



Using Whatsapp in Teaching Vocabulary: A Case Study from Palestine

Ahmed Raba^{*1}, Mahmoud Itmeizeh^{id}^{**2}, Sameer Qadous^{**1}

¹ Faculty of Arts, An-Najah National University (Palestine)

* ✉ ahmedm@najah.edu

** ✉ Sameerm@najah.edu

² Faculty of Arts, Palestine Ahliya University (Palestine)

✉ mitmeizeh@paluniv.edu.ps

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Abstract:

Messaging applications have become well-known among 21st-century students worldwide and in Palestine in particular. These applications are useful in teaching and learning all disciplines and English in particular. This study has sought to find out the effect of using the WhatsApp application in enriching primary school students' vocabulary. To this end, a 20 sixth-grade students (10 males and 10 females) from Al-Omariya Private Schools, Nablus were selected as a study sample. Since the research adopted one-group design method, a pre-test was administered to assess the student's level in vocabulary knowledge and to ensure their homogeneity. After that, the students in the experimental group received vocabulary instructions and a teacher's pedagogy through WhatsApp messages, which included pictures, texts and videos, three days a week for two months. A post-test was administered to the experimental group to measure the effect of using WhatsApp instructions on their vocabulary knowledge and gender as well. The results revealed that using WhatsApp had a significant effect on the improvement of the student's vocabulary knowledge. They also showed that there were differences in the effect of using WhatsApp in teaching vocabulary between males and females in favor of males. In light of these findings, the researchers suggest using WhatsApp messaging in other private and government schools. This study contributed to raising the awareness of students, teachers and curriculum designers of the importance of utilizing WhatsApp in teaching and learning. It also contributed to introducing students to new strategies and techniques for learning English vocabulary in a new environment that promotes students' motivation and enhances autonomous learning whenever and wherever they want according to their pace. The study may also participate in introducing foreign researchers to the reality and capacities of the Palestinian educational context that may lead to mutual collaboration in future.

Keywords: *English as a Foreign Language (EFL); Mobile Application; Primary Education; Vocabulary Learning; Vocabulary Teaching; WhatsApp*

استخدام الواتس آب في تدريس المفردات: دراسة حالة من فلسطين

أحمد رباح^{1*}، محمود طميمة²✉، سمير قدوس^{1**}

¹ كلية الآداب، جامعة النجاح الوطنية (فلسطين)

ahmedm@najah.edu ✉*

Sameerm@najah.edu ✉**

² كلية الآداب، جامعة فلسطين الأهلية (فلسطين)

mitmeizeh@paluniv.edu.ps ✉

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ملخص:

أصبحت تطبيقات المراسلة مشهورةً بين طلاب القرن الحادي والعشرين في جميع أنحاء العالم، وفي فلسطين على وجه الخصوص. تعدُّ هذه التطبيقات مفيدة في تدريس جميع التخصصات، واللغة الإنجليزية على وجه الخصوص. سعت هذه الدراسة إلى معرفة تأثير استخدام تطبيق WhatsApp في إثراء مفردات طلاب المدارس الابتدائية. تكوّنت عينة الدراسة من (20) طالباً في الصف السادس (10 ذكور و 10 إناث) من مدارس العمرية الخاصة في نابلس. واعتمدت الدراسة طريقة المجموعة التجريبية الواحدة، فأجري اختبار قبلي لتقييم مستوى الطلاب في معرفة المفردات والتأكد من التجانس بين مستويات الطلبة. بعد ذلك، تلقى طلاب المجموعة التجريبية تعليمات حول مفردات التدريس وأصوله من خلال رسائل الواتس آب، والتي تضمنت صوراً ونصوصاً وفيديوهات، لمدة ثلاثة أيام في الأسبوع على مدار شهرين، وأجري اختبار بعدي للمجموعة التجريبية لقياس تأثير استخدام تعليمات WhatsApp على معرفتهم بالمفردات والفرق بين الجنسين أيضاً. أظهرت النتائج أن استخدام WhatsApp كان له تأثير كبير في تحسين مستوى تعلم المفردات لدى الطلاب. كما أظهرت وجود فروق في تأثير استخدام الواتس آب في تعليم المفردات بين الجنسين لصالح الذكور. في ضوء هذه النتائج، يوصي الباحثون ضرورة استخدام رسائل WhatsApp في المدارس الخاصة والحكومية. أسهمت هذه الدراسة في زيادة وعي الطلبة والأساتذة ومصممي المناهج لأهمية توظيف الواتس آب في التعليم والتعلم، وأسهمت أيضاً في تعريف الطلبة باستراتيجيات وتقنيات جديدة لتعلم مفردات اللغة الإنجليزية في بيئة تزيد من دافعية الطلبة وتعزز تعلمهم الذاتي في أي مكان وزمان ووفق سرعتهم الخاصة، كما أن الدراسة قد تسهم في تعريف الباحثين الأجانب على واقع السياق التعليمي الفلسطيني وإمكانياته مما قد يؤدي إلى التعاون المشترك في المستقبل.

الكلمات المفتاحية: اللغة الإنجليزية كلغة أجنبية؛ تطبيق الهاتف المحمول؛ تعليم ابتدائي؛ تعلم المفردات، تعليم المفردات، الواتس آب.

1. Introduction

Vocabulary, just like grammar and phonetics, occupies a significant place in perfecting a second/foreign language. It is probably the most important aspect of language that students need to know (Ur et al., 2014). "Without its acquisition, students cannot master the language whether they are learning it as a foreign or a second language. A poor amount of vocabulary in a foreign or second language impedes the process of effective communication". Its significance is shown in students' communication demonstrated in school and daily tasks and activities (Hashemifardnia et al., 2018).

Proper technology integration has brought significant and wishful changes in teaching and learning. Teachers can employ it when using e-strategies and methods of teaching which include activities to improve students' creative and meaningful and successful communication (Raba' & Herzallah, 2018). Games, whether face-to-face or online, provide students with fun, happiness and freedom where all language skills are improved (Mahmoud & Tanni 2014). Teachers can also teach language skills interestingly and effectively via technological applications and tools, as these can develop students' creative self-expression (Raba' & Herzallah, 2015).

Cell phones, one of these technologies, have led to a plethora of studies on their educational use. Language teaching studies and activities have also been influenced by this change (Taleb & Sohrabi, 2012). By offering resilient, feasible and personal chances for use in class and out of class, roving learning significantly defies traditional methods of teaching and learning on the go becomes easier (Basal et al., 2016).

In the area of appropriate learning of foreign languages, nations all over the world have used different technological tools such as mobile, tablet and laptop learning applications. Furthermore, applications of mobile messaging have also been used to enhance students' acquisition of skills of language speaking, writing listening, and reading (Jafari & Chalak 2016; Ahmed 2019).

Using WhatsApp, users do not pay for their texts since WhatsApp sends messages by an internet data connection. Through WhatsApp, many kinds of messages can be sent, from simple texts to pictures to audio files and videos (Al-Saleem, 2013).

WhatsApp can benefit teachers of languages in the field of vocabulary, the most significant component of foreign and second language learning. It allows language teachers to teach a specific number of words at a time. Moreover, WhatsApp can be used as a tool to assist learners acquire the necessary vocabulary, an essential factor of an efficient vocabulary program (Bensalem, 2018).

In learning English as a Foreign Language (EFL), WhatsApp has become a widespread and efficient method of utilizing mobile messaging. It has the advantage of developing students' vocabulary, pronunciation, reading, and writing skills. Furthermore, WhatsApp, as a collaborative learning method, can assist EFL learners in acquiring new vocabulary, enhancing meaning and conversation, sharing language knowledge and communicating effectively (Alhawiti, 2015; Fattah, 2015; Ta'amneh, 2017; Ahmed, 2019).

This current research was an attempt to find out how effective WhatsApp application use is in improving vocabulary learning in Palestine's primary schools. It further sought to find out if there were differences in the outcome of its use due to students' gender. That is, does the appropriate use of WhatsApp improve students' learning of vocabulary? Who learns vocabulary better, via WhatsApp, males or females?

1.1 Research Problem

Based on the researchers' experiences in teaching English and running practicum courses for different levels, they have noticed that students suffer from the weakness and boredom of traditional methods used in teaching English vocabulary to primary-grade students. To the best of the researchers' knowledge, no studies have been conducted in the Palestinian context about WhatsApp application use in EFL primary classes. Accordingly, the researchers decided to explore other avenues for the teaching of English vocabulary such as the WhatsApp application.

1.2 Objective of the Study

WhatsApp application is one of the pedagogies that can be used in enriching language learners' vocabulary and solving his or her problems in this regard. The application can also help in making the learner more confident and able to speak and share ideas with other learners in an enjoyable learning environment. This research was conducted to measure the effectiveness of WhatsApp in teaching and learning vocabulary and to find out whether or not the outcome differed due to gender variable.

1.3 Significance of the Study

Searching for non-traditional methods, to improve language skills acquisition in general and vocabulary in particular are very important. The importance of this research springs from its uniqueness in the Palestinian educational context. Furthermore, it is also expected to enrich pedagogy as it deals with the vocabulary teaching of English to sixth graders. It might also be useful to the English language curriculum developers to consider introducing WhatsApp activities at the end of each unit in primary grades. Additionally, this research might pave the way for other researchers to explore the teaching of other language components at different school levels.

1.4 Limitations of the Study

This study was limited to the sixth-grade students at Nablus-based Omariya Private Schools in the first semester of the scholastic year 2018-2019. The study sample consisted of 20 sixth graders of both gender in the same school.

2. Literature Review:

Technological tools, which have become an essential part of the daily lives of users, have also become an important component of the educational process. Several studies have revealed that these tools had both positive (Samaha & Hawi, 2017) and negative effects (Maddena et al., 2016; Li, 2017) on different aspects of life, including academic success, depending on the aim of their use in the academic field. Each of the tools used has various features for learning purposes and can allow collaboration and interaction among students and teachers, at any time and in any place (Cetinkaya, 2017).

Research has suggested that vocabulary teaching can be intricate and difficult because teachers do not always use the pedagogies that work efficiently (Susanto, 2017). The process of teaching vocabulary is challenging because it needs more time and effort in comparison with other language components, and it is one of the best predictors of language performance (Ur et al., 2014). Without competence in words, a person cannot express himself and understand others.

Like all platforms, WhatsApp in language learning and teaching has both advantages and disadvantages. Its disadvantages can be minimized through the use of its appropriate application to assist learners learn more vocabulary, to ease students' debate, and control their scare of utilizing the language (Gon & Rawekar, 2017). The advantages are evident in helping the students to improve their writing, assisting them in learning from the mistakes of their classmates, and helping them build their confidence in their capabilities. In addition, it increases students' motivation towards

better learning, unlike the traditional educational context (Hamad, 2017).

In the Yemeni and the Iranian educational context, some research has been conducted on the effect of WhatsApp on vocabulary teaching and learning. For example, Hashemifardnia et al. (2018) and Ahmed (2019) have found that WhatsApp applications could help EFL students learn vocabulary easier and more comfortably than the traditional way. Another study in the same region, Jafari and Chalak (2016) revealed that using WhatsApp had a key role in vocabulary learning for students. Results showed that there was no significant difference between both genders regarding their vocabulary acquisition after using WhatsApp.

In an Indonesian educational context, Ajid et al. (2018) found that the use of WhatsApp in students' formal learning could promote positive feelings and intentions. In the Malaysian educational context, Annamalai (2019) revealed that the majority of undergraduate students expressed a preference for WhatsApp in their reflections despite the problems they faced.

In the Saudi educational system, Bensalem (2018) showed the superiority of the WhatsApp group over the control group in vocabulary achievement tests. In the same region, but on a different level of students, Alshammari et al. (2017) investigated the use of WhatsApp in teaching EFL. The researchers studied the attitudes of preparatory year students attending a university in the central north of Saudi Arabia. Using different ways, they revealed that the use of WhatsApp applications in the learning of English vocabulary by learners was more effective than the use of printed materials for vocabulary retention and retrieval. In addition to these studies in the Saudi educational context, Ta'amneh (2017) found out the introduction of the WhatsApp application to English language teaching and learning improved the abilities of Saudi university learners in both writing and reading.

As the literature review has shown, most of the studies have been carried out on adults or university and college students, and almost all of them have shown positive outcomes of the WhatsApp method if compared with the face-to-face methods (Taleb & Sohrabi, 2012; Alhawiti 2015; Fattah, 2015; Ta'amneh, 2017; Ahmed 2019). In contrast, only a few studies have been conducted on the effect of the WhatsApp method on young learners including the present study. (Cetinkaya & Sütçü, 2016; Harrison & Gilmore 2012; Lenhart et al., 2010). What is more is that no single study has been conducted in the Palestinian educational context mainly in the primary stage. So, this was a big motivation for the researchers to conduct the study.

3. Methodology:

3.1 Research Design

This research adopted the one-group design method. A pretest–posttest model was used in this study to investigate if WhatsApp application intervention made a difference in the level of vocabulary achievement or not. To proceed, the virtual classes where the "WhatsApp" group was created and enabled students to remotely attend the class where teaching and learning methods of vocabulary included multimedia, chat groups, unlimited messaging, and cross-platform engagements among other uses for this application. Using this enabled the students to exchange videos, text messages, images and voice notes simultaneously. With the introduction of this, it was no surprise that "WhatsApp" has become very popular and attractive.

Based on the feedback sent to schools from parents and the challenges of the present life, the school administration held intensive workshops on technology integration in the school educational system. All teachers received training on how to use technology and employ it in their teaching. WhatsApp allows users to utilize its features to text, call, and send video, audio, links, location,

documents, and pictures (Ta'amneh, 2017). Also, English teaching and learning, using WhatsApp, is regarded as one of the newest innovations in English language teaching strategy (Gon & Rawekar, 2017). Accordingly, the school administration allows English language teachers to participate in more intensive workshops on how to use the different educational technological tools in their teaching.

3.2 Participants of the Study

The participants of the study were (20) sixth-grade students of both genders. They were all attending one of Al-Omariya private schools.

3.3 Context of the study

The study was conducted in a private school. The schools are in three different sections of Nablus: one for preschool students, one for grades 1-3 and one for grades 4-7. The schools have one section for grades four, five, six and seven and are private and have better technology resources than other government counterparts. The standards of living of their families were better than their counterparts' families at government schools. The school council and the parents' council collaborated with the parents and teachers in supporting the students' learning and providing the school labs with different technological tools such as laptops and desktop computers.

The experimental study was implemented in the sixth grade because this class is considered at the beginning of middle school settings.

3.4 Procedures of the research

One of the researchers was the supervisor of English at schools, so all the ethical issues were easily done via the supervisor and the school administration. These steps were chronologically carried out:

The first step of the study was asking the participants to install WhatsApp on their cell phones, tablets, or laptops. Then, they electronically received vocabulary instruction three days a week for two months (12 sessions). In each session, four vocabulary items were taught to students. All students were members of the same WhatsApp chat group.

The second step was selecting different related pictures and videos. Then they were sent to the students. The pictures and videos conveyed the meaning of the new words and helped the students with pronunciation. They also received different drills to practice the new vocabulary items. The learners' vocabulary achievement was measured by a post-test.

The third step was implementing the pre and post-tests during the second semester of the scholastic year 2018-2019. To conduct the study, the experiment was conducted after taking permission from the schools' principals and students' parents. The students were administered to a pre-test and a post-test designed by the researchers and approved by the supervision department in the directorate of education to evaluate the effect of WhatsApp application on students' vocabulary enrichment.

3.5 Instruments

The instrument used in this study was a test of two formats: pre-test and post-test (Appendix A & B). A pretest was administered to test the student's knowledge of vocabulary before applying the WhatsApp application, using the available tools such as mobiles, iPads, and laptops. The test consisted of one section: 20 multiple-choice items. The test content was checked for adequate timing, clarity of instructions, and arrangement of items. To estimate the reliability of the test, Cronbach's alpha formula of reliability measure was employed. The estimated reliability for the test turned out to be 0.75 which was a moderately high index of reliability.

A similar version of the pre-test, but a different item arrangement as well as an optional arrangement, was used as a post-test, after implementing the tests of the study in order to find out

the vocabulary achievement of the participants and whether or not this application could have significant differences due to the variable of gender.

3.6 Data Collection

The data collection procedure was carried out through a pre-test and a post-test. The participants took a 30-minute pre-test to assess their vocabulary knowledge. Then the students installed WhatsApp on their cell phones, tablets or laptops. After that, they electronically received vocabulary instruction. The experimental group was taught the vocabulary from two textbooks "English for Palestine" and "Family and Friends" via the use of WhatsApp; students practiced it using their cell phones, tablets or laptops. In contrast, the control group was taught the same vocabulary traditionally, using hard copies. After the completion of the experiment, the post-test was administered to see whether the experimental group, using WhatsApp, for vocabulary learning was effective or not and whether or not this application differed due to the variable of gender. The marks of the two tests were fed into the SPSS program to find out the above-mentioned issues.

4. Results and discussion:

T-test was conducted to find out if there were differences between the grades of the participants in the pre-test and the post-test for the experimental group. The results are shown in the following tables:

Table (1): T-Test results

		Mean	N	Std. Deviation
Pair 1	Pre	14.00	20	2.470
	Post	16.50	20	1.960

Table 1 shows that the means of the pre-test marks was 14 out of 20, while the means of the post-test marks was 16.5 out of 20. This means that the WhatsApp application intervention made a difference in the level of vocabulary achievement for both male and female students. This result concurred with findings by Ahmed (2019), Hashemifardnia et al. (2018), and Jafari and Chalak (2016).

Regarding the differences between males and females in the degree of improvement in their achievement, a T-test was also conducted to identify if there were differences between the two sexes.

Table (2): Differences between means attributed to gender

		Gender	N	Mean	Std. Deviation
Pre	Male		10	14.11	2.147
	female		10	13.90	2.809
Post	Male		10	17.00	1.732
	female		10	16.09	2.119

The table shows that the males' and females' means increased, but the males' increase was higher as shown in the table. The pre-test mean for males was 14.11 and increased to 17 in the post-test with a 2.87% difference (2.87%). The pre-test means for females was 13.90 but it increased to 16 in the post-test with a 2.10% difference. This indicates that the level of vocabulary achievement was higher among males than females, but they both benefited from the WhatsApp application intervention. This result disagreed with Jafari and Chalak (2016) whose results showed no differences between males and females.

Pertaining to the results, which were in favor of males, one explanation could be attributed

to time. Male students had more time to spend on computers, laptops and mobile than females who had other activities to do like helping their moms with housework. This result may be attributed to the fact that Arab parents place restrictions on their daughters' use of mobile phones, thus limiting their access to the applications.

5. Conclusion:

There is no doubt that the WhatsApp application is a good way to flip traditional classes by making them smart classes. WhatsApp applications can be employed to learn and teach language skills: reading, writing, speaking and listening. However, this study is far from perfect and the researchers recommend further study of this issue for young learners and on gender as well. This experimental study results revealed two major themes concerning using WhatsApp in teaching EFL in the Palestinian context. The first theme is that using this application was effective since it showed improvement in EFL learners' performance. The second theme pertains to gender. Improvement in vocabulary as a result of using WhatsApp was higher among males than females. Within this framework, the following areas should be examined in other research whether locally, regionally, or globally:

- With reference to having more impact of this application on males than females, more studies within the Palestinian context should be conducted and their impacts should be compared and evaluated.
- In light of the findings of other studies, the attitudes of teachers, parents and supervisors should be examined to check the experimental data.
- Similar studies should also be conducted on other school grades and in other contexts as well as in government and UNRWA schools in particular.
- The impact of WhatsApp on the process of education in other regional areas on young learners should also be researched.
- The researchers also suggest conducting further research into the impact of using WhatsApp in teaching other language components, such as grammar and to students at different educational levels.
- Finally, they recommend holding training courses for teachers to teach them how to properly use WhatsApp application EFL settings.
- The researchers recommend that WhatsApp messages should be used in private and public schools.

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Appendix: 1 Pre-test

Dear Student,

Please, put a circle around the correct answer code below:

1. Ben and Amy have been sick yesterday.
a) before b) since c) so d) after
2. Ben was all day yesterday.
a) sneezing b) coughing c) thirsty d) cold
3. Amy was all day yesterday.
a) coughing b) thirsty c) cold d) fever
4. Omar had a
5. Omar had a
6. The doctor said, "There's a bug going around".
a) stomach b) ear c) stomachache d) sick
7. Ben and Amy have
8. Ben and Amy should stay in bed they feel better.
a) since b) because c) until d) so
9. Rania has a
a) sore throat b) cold c) thirsty d) bug
10. The doctor says, "I've seen other children with a this morning".
a) flu b) stomachache c) fever d) cold
11. Rania is and
a) hot/ thirsty b) hot/ bug c) hot/ fever d) cold/ thirsty
12. Omar's back hurts a lot. He's got a
13. Pain in the ear is called
14. Ali has been tired 2 days.
a) since b) for c) about d) because
15. Ben has been at this school 2013.
a) for b) since c) about d) along
16. The synonym of the word "sick" is
17. The pain in the tooth is called
18. The doctor gave Omar and Rania some
19. Ben's mum took the children to the
20. There's a flu going around.
a) bug b) fever c) cold d) sick

Appendix: 2 Post-test

Dear Student,

Please, put a circle around the correct answer code below:

1. Ben was all day yesterday.
a) sneezing b) coughing c) thirsty d) cold
2. Ben and Amy have been sick yesterday.
a) before b) since c) so d) after
3. Amy was all day yesterday.
a) coughing b) thirsty c) cold d) fever
4. Omar had a
a) backache b) earache c) ear d) fever
5. The doctor said, "There's a bug going around".
a) stomach b) ear c) stomachache d) sick
6. Omar had a
a) cold b) fever c) flu d) earache
7. Ben and Amy have
a) fever b) colds c) thirsty d) bug
8. Rania has a
a) sore throat b) cold c) thirsty d) bug
9. The doctor says, "I've seen other children with a this morning".
a) flu b) stomachache c) fever d) cold
10. Ben and Amy should stay in bed they feel better.
a) since b) because c) until d) so
11. Ben's mum took the children to the
a) School b) home c) clinic d) classroom
12. There's a flu going around.
a) bug b) fever c) cold d) sick
13. Rania is and
a) hot/ thirsty b) hot/ bug c) hot/ fever d) cold/ thirsty
14. Ben has been at this school 2013.
a) for b) since c) about d) along
15. Omar's back hurts a lot. He's got a
a) stomachache b) backache c) sick d) sneezing
16. Pain in the ear is called
a) stomachache b) backache c) earache d) fever
17. Ali has been tired 2 days.
a) since b) for c) about d) because
18. The synonym of the word "sick" is
a) medicine b) ill c) flu d) doctor
19. The pain in the tooth is called
a) ill b) sick c) earache d) toothache
20. The doctor gave Omar and Rania some
a) bug b) cough c) medicine d) fever