conducts a study to investigate the effectiveness of utilizing MALL on developing EFL prospective teachers' listening comprehension skills and vocabulary learning. The participants were 30 students of the 3<sup>rd</sup> year at Department of English at faculty of Education, Benha University, Egypt. Pre-post test, interview, self-report survey were used to collect the data of the study. The results revealed that there was a statistically significant difference between mean scores of the pre and post test and for the favor of the post test of the experimental group.

### Ali Sabah Jameel Al-Khayyat

## 3. Research Methodology

### 3.1 Definition of Terms

The population of the study involves all Iraqi University students who study English language as ESP subject during the second semester of academic year 2017-2018 were chosen purposefully from Department of Geography-college of Arts second grade (Section C). Section "C" was chosen because students' achievement marks in the final exam of the first grade were almost similar. The marks ranged between 53-78. In section 'A' the marks ranged between 51-58, 68-74, 81-92), and in section 'B' the marks were ranged between 57-66, 71-78, 86-90. So, the difference between students' levels in section 'C' is acceptable.

The participants were 173 students (99 males, and 174 females). Table 1 shows the distribution of the participants.

Table 1: Distribution of the participants of the study in the second

grade-Department of Geography

Section	Group	Males	Females	Total
A	Control	32	26	58
В	Control	31	27	58
С	Experiment	36	21	57
Total		99	74	173

### 3.2 Research instruments

The instruments consisted of 3 parts: pre-test, instructional Material (MALL) Program, and Post-test.

## 3.3 The Tests

The tests consisted of pre-test, and post, test. The pre-test contained questions which measure students' listening, Speaking reading and writing Skills. In the first question the participants listen to a dialogue and answer the questions in the question's format.

The participants fill blanks, draw line in road map, locate place in a picture, and choose the correct answer from multiple choice answers. In the second question, the students read a text and answer multiple choice questions. In the third question, the students write a

## Ali Sabah Jameel Al-Khayyat

brief paragraph about their family. In the fourth question, the students read specific information and comment on the events orally. The researcher has done this exam orally after the paperpencil exam.

The post-test consists of four questions. The Post-test form is similar to the pre-test form.

## 3.2.1 Test Content Validity

To examine the content validity of the post test, the researcher chooses a pilot sample consisted of 37 males and 21 females from Department of History to determine whether the items of the test match the objectives of the study.

## 3.2.2 Test Face Validity

The pretest and posttest have been exposed to specialists as jury members to ensure the face validity.

## 3.2.3 The Reliability of the Test

The reliability was obtained by using test-retest method. It was computed by using Pearson correlation between the implementation of the test. The internal consistency reliability values was 0.89 and the values of the stability index was 0.82, and its values for the test dimensions ranged from 0.82-0.89.

## 3.3 Variables of the Study

The independent variable is the MALL program, and the dependent variable is the students' achievement scores on the posttest.

3.4 Procedures of the Study

The researcher conducted the following procedures:

- 1- Reviewing the related literatures.
- 2- Designing the instructional method and then examining their validity and reliability.
- 3- Selecting the participants of the study, then assigning the experimental and control group.
- 4- Conducting the pretest and posttest and computing their results.
- 5- Analyzing the outcomes.
- 5. Analyzing the Outcomes

## Ali Sabah Jameel Al-Khayyat

## 3.5 Equalization

Certain variables which many cause in subjects' performance should be taken into account. Table 2 shows the participants results in pretest.

Table 2: Mean, Standard deviation, and T-Values of the participants level in pretest scale for both groups.

					T- Values	
Groups	No.	Mean	S.D	DF	Computed	Tabled
Control	116	24.69	5.47			
(A+B)				71	0.508	2.00
Experimental	58	25.24	4.71			

Table 2 shows that the Tabled value is higher than computed value, which means that there is no statistically significant difference between the two groups in the pretest. This indicates that the participants' level in English language is the same.

## 3.6 Procedures of the Instruction (Experimental Group)

- 1- In the first day of implementing the MALL in teaching the 'New Headway Plus" pre-Intermediate student's Book and activity Book' the researcher explains for the students that they are going to use the mobile phone in learning units: 1-5.
- 2-The students asked the researcher to get permission from the dean of the college of Arts to allow them bring the Smartphones to class, because it is forbidden.
- 3-The research asked students to install 'Google translation App', and bring their privet head-phone speaker. The researcher distributed the portable internet-password for all students, to install the program from the APP Store.
- 4-The researcher constructs a group on WhatsApp messenger program that gather all students' mobile numbers.
- 5-To test the experience, the researcher asked students to open their text-book on certain activity, and send an audio record via the WhatsApp messenger (on group) to all students. They listen to the audio record, and follow the researcher instruction. In this step, most students asked different questions, thus, the researcher

## Ali Sabah Jameel Al-Khayyat

repeated the experience two times, and explained in detail what the students should do.

6-After mastering the instructions, the researcher began the first lesson plan.

7-The lesson plan is similar to all unites (1-5), for example the students use the Smartphone to learn unit one 'Getting to Know You' the researcher sends a text with blanks via WhatsApp messenger (on group) and asks students to read it silently at the first time. Then, he sends them an audio recorded attachment and asks student to play it and follow the text along. After finishing reading the text in group, the researcher asks the students to fill the blanks of the text, and asks students to record their answers as a voice attachment (each one sends his answers as a voice recorded message to the group) and also to write their answers on group. After filling the blanks, the researcher asks students to play-on all the voice recorders and provides feedback.

The researcher keeps the correct answers and deletes the wrong answers. So, the students can review them at anytime. They can also listen to feedback and explanation of the researcher concerning the given exercise. By practicing such activity, all students have the same opportunity to practice the four skills in one exercise. At the end of the lesson, the researcher sends an activity as homework. Each student should fulfill the following:

- 1) Read a text and search for the unknown word or idiom, and even a full sentence, via 'Google translation App'.
- 2) Record an audio clip and send it on the researcher's privet number in-box via WhatsApp messenger.
- 3) Listen to an audio clip and follow the procedures to solve an exercise, and sends the answer to the researcher privet number in-box WhatsApp messenger.
- 4) Write at less two paragraphs concerning a given title.

When the researcher receives the answers, he shares the correct answers on group. The incorrect answers are sharing too later, with providing researcher's voice audio clip as feedback.

## Ali Sabah Jameel Al-Khayyat

The researcher believes that students can learn better from their mistakes. It is worth to mention that sometimes the students listen to on audio clip and or to watch a video which is related to a given them.

During conducting the activities, the researcher pays attention to the grammar structures and vocabularies.

- 4 Results and Findings of the Study
- 4.1 Results Related to the First Question.

To answer the first question "Is there a statistically significant difference at  $(\alpha = 0.05)$  in the mean scores between the experimental and control groups due to the teaching method?", a t-test of two independents samples has been used to collect the data of the study. Table 3 shows the results.

	Table 3: Mean.	Standard	deviation	and t-value	for the two groups	_
--	----------------	----------	-----------	-------------	--------------------	---

				T-Values		
Groups	No.	Mean	S.D	Computed	Tabled	D.F
Control	116	30.81	6.082			
(A+B)				4.28	2.000	71
Experiment	58	38.86	6.24	4.40	2.000	/ 1
al						

Table 3 shows that the mean scores of the experimental group is 38.86 and the control group is 30.81, and the computed t-value is 4.28, which is higher than the Table t-value this indicates that there is statistically significant difference between the two groups for the favor of the experimental group due to teaching strategy.

## 4.2 Results Related to the Second Question

To answer the second question " Is there a statistically significant difference at ( $\alpha = 0.05$ ) in the mean scores between the male and the female students of the experimental group in the posttest?", a mean, standard deviations, and adjusted mean were used to collect the data. Table 4 shows the results.

## Ali Sabah Jameel Al-Khayyat

Table 4: Means and standard deviations of participants' Scores (Males and Females) of experimental group on posttest.

Gender	No	Mean	S.D	Adj Mean
Males	36	36.01	6.21	12.03
Females	21	33.09	6.32	7.12

Table 4 shows that the males' mean scores were 36.01, and the females' mean scores were 33.09 this indicated the male participants got higher marks in the achievement test than the female participants.

### 5. Discussion of the Results

The results of the first question indicate that using MALL program has a positive effect on developing students' achievement in English language. The researcher noticed that MALL program has increased students' motivation, and they were interested in using their mobile as a tool in learning the English language. These results were in line with the results of Ahn (2018) Chakir (2018), Helwa (2017), and Tayan (2017).

The results of the second question indicated that the male students got higher marks then the female students. This may due to fact that the males have good experience in using the programs of the Smartphone than the females, also the males have found that the learning English via mobile have provided then with good opportunity to practice the English language which they use it in playing electronic games, and may chat with foreign people.

#### 6. Conclusion

The researcher concludes that teaching English language as ESP via MALL is an interesting experience for students. MALL can achieve the following:

- 1- Increases students' learning behaviors.
- 2- Provides good opportunity for EFL learners to practice the English language inside the classroom and out-side the classroom.
- 3- Enhances students' speaking confidence.
- 4- Supports students' ability to listen in a foreign language.

## Ali Sabah Jameel Al-Khayyat

- 5- Develops students' speaking performance.
- 6- Promotes students' spelling writing technique in English, and enable them to distinguish between the similar sound such as /k/ and /c/ in writing.

### References

- 1-Al-khayyat, Ali (2015). The Effect of CALL proposed program on University students' Achievement in English. Arab World English Journal, Special Issue on CALL, 2: 183-194.
- 2-Al-khayyat, Ali (2016): The Impact of Audio-visual (AVA) and 5 omputerized Materials on University ESP students. Progress in English Language. International Journal of Education and research, 4 (1): 273-282
- 3-Ahn, Soo (2018). Korean EFL College Students' Acceptance and Use of Smartphone Application for English Language learning. Unpublished dissertation, faculty of California school of Education, Alliant International University.
- 4-Chakir, Mohamed (2018). The Integration of Mobile Phones in EFL Contexts: Using Vocabulary. Unpublished thesis, Graduate Shool, SouthernIllinois university Edwards.
- 5-Keskin, N., and Metcalf, D. (2011). The Current Perspectives, Theories and Practices of Mobile Learning. Turkish Online Journal of Educational Technology- TOJET, 10 (2): 202-208.
- 6-Kukulska-Hulme, A., and Shield, L. (2008). An Overview of Mobile Assisted Language Learning: From Content Delivery to Supported Collaboration and Interaction. ReCALL, 20(3), 271-289.

## Ali Sabah Jameel Al-Khayyat

7-Tayan, Bilal (2017). Students and Teachers' perceptions into the validity of mobile technology Implementation to support language learning for first Year Business students in Middle Eastern University. International Journal of Education and literacy studies, 5 (2): 74-82.

8-Helwa, Hasnaa (2017). Using Mobile Assisted Language learning (MALL) Approach for Developing prospective Teachers' EFL listening comprehension Skills and vocabulary Learning. Journal of Research in Curriulum, Instruction and Education Technology, 3 (4): 133-167.

9- Weng T.H., and Chen Y.J. (2015). Students' Perceptions Towards the Use of Smartphone Applications for English learning. International Journal of Educational Science and Research, 5, 1-10.