The Effectiveness of Whats App-Mediated Learning Activities in Developing EFL Higher Education Students'Writing Performance

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Abstract

This study was conducted to investigate the effectiveness of WhatsApp (WA) - mediated learning activities in developing EFL higher education students' writing performance. The participants of the study (N=70) were selected randomly from EFL second year students, MIS Division at Tanta Higher Institute for Computers, Information and Management Technology that administered by the Ministry of Higher Education during the first semester of the 2020-2021 academic year. The participants were assigned into "treatment" and "non-treatment" groups. The treatment group students (N=35) studied via WA-mediated learning activities (article sharing, brainstorming, movie reviewing, project design, chart description, cartoon creation and grab-and-go),whereas the non-treatment group students (N=35) received ordinary class-based instruction. The instrument used in the study, prepared by the researcher, was a pre-post EFL writing performance test. Testing the two groups was administered before and after the experimentation. The t-test for independent and paired samples was applied. Data obtained were logged and analyzed using SPSS, version 21 . Results revealed that using WA was effective in developing EFL second year students' writing performance. Pedagogical implications, recommendations, insights for further research and conclusions were provided in the light of the study results.

Keywords:- WhatsApp (WA) - EFL Writing Performance

الملخص:

هدفت هذه الدراسة إلى تقصى فعالية الأنشطة التعليمية باستخدام واتساب في تنمية الأداء الكتابي في اللغة الإنجليزية كلغة أجنبية لدى طلاب التعليم العالي و تكونت عينة الدراسة من (٧٠) طالب و طالبة تم اختيارهم بطريقة عشوائية من طلاب و طالبات الفرقة الثانية شعبة نظم المعلومات الإدارية بالمعهد العالي للحاسبات و المعلومات و تكنولوجيا الإدارة بطنطا خلال الفصل الدراسي الأول من العام الجامعي ٢٠٢٠/٢٠٢١. و تم تقسيم العينة المختارة (ن=٧٠) إلى مجموعتين , أحدهما تجريبية (ن=٣٥) و هيالتي تعرضت للمعالجة التجريبية والأخرى ضابطة (ن=٣٥) و هي التي لم تتعرض للمعالجة التجريبية.

ولقد استخدام الباحث المنهج شبه التجريبي وتم تطبيق أدوات البحث على المجموعتين قبل التجربة وبعدها وتمت معالجة البيانات إحصائيا باستخدام برنامج SPSS

و قد أوضحت نتائج الدراسة وجود فروق ذات دلالة إحصائية بين متوسطي درجات المجموعتين لصالح المجموعة التجريبية. و في ضوء هذه النتائج تم تقديم التضمينات التربوية و التوصيات و أيضا المقترحات لا جراء بحوث مستقبلية.

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Introduction

The twenty- first century is marked by a significant shift of attention from traditional teaching/learning methods to more innovative ones. The widespread of the technological progress has drastically affected the educational setting, including teaching methods and experiences of classrooms at all educational levels in a way or in another. This technological progress has greatly invaded our life in general and the educational system in specific and no one can deny that the generation of students we teach nowadays is considered the generation of technology and no one can stop them from using mobile phones, technology , ipad, etc.There fore, technology should be integrated in the teaching and learning process as it enables students recognize that what they learn is not separated from their daily life since it is not acceptable to teach students of this century using traditional methods. If this happened, they will feel bored, demotivated and unenthusiastic to learn. As a result, educational systems should take into consideration the increasing change in the world caused by technology and prepare students to cope with it successfully in order to be able to deal with real life situations and their future careers. Consequently, institutions of higher education shoulder the responsibility of availing instructors and students alike of the technological infrastructure for enhancing their teaching and learning process.

The continuing advancement of mobile technology and its devices have proved to influence the shift on how education perceived, implemented, evaluated and proposed. Besides, the success of any initiatives in implementing such technology in any educational system depends on the supports and attitudes of the involved users. This in turn ,has contributed to new opportunities and resources to enhance the accessibility and quality of education. Such technology and its devices also may make the educational environment different from the traditional face-to-face instruction as they provide both students and instructors several opportunities to learn and

communicate with others anywhere and at any time. Accordingly, old methods and tools can no longer meet and satisfy the needs of the teaching processes(Isman &Dabaj, 2004;Crescente &Lee,2011& Chen, 2013).

In the aspect of teaching and learning environment, there is a growing support among researchers and practitioners for the use of such technology and its devices because of their convenience that comes with lightweight devices , availability of space and time for learning, adaptability of content according to students' individual needs, facilitation of sustained connections between students and their instructors and ability to enhance individual learning experiences. This in turn , may enhance productive learning where students show responsibility for , initiate their own learning and share learning with peers and others. Moreover, there are several basic considerations why mobile technology and its devices should be used as learning tools in the process of teaching and learning foreign /second language and among them :(1) they serve as an alternative devices to provide motivation, interest and new learning experiences for students, (2) they enable instructors to involve their students in classroom communication and encourage them to practice foreign /second language skills optimally,(3) they strengthen students' learning processes that act as an extra positive material for students,(4) they stimulate critical thinking skills, collaboration and knowledge construction to promote and create a collective intelligence,(5)they enable students to communicate, interact and share opinions, ideas and feelings with others,(6)they allow students to express their own points of view about topics more easily and efficiently,(7)they assist students to gather useful information related to their study and (8) they enable students to do their homework and assignment more easily and efficiently (Vavoula & Sharples, 2008; Shirvani, 2009; Trevor ,2013; Karpisek, Baggili & Breitinger, 2015& Moreira et al.,2016).

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Among various mobile technology and its devices is WhatsApp (WA) that is considered as the easiest, most popular and effective tool that can be used by instructors and lecturers of foreign /second language in order to develop their students' foreign / second language skills. It was invented by Jan Koum and Brian Acton in 2009 and then released into the market since 2010. It is a free, proprietary, cross-platform instant messaging application that works across multiple platforms like iPhone and android phones. It is being widely used among undergraduate students to send multimedia messages along with simple text messages . Its popularity among students is largely due to its flexibility , useful features, attractive options and its capability to hold group chats, voice messages, emoticons and even location sharing. Through it , instructors and lecturers of foreign / second language can attain faster and easier communication with their students. It offers real-time texting or communication including the ease of sharing information. It can increase the level of communication among students and create another field for learning. In turn , it can be viewed as an aid of communication and a tool of circulating educational resources and information to students (Bere , 2012; Cohavi, 2013 & Han & Keskin, 2016).

WA has been viewed as an effective tool in the teaching and learning process due to its rationales over other forms of social media tools. It is a new and a very popular, convenient, effective and reliable mobile application that can be applied in the EFL/ESL classroom .Through it, EFL/ESL students can communicate and interact with their classmates through sharing pictures, instant messages and video calls as well as they can develop their foreign/second language skills . Besides, EFL/ESL students can practice foreign/second language in their contexts using what they prefer, in terms of interests about social networks .Moreover , it can be integrated into the teaching and learning process as an instructional tool for foreign/second language teachers to promote fun and interesting language activities , in turn ,

stimulates active foreign/second language teaching and learning (Fisher, 2006;Ahad & Lim, 2014; Susilo, 2014& Wilson & Boateng, 2014).

Rambe & Bere(2013)& AbdulFattah (2015) demonstrated that WA assists foreign / second language students as it boosts active involvement of them in the teaching and learning process, facilitates knowledge sharing among them, improves their manipulative skills, enhances their evaluation process, creates strong association between them and their lecturer, leaves positive results on their learning outcomes, helps absent students to catch up, helps to increase their feeling of security since they always have their instructor/lecturer around, helps to facilitate their discussions, helps them to overcome their fear of using foreign / second language, helps them to develop their foreign / second language skills, enables them to learn from their colleagues' mistakes and increases their motivation towards learning foreign / second language .It can also assist foreign/second language lecturers to reach out to their students in order to understand and teach them better, encourage cooperation and motivation, enhance creativity, critical thinking and problem-solving skills among students and help them to construct their own knowledge(Griesemer, 2012).

Furthermore, it can be used in order to attract students' attention , create a healthy environment regardless of time, place and pace that lead to self-study autonomous learning, access a great deal of information rapidly ,provide fun-based learning, allow students to express their thoughts and ideas freely, help students to get actively involved in learning activities according to their own abilities, allow students to receive materials rapidly, create WA groups between instructors and their students by separating each group according to certain practicums to communicate effectively and afford a pleasant and continuous learning environment beyond classroom hours through various features of WA such as attaching pictures, sharing videos, sharing web-links, recording videos ,etc.(Ibrahim, Hafiz & Idris, 2015& Thang et al., 2016).

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The problem and its context

Writing skill is a predictor of academic success and a basic requirement for participation in civic life and in the global community. For all EFL students, writing is essential for putting their thoughts and ideas on paper and sharing them with others. In turn, writing well is not just an option for EFL students-it is a must. Among the four EFL skills (listening, speaking, reading and writing), writing is commonly known as the most difficult but the least liked skill although it plays a crucial role in language production. This is because it requires several factors such as a good ability to generate and develop ideas and information, good ability to integrate information into coherent paragraphs and texts , sufficiency of content and ideas ,high level of accuracy to enable readers avoid misunderstandings and the use of diversified grammatical structures, syntax and vocabulary.

Teaching/learning how to write in a foreign language is not an easy task for EFL lecturers and students alike and though countless research and efforts that have been conducted by researchers and lecturers in order to develop the writing skill among EFL students, many of them still face a number of serious difficulties that prohibit them from constructing satisfactory levels in EFL writing. Despite the significance of EFL writing skill, the weak and low levels of EFL writing performance reached by EFL second year students, MIS Division at Tanta Higher Institute for Computers, Information and Management Technology seem to be among the problems that were observed out of the researcher's experience while teaching them EFL.It was observed that many of them stated and organized ideas illogically, used irrelevant and in sufficient content, made frequent errors in punctuation and capitalization that obscured the meaning, used inadequate and inappropriate vocabulary that obscured the meaning and made frequent errors in spelling and grammar that obscured the meaning.

In addition , most of them did not start paragraphs of essays with indented line, had difficulties in arranging good sentences and paragraphs in EFL where the style is quite different from their mother tongue and had difficulties in choosing correct vocabulary for certain sentence context. They also used non-academic words to express their ideas on their academic essays , wrote inappropriate paragraphs since many of them wrote too many sentences that made the paragraph too long and not readable, and on the contrary, some of them only had one sentence for a paragraph which was not meet required number of sentences in a paragraph.

To document such problem, the researcher piloted a study to a sample of 20 students from EFL second year students, MIS Division at Tanta Higher Institute for Computers, Information and Management Technology. In the pilot study, a writing performance test, prepared by the researcher, was given to the sample during the first semester of the 2020-2021 academic year . Results indicated that students really encountered a problem in their EFL writing as the scores of the majority (92%) of them were low and so they still need more help and effort. Besides, the researcher held some interviews and meetings with a number of EFL second year students, who are the participants of the study, to be aware of their desires and willingness to develop their EFL writing performance. All students expressed their desires and willingness to develop and improve their level of EFL writing performance and they considered it a must for their future careers as well as they expressed that they were not motivated and interested in EFL writing activities and assignments.

Furthermore ,the researcher found a strong evidence in the previous studies that supports and emphasizes such problem (i.e., Kajder & Bull ,2004; De Bakker, Sloep & Jochems, 2007; Brett, 2008; Quan-Haase, 2008; Lauricella & Kay, 2013; Plana et al. ,2013; Bouhnik & Deshen ,2014 ; Danesh & Amiri ,2015;Van der Vyver, Williams & Marais ,2015;Basal, Yılmaz, Tanrıverdi & Sari, 2016;

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Binti Mistar& Embi ,2016;Hazaea & Alzubi, 2016; Jafari & Chalak, 2016;Khubyari & Narafshan, 2016; Ling ,2016; So ,2016; Susanti& Tarmuji ,2016; Yavuz ,2016;Andújar-Vaca&Cruz-Martínez,2017; Khalil,2017;Li,2017;Shariffuddin, Shaaidi & Hashim,2017 ; Bataineh, Bani Khalaf & Baniabdelrahman ,2018; Çetinkaya & Sütçü ,2018; Flores-Salgado & Castineira-Benitez ,2018; Hashemifardnia, Namaziandost & Esfahani,2018;Hertzog & Swart ,2018; Noyan & Kocoglu ,2019&Wil, Yunus & Suliman ,2019).

Consequently, the general agreement of the significance of EFL writing skill, EFL students' desires to develop their level and performance in EFL writing skill and low, weak and unsatisfactory level of EFL students has provided a challenge for EFL lecturers and researchers to look for effective ways to overcome such problem as they should feel a responsibility towards their students to develop and maintain environments that motivate, urge and assist them to continue EFL learning even after school hours. This can be achieved through the use of WhatsApp (WA) - mediated learning activities (article sharing, brainstorming, movie reviewing, project design, chart description, cartoon creation and grab-and-go)and it is a hope to find an effective solution in order to help students to develop their EFL writing skill.

WA enables EFL students to learn EFL better and enhances their proficiency in it. For this, the use of WA should be encouraged to improve the collaboration between high and low achievers of EFL students. Through WA, students can work together in a group to produce a piece of writing . In addition, it gives EFL students several opportunities to write for their lecturer and other students that may enable them to be actively involved in teaching and learning writing activities. Besides, through the use of it, EFL lecturers may have useful opportunities to develop their students' writing skill outside the classroom since social networking services provide the users to interact everywhere and any time. Moreover, EFL lecturers can ask

their students to write comments on given topics of discussion. Students can also be asked to write any responses raised by their lecturers in the group discussion of WA that can enable them to enhance their writing performance (Abdul Fattah, 2015& Binti Mistar& Embi, 2016).

WA can provide purposeful activities that can help EFL/ESL students to learn foreign/second language more effectively, in turn, their foreign / second language skills can be enhanced and developed more effectively. It can also support sharing of captured video clips and exchange of information in teaching and learning foreign/second language. It allows EFL/ESL instructors to deliver foreign/second language learning materials and activities in small chunks. It is also less overwhelming for foreign/second language students and makes it easier for their foreign/second language learning. For this, educational institutions are recently interested in using WA as an instructional tool in order to develop and improve students' foreign/second language skills due to its useful features and flexibility to text, call, document, links, pictures, etc.(Beetham & Sharpe, 2013; Ibrahim, Hafiz & Idris, 2015& Thang et al., 2016).

Significance of the study

The significance of the study stems from the strong empirical evidence of the positive effects of using WA in developing EFL students' language skills in general and their EFL writing performance in specific .Therefore, it is hoped that the results of the study will help EFL lecturers, syllabus designers as well as researchers . Lecturers may be empowered by these results to look for other ways for promoting their own professional development ,in turn, may improve their teaching practices and their students' achievement particularly in EFL writing performance. Results may also help syllabus designers to organize and improve the quality of EFL courses and programs with materials and activities, which depend on using WA. Moreover, results may evoke other researchers

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worldwide to conduct more studies about using WA in developing and improving EFL skills.

Aim of the study

In accordance with the study problem, the study aimed to investigate the effectiveness of WhatsApp (WA) - mediated learning activities(article sharing, brainstorming, movie reviewing, project design, chart description, cartoon creation, grab-and-go)in developing EFL higher education students' writing performance.

Questions of the study

Based on the study aim and the problem specified above, the study attempted to answer the following questions:

1- How is WA effective in developing EFL writing performance among higher education students(MIS Division)?
2- Is there any statistical significant difference between EFL students who use WA in order to develop their EFL writing performance and those who do not use it?

Hypotheses of the study

The present study attempted to verify the following hypotheses:

1- No statistically significant difference will be found in mean scores of the experimental group and that of the control group on the posttest of EFL writing performance.
2- No statistically significant difference will be found in mean scores of the experimental group on the pretest and posttest of EFL writing performance.
3- No statistically significant difference will be found in mean scores of the control group on the pretest and posttest of EFL writing performance.

Delimitations of the study

The study was delimited to:

1- 1- EFL second year students (MISDivision) at Tanta Higher Institute for Computers, Information and Management Technology.
2- 2- The first semester of the 2020-2021 academic year.
3- WA was the mobile application that was used in order to develop EFL students' writing performance.
4- Article sharing, brainstorming, movie reviewing, project design, chart description, cartoon creation and grab-and-go were the activities that were used in order to develop EFL students' writing performance.

Definition of terms

The study involves a number of terms and they are defined as follows**:**

− WhatsApp (WA)

WA is an online smart phone application which provides users numerous ways of communication such as group talks, individual chats or WA calls and enables them to share simple texts, multimedia files, contact numbers or even sharing the location (Anglano, 2014). But for the present study, WA is operationally defined as: An online smart phone application that allows EFL second year students, MIS Division at Tanta Higher Institute for Computers, Information and Management Technology to develop their EFL writing performance through affording them with several opportunities and numerous ways of communication, for example, sending and receiving EFL writing materials and feedback, sharing and exchanging files, making individual chats, making group talks, etc.

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- EFL Writing Performance

For the present study, EFL writing performance is defined operationally as: The ability of EFL second year students, MIS Division at Tanta Higher Institute for Computers, Information and Management Technology to express their thoughts and ideas through writing using relevant and sufficient content, correct mechanics, correct grammar and spelling, proper vocabulary and organized ideas.

Review of literature

Mobile Assisted Language Learning(MALL)

The rapid growth of mobile technologies such as mobile phones and hand-held computers has helped MALL reach new heights . Recently, MALL has entered the fields of foreign/second language learning. Familiarity with MALL is the result of the widespread availability of mobile phones and smart phones which are owned by nearly all students. Teaching and learning foreign/second language using mobile applications has become an admirable alternative due to the veritable explosion of mobile phone production. Kukulska-Hulme & Shield (2008) defined MALL as formal and informal learning via handled devices that are potentially available for use at anytime and anywhere. They stated that foreign/second language students can use such devices (i.e., tablets, electronic dictionaries, etc.) to learn and study autonomously in order to improve their foreign/second language skills. For Godwin-Jones (2006) & Hazaea & Alzubi (2016), it is the integration of mobile tools and applications in order to develop foreign/second language learning inside or outside the classroom setting.

Mobile phones are considered the most popular of the technological devices that used by people at all ages. They have innovative and unique features and thus are called as smart phones .They can enable students to communicate easily through Internet ,as well as assist them to access quickly to e-mails or any other social

networking sites. This in turn, urged instructors to seek for their educational benefits for their students(Montag et al., 2015& Sussex, 2012).There are several mobile phone applications that foreign/second language students can access today through their smart phones (i.e., bilingual dictionaries, videos, WhatsApp, web-based language learning sites, etc.) . In the past, foreign/second language learning was delimited to textbooks and classroom but today information and communication technology has provided students with several applications and programs for developing their foreign/second language skills using many innovative applications .These applications can provide students with opportunities for self-learning and can be used inside and outside the classroom setting for practicing their foreign/second language skills and developing proficiency in it(Zayed, 2016& Kacetl & Klímová, 2019).

Klopfer ,Squire & Jenkins (2002); Dehghan, Rezvani & Fazeli (2017) & Gangaiamaran& Pasupathi (2017)seem to agree upon the following features of MALL: The first one is portability that means taking mobile devices to different sites or moving them around within a site. The second one is social interactivity that helps students to interact with a huge amount of exposure in order to exchange diverse types of content and collaborate with classmates and peers. The third one is context sensitivity that provides the possibility to respond to current location, environment and time where and when a student uses mobile devices. The fourth one is connectivity that means the necessity to be connected to a Wi-Fi network in order to use online tools .The last one is individuality that explains the importance of doing autonomous work to learn and practice knowledge. These features bring great benefits to the process of teaching and learning foreign/second language as, for example, facilitating experimental learning, enhancing collaborative work , making knowledge more accessible, enhancing learners' foreign/second language skills and facilitating social interaction and data exchanging among students (Godwin-Jones, 2006& Sa'aleek ,2014).

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Godwin-Jones(2006) & Sa'aleek (2014) also stated that MALL promotes the following learning opportunities:

- Students can improve their understanding of learning material and assessment using recorded information/sessions via mobile phones.

- Students can monitor their learning progress via various kinds of assessment provided by their lecturer.

- Students can learn via images ,in turn, reflects positively on their understanding of difficult concepts.

- Both lecturers and students can participate in collaboration via chat, email, etc.

- Students can better grasp the information required for class by searching online which is easily available with the search feature offered by mobile phones.

- Mobile phone feature ,for example, calendar can be utilized to arrange students' learning schedule which include reminders and due dates of assessments ,as well as it can assist their lecturers to monitor attendance and performance.

- Enabling both lecturers and students to facilitate support and co-ordination required to obtain additional information about the course content.

WhatsApp(WA)

WA was founded in 2009 in California, USA by Jan Koum and Brian Acton. The name WhatsApp (WA) was set by Jan Koum as a reference to "what's up". WA was introduced initially as an application with a messaging feature and in November 2009, it was released exclusively for I Phone's app store. The following month, the feature of sending photos was added and, in turn ,the users of WA then grew substantially. To bear the cost of sending verification messages to its growing user base, WA began to charge its users from

the initial free service. It was then released into the market in 2010. It was first made available for BlackBerry smart phones and then later included platforms using the Symbian Operating System, followed by Android Operating System. There after, it incorporated most of the other operating systems, including Windows Phone, Nokia Series and Samsung.

WA is a popular application because its features and capabilities allow users to interact in a variety of ways. For example, it allows them to exchange text messages one-to-one or as group conversations. In addition, users can share documents and a variety of multimedia types, as well as making voice or video calls. In turn , it is viewed as a useful learning tool that makes posting information, sharing content and engaging in online discussions easy and available anytime and anywhere (Jain, Eddy Luaran & Rahman, 2016).It is a proprietary, cross-platform, encrypted instant messaging client for smart phones. It uses the Internet to send text messages, documents, images, video, user location and audio messages to other users using standard cellular mobile numbers. It is easier than other applications that need several ways or steps to start. The users of it can share their location in real time over messages. They can also organize lists of contacts so that they can send messages quickly to many people in group chats through WA. It allows users to keep in touch with people living abroad without incurring the international charges associated with text messages (Aburezeq & Ishtaiwa ,2013 & Rambe & Chipunza ,2013). Further more, Bouhnik & Deshen (2014) & Hamad (2017) showed some features of WA,in terms of technical, educational and academic ones. The technical ones are simple operation, low costs, availability and immediacy. The educational ones are creation of a pleasant environment and in-depth acquaintance with fellow students which have a positive influence upon the manner of conversation. The academic ones are its accessibility of learning materials, teacher availability and the continuation of learning beyond classroom hours.

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According to Bere (2012) , WA has the following features:

- Multimedia: It allows its users to exchange videos, text messages, images and voice notes.

- Group Chat: It supports the interaction of up to 50 members.

- Unlimited Messaging: The number of messages that users can share on WA is unlimited.

- Cross Platform Engagements: Interact ants with different devices (i.e., smart phones, galaxy tablets, etc.) can message one another through various media (text messages, pictures, videos, voice notes).

- Offline Messaging: Messages are saved automatically when the device is off or outside coverage area.

- • No Charges Involved: No charges involved for using WA as it uses the same Internet data plan which is used for email or web browsing.

- Pins and Users Name: WA users do not need to remember their passwords or usernames as it works via phone numbers and integrates with users address books.

 Moreover ,Bere (2012);Church &De Oliveira (2013); Sahu(2014) &Yeboah & Ewur (2014), WA has the following unique features:

- • Creating a groupo f participants who can communicate within its boundaries among each other at any time. The creator of the group is considered its manager, a position that includes the privilege of adding and deleting participants without the need for approval from the members of the group. Aside from this, all of the members in the group enjoy equal rights.

- The members in the WA group receive an alert for each message sent or, alternatively, mute the incoming alerts for the duration of 8 hours, a day, or a whole week.

- Providing easy and quick transference of links to study materials, sending real time text messages , exchanging photos, videos, files, audio messages, GPS locations and contacting via an Internet data connection, unlike any other applications - which often do not work-or other forms of communication that students just do not use after school hours.

- WA is a free, fast, convenient, personal mode of communication and downloadable mobile instant messaging application that is available on almost all smart phones in the market. For using it, users need to have Internet connection, each other's phone numbers, as well as the app installed on their smart phones.

- It has spread mostly among young people who are students . They can use it as an entertainment and a funny tool .

These features, therefore, can offer a great opportunity for EFL/ESL students to express their feelings, thoughts, ideas, or events more easily and efficiently.

A number of rationales why educators and foreign/second language lecturers have adopted WA as their main communication channel were listed by Church &De Oliveira (2013) as follows:

- The low cost of the application combined with the ability to send an unlimited number of messages.

- The desire to feel a part of the trend since their acquaintances have already adopted the application.

- Its capacity to conduct an on-going conversation with many friends simultaneously.

- The knitting together of a community of friends or family .

- The sense of privacy relative to other social networks.

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EFL writing skill

According to Harmer (2004,2007)& Virdyna (2016),writing is a way of communication that has always formed part of the syllabus of foreign/second language and one reason that makes it difficult to learn is that written words usually have to express the writer's meaning in his or her absence. When someone speaks face-to-face with a listener, the speaker can communicate in various ways(i.e., raising or lowering the pitch or volume of voice for confirming a certain point, using the hands for shaping out a meaning, etc.). But in writing, the writer have to communicate without facial expressions, gestures, or body language. For this, writing encourages students to focus on accurate language.

Writing is both a process and a product. As a process ,it involves various aspects, ranging from grammar (articles, tenses, etc.), syntactic, mechanics (punctuation and spelling) and organization of ideas and thoughts to form cohesive and coherent writing. Writing as a process does not just stop until the technical stuff. It also involves the communication of ideas in which the organization of delivery, skills, word selection and creativity of the writer is required. On the other hand, writing that becomes the end result of the process is a product that can be expressed in different forms (Harmer, 2004& Gebhard, 2006).Writing is a productive skill that involves producing language rather than receiving it. It involves communicating a message (something to say) by making signs on paper. To write is to put down the graphic symbols (letters of the alphabet, punctuation and spaces) that represent a language that the receivers understand, in turn , others can read these graphic symbols if they know the language and the graphic representation(Harmer ,2004 &Virdyna, 2016).

Writing is an essential skill as foreign /second language learners are asked to convey ideas and information in a clear manner when they enter the workforce .They are also asked to write to pursue

functional tasks such as filling out forms, succeed in academic studies , advance in a job, or writing email messages (Alber-Morgan, Hessler & Konrad, 2007).Harmer (2004,2007) &Virdyna (2016)add that writing : 1) adds another physical dimension to the learning process as hands are added to eyes and ears, 2) lets students express their personalities, 3) develops the other language skills (reading, speaking and listening) , 4) allows for conscious development of language and 5) is valuable in itself as there are special feelings of proud and satisfaction when seeing one's work in print .

According to Nunan (2003) ;Harmer (2004,2007); Gebhard (2006) &Virdyna (2016),there are some functions of writing and among them the following :

- A tool for self-expression .This can be achieved in different forms (i.e. ,paragraphs , essays, etc.).

- A tool for understanding. When a student is about to write, he or she thinks, elaborates and rethinks bout the ideas before writing so that he or she gets better understanding of the content he or she wants to write.

- A tool for developing personal satisfaction and pride .These feelings can encourage the writer to be more creative to produce good writing.

- A tool for increasing awareness and perception of one's environment. A person should develop physical and mental readiness or sensitivity to observe, internalize and portray any state, events or happening in his surrounding to produce good writing.

- A tool for creative involvement. Through writing, a person is actively involved in expressing the subject he or she is writing about.

- A tool for developing an understanding of and ability to use language to express thoughts, ideas, feelings and emotions to other people.

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There are many characteristics of written language that areviewed from the perspective of a reader and among them the following : 1) Permanence: Written discourse is fixed and stable so reading can be occurred at whatever time, 2) Density: The content is presented much more densely in writing ,3) Detachment: The writing of a text is detached in time and space from its reading , 4) Organization: A written text is usually organized and carefully formulated, since its composer has time and opportunity to edit it before making it available for reading, 5) Slowness of production and speed of reception :Writing is much slower than speaking and reading is much faster than listening ,6) Standard language :Writing normally uses a generally acceptable standard variety of the language, whereas speech may sometimes be in a regional or other limited context dialect, 7) A learnt skill: Most people acquire the spoken language intuitively, whereas the written form is in most cases deliberately taught and learned and 8) Sheer amount and importance: Spoken texts are far longer than a representation of the same information in writing (Nunan, 2003;Harmer ,2004 &Virdyna, 2016).

In the area of investigating the effectiveness of WhatsApp (WA) - mediated learning activities in developing foreign /second language skills in general and EFL writing performance in specific, several studies have been conducted and they all assert and confirm its positive effect, among them, (i.e., Alsaleem, 2013; Lauricella & Kay, 2013; Plana et al. ,2013; Rambe & Bere,2013; Allagui, 2014; Amry, 2014; Bouhnik & Deshen ,2014 ; Hani ,2014;Abdul Fattah,2015 ;Danesh & Amiri ,2015; Andujar, 2016; Awada, 2016; Binti Mistar & Embi ,2016;Hazaea &Alzubi, 2016; Jafari & Chalak , 2016; Justina, 2016; Khubyari & Narafshan, 2016; Ling, 2016; So ,2016; Alshammari, Parkes & Adlington, 2017; Hamad, 2017; Khalil, 2017; Li, 2017; Rahmawati, 2017 ; Ta'amneh ,2017; Bataineh, Al-Hamad & Al-Jamal, 2018; Bataineh, Bani Khalaf & Bani abdelrahman ,2018; Bensalem,2018; Çetinkaya & Sütçü ,2018; Hertzog & Swart ,2018;

Ahmed, 2019; Noyan & Kocoglu ,2019 &Wil, Yunus & Suliman ,2019). The following is an explanation of some of these studies:

Alsaleem (2013) investigated the effect of electronic dialogue journaling via WA on EFL undergraduate Saudi students' writing performance ,in terms of vocabulary word choice and voiceas two critically important writing factors. Along a period of six weeks of data collection, students were given 30 prompts to write on via WA. Results indicated that there was a significant improvement in students' writing performance, in terms of vocabulary word choice and voice. In another setting, Rambe & Bere (2013) conducted a study that entitled" Using mobile instant messaging to leverage learner participation and transform pedagogy at a South African University of Technology". They selected 163 third year IT students. They used interviews and a questionnaire as instruments of the study to collect data. Results showed that WAinfluenced positively students' ability to participate and connect with their peers online at any time. Moreover, WA online discussion interaction forums proved to be flexible comparing with traditional lectures.

In addition , the studies of Allagui (2014); Amry (2014)&Hani (2014) also assure the positive effects of WA.Allagui (2014)explored the effectiveness of WA on undergraduate students' writing skills. The participants of the study were 50 students who were given writing assignments and were asked to text messages to one another using WA messenger in order to develop their writing skills. The participants then reported about their experiences through a survey after the completion of the given assignments. They benefited from the spell checker as they received better scores in spelling and vocabulary. Results also indicated that the use of WA in the classroom increased their motivation to write. Amry (2014) investigated the effect of using WA on the achievement and attitudes among online higher education students using mobile devices. The researcher selected 30 students to be in two groups (experimental and

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control).The experimental group students taught via WA mobile learning activities, whereas students in the control group received only face-to-face learning in the classroom. The t-test was used to compare mean scores of the two groups of the study. Results showed that there was a significant difference at 0.05 level in the achievement and attitudes , in favor of the experimental group students. Hani (2014) investigated the effect of WAgroup's utilization on EFL students' vocabulary writing amelioration . Results showed that there was a statistically significant difference in mean scores of the participants on the pretest and posttest, in favor of the posttest .

Moreover, Abdul Fattah (2015); Andujar (2016);Awada (2016) & Justina (2016)seem to reach similar results in their studies .Abdul Fattah (2015)conducted a study to determine the effectiveness of using WA in order to develop EFL students' writing skills. The participants were 30 second year college students, English department from a private university in KSA. They were divided into two groups (experimental and control). The experimental group students used WA in order to develop their writing skills, whereas the control group students taught via their prescribed book. Results revealed that there was a significant improvement in the writing quality ofthe experimental group students comparing with the control group students. Moreover , the experimental group students felt free and happy to express their ideas , correct their mistakes and edit their peer works. Andujar (2016) investigated the benefits of WA through an analysis of grammatical, lexical and mechanical accuracy as well as syntactic complexity in second language students' writing. A WA group was created where 80 Spanish students taking a B1 English course participated in a daily interaction during six months. A quasi-experimental design with two groups (experimental and control) was followed. Students were divided into two main groups with 40 students in each one . WA proved to be a powerful educational tool in developing writing performance among students .Awada (2016) investigated the effect of WA on critique writing proficiency and

perceptions toward learning. Results indicated that the use of WA mediation was effective than the regular instruction in improving the critique writing proficiency of the participants .Justina (2016) investigated the effectiveness of WA in enhancing undergraduate students' language skills. Results showed that using WA helped to motivate students in order to improve their reading and writing skills and they responded better when technology, especially the Internet, involved in their language learning.

Furthermore, Hamad (2017);Khalil(2017) ;Rahmawati (2017); Ta'amneh (2017) & Bataineh, Al-Hamad & Al-Jamal (2018) also utilized WA in order to develop students' writing skill. Hamad (2017) explored the effect of using WA in enhancing Saudi tertiary students' writing in English. The participants of the study were 36 female students from 1st level. Data were collected through students' questionnaire and instructor's observation. Results revealed that using WA enhanced students' learning enriched their vocabulary and enabled them to learn from their classmates' mistakes .Khalil(2017) developed collaborative writing among 3rd year English majors at Misr University for Science and Technology (MUST) in Fall 2017 semester using WA. The researcher used the quasi- experimental design with two groups(experimental and control). Results of the writing skills test revealed that using WA was effective in developing collaborative writing among the participants of the study. Moreover, the participants were satisfied with using WA in their writing class. Rahmawati (2017)investigated the effectiveness of using WA in improving writing ability in announcement text at the tenth grade students of SMAN 1 Klirong in the 2016-2017 academic year. Results indicated that there was a significant difference in writing ability, in favor of the experimental group students who taught via WA.

Ta'amneh (2017) investigated the effect of using WA in learning EFL among university students. The sample of the study consisted of 40 students who were divided into two groups (control and

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experimental). The control group (N=21) taught via the traditional method, whereas the experimental group (N=19) taught via a combination of WA and face-to-face learning. Results showed that there was a significant difference in the achievements of the two groups, in favor of the experimental group students. Bataineh, Al-Hamad & Al-Jamal (2018) examined the effect of WA on 98 EFL Jordanian eleventh-grade students' writing performance along the dimensions of content and ideas, organization , mechanics, vocabulary and language use (with special reference to gender).Results showed that students' writing performance was improved on all dimensions (more for female students).

Along with the same aim ,Bensalem(2018)&Ahmed (2019)conducted their studies .Bensalem(2018) explored the development of academic vocabulary knowledge of EFL students using WA. The sample of the study consisted of 40 Arab EFL students at the elementary level at a public university in the Arabian Gulf. The participants(40) were divided into two groups (control and experimental) . The control group (N=19) followed the traditional method in submitting academic vocabulary assignments, where as the experimental group (N=21)completed and submitted their academic vocabulary assignments via WA. Results indicated that the experimental group students significantly outperformed the control group students. Moreover, the experimental group students had positive attitudes towards learning new vocabulary items via WA. Ahmed (2019) examined the effectiveness of WA in developing motivational levels of Yemeni EFL students in order to develop their reading and writing skills. The participants were 20 EFL undergraduate students of Aden University. The participants joined a WA group for two months where they chatted, shared and commented on news in English. Results revealed that WA was a very effective tool in developing students' motivation in order to develop their reading and writing skills.

Method

Participants

The experiment involved a number of 70 undergraduate students, who were randomly selected from EFL second year students, MIS Division at Tanta Higher Institute for Computers, Information and Management Technology during the first semester of the academic year 2020-2021, with an average age of 20. The participants (N=70) were randomly assigned into two groups, the first group was the experimental (treatment) group (N= 35) and   the second as the control(non-treatment)group (N= 35). All of the participants had WA on their mobile phones. The two groups were homogeneous and enjoyed the same level of EFL writing performance prior to the implementation of WA-mediated learning activities as there was not any statistically significant difference in mean scores of the two groups on the pretest of EFL writing performance as shown in the following table:

Table(1): The independent samples t-test for the two groups on the pretest of EFL writing performance

Test	Groups						df	t	Sig
	Experimental Group			Control Group					
	M	SD	N	M	SD	N			
EFL Writing Performance	6.29	0.957	35	6.34	0.838	35	68	.266	No sig > 0.01

Design

The study adopted the quasi-experimental design. In this design, there were two groups (experimental and control) and it involved three steps. In the first step, the two groups were pretested to be sure that they were equal and homogeneous before the treatment.In the second step , the experimental group students taught via WA, whereas students in the control group dealt with their ordinary class-based

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instruction method. In the last step, the two groups were post tested after the experimentation to measure students' EFL writing performance after having the treatment. There are two variables of this study. The students' development in EFL writing performance was considered as the dependent variable, whereas using WA was considered as the independent variable.

Instrumentation

A writing performance test, prepared by the researcher, was used as a pre-posttest in order to measure EFL students' writing performance before and after the treatment (see Appendix A). In the test , students were asked to write an essay about one of two given topics .

Test validity and reliability

The validity of the test was established by submitting itto a number of jurors in the field of TEFL in order to determine if the test measures what it is supposed to measure. The jurors' remarks were considered and taken into consideration to amend the test prior to its administration. The jurors agreed that the test was valid in its final form. In order to ensure the reliability of the test, it was administered to a group of EFL second year students (N=20), MIS Division at Tanta Higher Institute for Computers, Information and Management Technology out of the main sample of the study at the beginning of the first semester of the 2020-2021 academic year. The same test was re-administered to the same group of students after a period of two weeks of the first administration. The correlation coefficient between the two administrations of the test amounted to 0.90, which was statistically significant at 0.05 level.

Test piloting

The test was piloted to a sample of EFL second year students, MIS Division at Tanta Higher Institute for Computers, Information and Management Technology during the first semester of the 2020-

2021 academic year. The purpose of piloting the test was to determine if any words or directions in the test appeared to be vague, delete or replace any difficult words, receive useful feedback from students and estimate how much time students would take in completing and answering the test .Some   modifications were accomplished in the light of the pilot study .Therefore, 60 minutes were found to be appropriate time for answering the test.

Test scoring

A rubric was designed and prepared by the researcher(see Appendix B) for assessing and scoring students' answers in the writing test. In the scoring rubric, a total of 20 marks was equally divided among five components (organization, content, mechanics, word choice and language use). Each component had four levels from 1 to 4. In order to avoid the researcher's bias, two raters were assigned to evaluate students' answers. The rubric was submitted to a number of jurors in the field of TEFL to determine if the rubric measures what it is supposed to measure. In the light of their feedback, suggestions and comments, some modifications were pursued.

The WA group

The group's purpose was using WA as a learning platform in order to develop EFL second year students' writing performance through using features, facilities and options of WA (i.e., sending and sharing learning materials, learning activities, information, videos, links, documents, etc.).A group of 35 students (participants) was created on WA, entitled "Second Year Students -MIS ".The group administrator(the researcher) had the privilege to assign , remove or suspend a member in case of violation of ethics and he made sure that all students of the group had WA on their mobiles. The phone numbers of students were required and it was a tricky moment as students were not comfortable with sharing their phone numbers. The

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name of the group and the icon were set together and declared to all students of the group.The icon of the group, in turn in a regular time, was updated using, for example, motivating pictures and English words / phrases.Some guidelines and instructions in a form of rules were delivered (i.e., nature of interaction, topics, assigning and uploading learning materials and activities, ways for asking for clarification, kinds of information that should and should not be shared in the group, possibility of sending private messages outside of the group, possibility of using informal chats, etc.). The group was set up for class use and the tasks and materials were assigned and uploaded to the group in class and outside of the class .

Both student-student and student-teacher interactions were encouraged, the former to exchange experiences, ask and answer questions, and/or clarify details about EFL writing, whereas the latter to ask for or provide individual help, especially for students who preferred doing so away from the group. Also, student-online resource interactions were encouraged to further support students' writing performance. This multi-faceted interaction allowed each participant in the group to participate effectively. At the end of each session, a YouTube video was posted for students to watch and discuss. For consolidation and feedback, the participants received feedback from their lecturer and their peers. The use of emoticons was widespread by both students and their lecturer. The participants found that using WA useful, enjoyable and interesting as it helped them develop their writing performance. They also declared that they became comfortable to communicate using WA. As a result, (1) a good rapport between students and their lecturer developed and consequently led to having a better learning atmosphere, (2)a sense of belonging and community cultivated and (3) students worked as a team

.

Results of the study

Results related to the first hypothesis

"No statistically significant difference will be found in mean scores of the experimental group and that of the control group on the posttest of EFL writing performance"

The independent samples t-test was used in order to test this hypothesis and the result is shown in the following table:

Table(2): The independent samples t-test for the two groups on the posttest of EFL writing performance

Test	Groups						df	t	Sig
	Experimental Group			**Control Group**					
	M	**SD**	**N**	**M**	**SD**	**N**			
EFL Writing Performance	13.57	1.065	35	6.37	1.031	35	68	28.729	Sig<0.01

According to the above table, there was a statistically significant difference in mean scores of the experimental group (M=13.57, SD=1.065, df=68) and that of the control group (M=6.37, SD=1.031, df=68), in favor of the experimental group (t=28.729, p< 0.01). This result shows that the experimental group students outscored and surpassed the control group studentson the posttest of EFL writing performance. Thus, the first hypothesis is rejected. The result of the second hypothesis can be visualized graphically in the following figure:
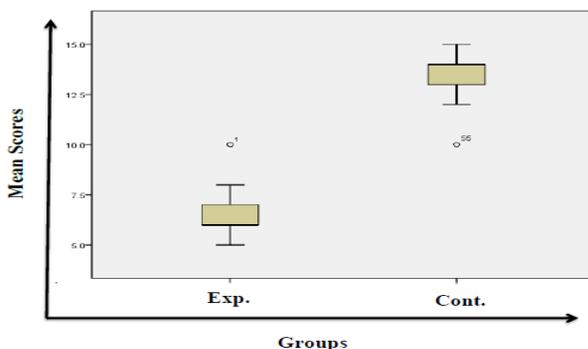

Figure (1): Mean scores for the two groups on the posttest of EFL writing performance

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Results related to the second hypothesis

"No statistically significant difference will be found in mean scores of the experimental group on the pretest and posttest of EFL writing performance"

The paired samples t-test was used in order to test this hypothesis and the result is shown in the following table:

Table(3): The paired samples t-test for the experimental group on the pretest and posttest of EFL writing performance

Group	EFL writing performanceTest						df	t	Sig
	Pretest			Posttest					
	M	SD	N	M	SD	N			
Experimental Group	6.29	0.957	35	13.57	1.065	35	34	28.251	Sig<0.01

According to the above table, there was a statistically significant difference in mean scores of the experimental group on the pretest (M=6.29, SD=0.957, df=34) and posttest (M=13.57, SD=1.065, df=34) ofEFL writing performance, in favor of the posttest (t=28.251,p < 0.01). This result shows that the experimental group students'performance on the posttest of EFL writing performance was better than their performance on the pretest of EFL writing performance. Thus, the third hypothesis is rejected. The result of the third hypothesis can be visualized graphically in the following figure:
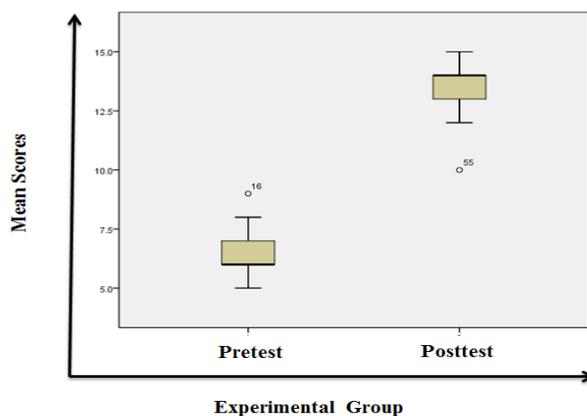

Figure (2): Mean scores for the experimental group on the pretest and posttest of EFL writing performance

Results related to the thirdhypothesis

"No statistically significant difference will be found in mean scores of the control group on the pretest and posttest of EFL writing performance"

In order to test this hypothesis, the paired samples t-test was used and the result is shown in the following table:

Table(4): The paired samples t-test for the control group on the pretest and posttest of EFL writing performance

Group	EFL writing performance Test						df	t	Sig
	pretest			Posttest					
	M	SD	N	M	SD	N			
Control Group	6.34	0.838	35	6.37	1.031	35	34	0.154	No sig>0.01

According to the above table, there was not a statistically significant difference in mean scores of the control group on the pretest (M=6.34, SD=0.838, df=34) and posttest (M=6.37, SD=1.031, df=34) ofEFL writing performance(t=0.154, p> 0.01). Thus, the fourth hypothesis is accepted. This result can be visualized graphically in the following figure:
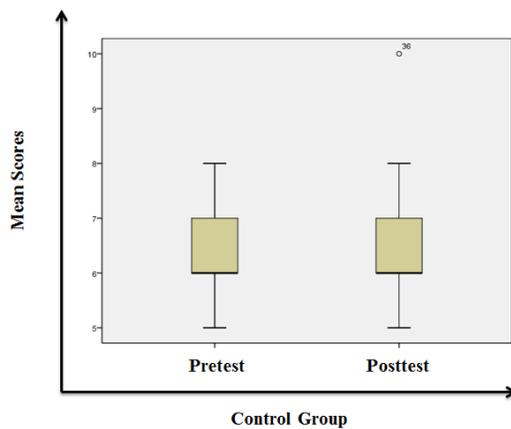

Figure (3): Mean scores for the control group on the pretest and posttest of EFL writing performance

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Discussion

The results of the study showed that there was improvement in the experimental group students' writing performance and they outperformed and surpassed the control group students on the writing performance posttest .This means that WA was more effective than the ordinary class-based instruction followed by the control group students in developing EFL second year students'(MIS Division) writing performance ,in terms of organization, content, mechanics, word choice and language use. The effectiveness of WA in developing EFL higher education student' writing performance can be attributed to a number of factors and reasons as follows:

The first possible factor may be related to the novelty of the experience of using WA as well as the sense of virtual community that was created between students and their lecturer, on one part, and among students themselves through the use of the WA group chat in order to develop EFL wring performance of EFL higher education students. This new experience intrigued the experimental group students and made them more involved in purposeful and meaningful activities via WA. In such an environment, a special bond could have been created among the different members of the WA group .This gave the experimental group students more opportunities to write in EFL, paying more attention to organization, content, mechanics, word choice and language use as far as they could. Thus, they were involved in more meaningful communication through writing in EFL. In this way, group learning even outside the classroom was made possible through WA.

Another possible explanation may be related to the new features and options of WA. Such features and options offered great opportunities for the experimental group students to express their thoughts and ideas more easily ,get them more free from the limits of time and location, learn more systematically, develop self-learning, get instant feedback, repeat the lesson several times, ease displaying

the new content, design visual and auditory learning environments, evaluate their performance, minimize their errors in writing, interact with each other online and send pictures, messages, files, documents, images, videos, recordings and more. These features and options helped students to be closer to their EFL lecturer when he communicated with them outside the classroom. This gave him the opportunity to know his students , as well as their problems they faced inside and outside the classroom which prevented them from performing well in the class, in turn, helped their EFL lecturer to address students' needs more effectively. This communication was essential because it served as a source of practicing EFL.

A further explanation may be related to the EFL lecturer's new roles. He performed the roles of   monitoring students' activeness and progress in writing, assisting the WA group, guiding them to write well by giving instant feedback and helping them develop autonomy, in turn, guaranteeing that students had adequate language exposures and instructional guidance. Moreover, he was responsible for creating humor that helped in relaxing students' minds ,in turn, helped them to enjoy language learning, provided them with the feeling of being part of a group , made them free to do the assignments everywhere and provided an opportunity for connections with their classmates outside of the formal classroom.

Besides, the use of WA instilled a sense of confidence in students and helped them to feel less inhibited and thus boosted their confidence to be actively involved in the learning process. This in turn , enabled them become autonomous learners as they could practice writing independently on their own without being limited by the time and the classroom .In addition, profuse encouragement, acknowledgment and appreciation of the experimental group students' efforts seem to be a reason for developing their attitudes towards EFL writing. They kept trying to do better each time to get more appreciation from their EFL lecturer. They were applauded for

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various achievements which boosted their morale and kept them motivated to improve their writing performance. Referring to some students' work as good examples was highly encouraging not only for students who were being appreciated, but also for the others who wanted to receive the same kind of appreciation and acknowledgement.

Furthermore, WA assisted the experimental group students to achieve a sense of creativeness, relatedness and effectiveness of ideas, in turn , generated sufficient ideas and the flow of ideas could not be inhibited, achieve positive results ,in terms of clarity and unity, lessen mistakes in grammar and spelling, expose to meaningful passages and texts, in turn , generated meaningful paragraphs and essays ,express their ideas freely, use discourse markers in their writing, in turn, generated well-constructed and logical paragraphs and make the classroom fun and interesting instead of the usual boredom of lectures. The anytime-anywhere capabilities of WA enabled students to develop their EFL writing performance at times of their own choice as they were allowed to exploit small amounts of time and space for developing the quality of their EFL writing performance. Moreover, the use of WA made students more excited and enthusiastic in EFL writing using their own words as it looked like that they communicated with their friends in daily context regardless of their proficiency levels. So, the use of WA could hinder them from barriers that could affect their achievement in EFL writing (i.e.,fear of making errors, embarrassment to practice EFL writing, etc.).This urged the experimental group students to give comments, suggestions as well as corrections freely when they found any errors made by their friends (i.e., grammar , spelling, etc.). The corrections, suggestions and comments given by everyone through WA benefited them to improve the quality of their writing.

On the other hand, the control group students achieved less than the experimental group students in EFL writing performance ,in terms

of organization, content, mechanics, word choice and language use according to their ordinary class-based instruction that based on memorization ,lecture, question and answer and demonstration. This in turn, made them passive in the class as they did not feel confident enough to be peer editors for their classmates' writings and hardly revised the feedback from their lecturer. There were various possible factors and reasons that made them reach this low level as follows: their fear of failure or their fear of not being able to achieve their goals, their fear from committing mistakes that prohibited them from writing well as well as made them feel uncomfortable over the structure of any piece of writing, their uncertainty to show their writing, their low motivation to write in EFL ,influence of their native language(Arabic) on EFL writing in a way that hindered them from writing, their lack of cultural backgrounds in EFL academic writing and their poor background in EFL that made it hard to reach satisfactory level.

For all of these drawbacks, the control group students felt stressed and stuck in trying to convey their message when writing in EFL, in turn , stated and organized ideas illogically, used irrelevant and insufficient content, made frequent errors in punctuation and capitalization that obscured the meaning, used inadequate and inappropriate vocabulary that obscured the meaning and made frequent errors in spelling and grammar that obscured the meaning. For example, It was hard for them to use, articles, prepositions, pronouns and connectors appropriately. Accordingly, the control group students used traditional ways to pass an exam ,for example, memorizing paragraphs and essays rather than learning language. As a result, they had the same sentence structure and patterns with the same vocabulary, in turn, thwarted and affected negatively their EFL writing practices. The results of the study are in agreement with the results of most of the studies that were conducted in this area(as mentioned earlier in the section of literature review).

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Implications

In the light of the results of the study, the following implications have been provided:

1- It is highly essential for EFL lecturers to determine what their students enjoy doing and utilize it to engage them in EFL development. This requires quite a bit of change in teaching style as well as a huge paradigm shift, in turn, EFL lecturers need to look for a different way. However, this change can go a long way in assisting EFL lecturers to develop interest in EFL writing without any anxiety and WA has proved to be effective in achieving this goal.

2- The roles of EFL lecturers are to : facilitate the WA group, motivate EFL students to be confident to write, monitor students of the group and oversee them whether they are active or not, provide questions to be answered by students, ask students to discuss and negotiate writing materials, present writing materials through WA and encourage various feedback towards their answers(i.e. ,peer comment ,etc.).

3- With its easiness and sophisticated features, WA can help EFL students to interact with other classmates at any situation with or without their lecturer's assistance, and it can encourage them to participate in group discussion in order to develop their EFL skills. Therefore , WA should be applied in positive and careful manner to assure the result of EFL learning process in general and develop EFL skills in specific.

4- Technology has always been an important element of EFL teaching and learning process through which EFL lecturers can use it to facilitate EFL students' learning. So, EFL students should regard technology as a significant part of their EFL learning process in general and developing EFL skills in specific.

5- EFL lecturers and curriculum designers should be aware that mobile phone activities /materials should be different from regular ones in design and outcome. That is, when designing mobile phone activities /materials, mobile phone device features should be regarded and considered.

Recommendations

A number of practical recommendations should be considered in the light of the results of the study:

1- Faculties and higher education institutions should consider WA as a significant part of teaching and learning EFL courses and programs and they should encourage the use of it to demonstrate its usefulness and appropriateness in developing EFL students` writing performance.

2- Technology experts should provide extra technical assistance and guidance for EFL lecturers in order to teach EFL courses and programs effectively.

3- EFL lecturers should perform as a pattern for their students in using technology for EFL purposes. They should be aware of their new roles as guides and facilitators and they should provide enough support and technical assistance for their students.

4- Training courses and workshops should be held for EFL lecturers in order to learn how to use and implement WA for EFL purposes effectively.

5- EFL lecturers should encourage their students to use WA in order to develop their EFL skills.

6- EFL lecturers should encourage and provide greater opportunities for autonomous and peer learning to their students.

7- The informal anytime-anywhere learning that can be supported by WA should be encouraged as it can provide several opportunities for practice and exposure to EFL ,in turn, EFL students' skills can be enhanced .

8- EFL lecturers should be prepared to allocate more time for using WA into their EFL.

9- EFL lecturers should provide Internet facilities as a top priority in today's education to enable the use of WA broadly.

10-EFL lecturers should be provided with various references and resources about implementing and using WA in developing EFL students` writing performance.

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Insights for further research

The researcher suggests the following areas for further research:

1- Qualitative , evaluative and   analytical studies should be conducted in the area of using WA in developing EFL skills in order to obtain more varied research results .

2- Conducting other studies based on other MALL applications in order to develop other types of writing (i.e., critical writing, argumentative writing and creative writing).

3- A comparative study can be conducted to compare a number of MALL devices to determine the best suited one in order to develop EFL skills for a certain group of EFL students.

4- A study should be dedicated to exploring EFL teacher's awareness of particular features of WA and how their understanding of these features might influence EFL skills, teaching goals and strategies.

5- It would be interesting for future studies to investigate how other EFL skills can be developed through using WA and other MALL applications.

6- A study about the problems faced by EFL students in using WA can be conducted to get more in-depth understanding about its usefulness in developing EFL skills among EFL students.

7- Further research in the area of using WA in developing EFL skills can be conducted at other educational stages (i.e., primary, preparatory, or secondary).

Conclusion :

According to the achieved results of the study, it can be concluded that WhatsApp (WA) - mediated learning activities(article sharing, brainstorming, movie reviewing, project design, chart description, cartoon creation and grab-and-go) played a significant role in developing EFL higher education students' writing performance . Besides , the experimental (treatment) group students performed better than the control (non-treatment) group students in EFL writing performance . Moreover, WhatsApp (WA) - mediated learning activities helped to maximize students' learning opportunities in order to enhance their EFL writing performance outside the classroom setting. The achieved results could be beneficial and significant for EFL curriculum planners and developers when designing EFL writing materials and activities for EFL students at higher education institutions. Moreover, such results might be motivating and intriguing enough to pave the way for other researchers for conducting other studies .

References

Abdul Fattah,S.F.F. (2015). The effectiveness of using WhatsApp messenger as one of mobile learning techniques to develop students' writing skills. *Journal of Education and Practice, 6* (32), 115 – 127.

Aburezeq, I. M., & Ishtaiwa, F. F. (2013). The impact of WhatsApp on interaction in an Arabic language teaching course. *International Journal of Arts & Sciences, 6*(3), 165-180.

Ahad, A .D., & Lim, S .M .A . (2014). Convenience or nuisance? : The 'WhatsApp' dilemma. *Procedia - Social and Behavioral Sciences, 155*, 189-196.

Ahmed,S. (2019). Chat and learn: Effectiveness of using WhatsApp as a pedagogical tool to EFL learners' reading and writing skills . *International Journal of English Language and Literature Studies,8*(2), 61-68.

Alber-Morgan, S.R., Hessler, T., & Konrad, M. (2007).Teachingwriting for keeps. *Education and Treatment of Children,30*(3), 107-128.

Allagui, B.(2014). Writing through Whatsapp : An evaluation of students writing performance. *International Journal of Mobile Learning and Organization, 8*(3-4) , 216-231.

Alsaleem, B.I.A. (2013). The effect of "WhatsApp" electronic dialogue journaling on improving writing vocabulary word choice and voice of EFL undergraduate Saudi students. *Arab World English Journal, 4*(3),213-225.

Alshammari, R., Parkes, M., & Adlington, R. (2017). Using WhatsApp in EFL instruction with Saudi Arabian university students. *Arab World English Journal(AWEJ), 8* (4) , 68-84.

The Effectiveness of Whats App-Mediated
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Education Students'Writing Performance

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Amry, A. B. (2014). The impact of WhatsApp mobile social learning on the achievement and attitudes of female students compared with face-to-face learning in the classroom. *European Scientific Journal, 10*(22), 116-136.

Andujar, A. (2016). Benefits of mobile instant messaging to develop ESL writing. *System, 62*, 63-76.

Andújar-Vaca, A., & Cruz-Martínez, M. S. (2017). Mobile instant messaging: WhatsApp and its potential to develop oral skills. *Comunicar. Media Education Research Journal, 25*(1), 43-52.

Anglano, C. (2014). Forensic analysis of WhatsApp Messenger on Android smart phones. *Digital Investigation, 11*(3), 201-213.

Awada, G. (2016). Effect of WhatsApp on critique writing proficiency and perceptions toward learning. *Cogent Education ,3*(1),1264173.

Basal, A., Yilmaz, S., Tanriverdi, A., & Sari, L. (2016). Effectiveness of mobile applications in vocabulary teaching. *Contemporary Educational Technology, 7*(1), 47-59.

Bataineh, R. F., Al-Hamad, R. F., & Al-Jamal, D. A. (2018). Gender and EFL writing: Does WhatsApp make a difference? *.Teaching English with Technology, 18*(2), 21-33.

Bataineh, R., Bani Khalaf, K. , & Bani abdelrahman, A. (2018). The effect of e-mail and WhatsApp on Jordanian EFL learners' paraphrasing and summarizing skills. *International Journal of Education and Development using Information and Communication Technology (IJEDICT), 14*(3), 131-148.

Beetham, H., & Sharpe, H. (2013). *Rethinking pedagogy for a digital age: Designing for 21st century learning*. UK: Routledge.

Bensalem, E. (2018). The impact of WhatsApp on EFL students' vocabulary learning. *Arab World English Journal(AWEJ), 9* (1) ,23-38.

Bere A. (2012). A comparative study of student experiences of ubiquitous learning via mobile devices and learner management systems at a South African university. *Proceedings of the 14th Annual Conference on World Wide Web Applications*. Durban.

Binti Mistar, I.,& Embi,M.(2016).Students' perception on the use of WhatsApp as a learning tool in ESL Classroom. *Journal of Education and Social Sciences, 4*, 96 – 104.

Bouhnik, D., & Deshen, M. (2014). WhatsApp goes to school: Mobile instant messaging between teachers and students. *Journal of Information Technology Education: Research, 13*(1), 217-231.

Brett, P. (2008). *MeLAS: Mobiles enhancing learning and support. JISC final report* . Retrieved September 9, 2019, from http://www.jisc.ac.uk/media/documents/programmes/ eLearning innovation/melasfinalreport.pdf.

Çetinkaya, L., & Sütçü, S. S. (2018). The effects of Facebook and WhatsApp on success in English vocabulary instruction. *Journal of Computer Assisted Learning,34*(5)504-514.

Chen, X. B. (2013). Tablets for informal language learning: Student usage and attitudes . *Language Learning & Technology, 17*(1),20-36.

Church, K., & De Oliveira, R. (2013). What's up with WhatsApp?: Comparing mobile instant messaging behaviors with traditional SMS. *Proceedings of the 15th international conference on Human-computer interaction with mobile devices and services* (pp. 352-361). New York, ACM.

The Effectiveness of Whats App-Mediated
Learning Activities in Developing EFL Higher
Education Students'Writing Performance

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Cohavi, A. (2013). *How did WhatsApp became the strongest social network?*. Retrieved October 5, 2019, from http://wwwcalcalist.co.il/local/articles/0,7340,L-3593840,00.html. .

Crescente, M. L.,& Lee, D. (2011).Critical issues of m-learning: Design models, adoption processes, and future trends. *Journal of the Chinese Institute of Industrial Engineers, 28* (2) 111–123.

Danesh, A., & Amiri,M.(2015). Mobile applications on high school students' motivation. *International Research Jornal of Applied and Basic Sciences, 9* (8), 1360 – 1367.

De Bakker, G., Sloep, P., & Jochems, W. (2007). Students and instant messaging: A survey of current use and demands for higher education. *Research in Learning Technology, 15*(2), 143–153.

Dehghan, F., Rezvani, R., & Fazeli, S. (2017). Social networks and their effectiveness in learning foreign language vocabulary: A comparative study using WhatsApp. *CALL-EJ, 18* (2), 1-13.

Fisher , T . (2006). Educational transformation: Is it, like 'beauty', in the eye of the beholder, or will we know it when we see it?.*Education and Information Technologies, 11*(3-4), 293-303.

Flores-Salgado, E., & Castineira-Benitez, T. A. (2018). The use of politeness in WhatsApp discourse and move 'requests'. *Journal of Pragmatics, 133*, 79-92.

Gangaiamaran, R. , & Pasupathi, M.(2017). Review on use of mobile apps for language learning. *International Journal of Applied Engineering Research, 12*(21), 11242–11251.

Gebhard , J . G.(2006). *Teaching English as a foreign or second language: A teacher self-development and methodology guide* (2nd ed.). Michigan: University of Michigan Press .

Geddes, S.J.(2004). Mobile learning in the 21st century: Benefits for learners. *Knowledge Tree e- journal, 30*(3), 214-228.

Godwin-Jones, R.(2006). Going to the MALL: Mobile assisted language learning. *Language Learning & Technology, 10* (1), 9 – 16.

Griesemer, J.A. (2012). Using social media to enhance students' learning experiences. *Quality Approaches in Higher Education*, *3*(1), 8-11.

Hamad, M.M. (2017). Using WhatsApp to enhance students' learning of English language "experience to share". *Higher Education Studies, 7*(4), 74-87.

Han, T., & Keskin, F. (2016). Using a mobile application (WhatsApp) to reduce EFL speaking anxiety. *Gist: Education and Learning Research Journal, 12*, 29-50.

Hani, N. A. B. (2014). The impact of WhatsApp group's utilization on EFL students' vocabulary writing amelioration. *International Journal of University Teaching and Faculty Development, 5*(2), 73-87.

Harmer, J. (2004) . *How to teach writing*. Malaysia: Longman

Harmer, J. (2007). *How to teach English*. England: Pearson Education Limited.

Hashemifardnia,A. , Namaziandost, E. , & Esfahani, F. (2018). The effect of using WhatsApp on Iranian EFL learners' vocabulary learning . *Journal of Applied Linguistics and Language Research,5*(3) 256-267.

Hazaea, A.N., & Alzubi, A.A. (2016). The effectiveness of using mobile on EFL learners' reading practices in Najran University. *English Language Teaching*, 9(5), 8-21.

Hertzog, P. E., & Swart, A. J. (2018). The use of WhatsApp in design- based modules. *Paper presented at the Global Engineering Education Conference (EDUCON)* (pp. 445-450).IEEE.

The Effectiveness of Whats App-Mediated
Learning Activities in Developing EFL Higher
Education Students'Writing Performance

Dr. Yasser Ahmed Eldesouky

Ibrahim, A .A. , Hafiz, H., & Idris, R .G I.G. (2015). Psychometric properties of WhatsApp use and perceived academic performance: An exploratory factor analysis. *Journal of Creative Writing, 1*(4), 57-64.

Isman, A., & Dabaj, F. (2004). Attitudes of students towards Internet. *Journal of Technology and Teacher Education, 11*(4), 549-577.

Jafari, S., & Chalak, A. (2016). The role of WhatsApp in teaching vocabulary to Iranian EFL learners at junior high school. *English Language Teaching, 9*(8), 85-92.

Jain J., EddyLuaran J., Rahman N..A. (2016). Learning beyond the walls: The role of WhatsApp groups. In Luaran J., Sardi J., Aziz A.,& Alias N. (eds.). *Envisioning the future of online learning: Selected papers from the International Conference on eLearning 2015* (pp. 447-457). Singapore,Springer.

Justina, M. (2016). Use of WhatsApp to enhance reading and writing skills at undergraduate college level. *Language in India, 16*(11) ,47-60.

Kacetl, J. , & Klímová,B.(2019). *Use of smartphone applications in English language learning-A challenge for foreign language education* . Retrieved October 5, 2019, from http:// doi:10.3390/educsci9030179.

Kajder, S., & Bull, G.(2004) . A space for writing without writing: Electronic dialogue journaling in the language arts classroom. *Learning & Leading with Technology, 31* (6), 32-35.

Karpisek, F . , Baggili, I .,& Breitinger, F. (2015). WhatsApp network forensics: Decrypting and understanding the WhatsApp call signaling messages. *Digital Investigation, 15*,110-118 .

Khalil, H.(2017). Using WhatsApp for developing collaborative writing among English majors at MUST. *Journal of Research in Curriculum, Instruction and Educational Technology,3*(3),137-154.

Khubyari, L., &Narafshan , M.H.(2016). Rapport in EFL classroom with mobile application in everyday context. *International Journal of English Language Education, 4* (1), 123- 137.

Klopfer, E., Squire, K., & Jenkins, H. (2002). *Environmental detectives: PDAs as a window into a virtual simulated world*. Proceedings of IEEE international workshop on wireless and mobile technologies in education (95-98). Retrieved December 10, 2019, from http://doi.org/10.1109/WMTE.2002.1039227.

Kukulska-Hulme, A.(2009). Will mobile learning change language learning?. *ReCALL, 21*(2), 157-165.

Kukulska-Hulme, A.,& Shield, L. (2008) . An overview of mobile-assisted language learning: From content delivery to supported collaboration and interaction. *ReCALL, 20*(3), 271 – 289.

Lauricella, S., & Kay, R. (2013*). Exploring the use of text and instant messaging in higher education* . Retrieved October 1, 2019, from http://dx.doi.org/10.3402/rlt.v21i0.19061.

Leis, A. , Tohei, A. , & Cooke, S.D.(2015) . Smartphone assisted language learning and autonomy. *International Journal of Computer- Assisted Language Learning and Teaching (IJCALLT)*, *5*(3), 75–88.

Li,V. (2017) . Social media in English language teaching and learning*. International Journal of Learning and Teaching , 3*(2) ,148-153.

Ling,H.(2016). *Investigating the perceptions of secondary school students in Kuching, Sarawak in using WhatsApp for*

The Effectiveness of Whats App-Mediated Learning Activities in Developing EFL Higher Education Students'Writing Performance

Dr. Yasser Ahmed Eldesouky

communication and learning purposes. Unpublished master dissertation, Wawasan Open University: Penang.

Mikic, F. , Anido, L. , Valero,E. , & Picos, J.(2007). Accessibility and mobile learning standardization. *Paper presented at the second International conference on* systems(ICONS' 07).IEEE.

Montag, C., Błaszkiewicz, K., Sariyska, R., Lachmann, B., Andone, I., Trendafilov, B., Eibes,M. , & Markowetz, A. (2015). Smartphone usage in the 21st century: Who is active on WhatsApp?. *BMC Research Notes, 8*(1), 331.

Moreira, F., Ferreira, M. J., Pereira, C.S., & Durão, N. (2016). Collaborative learning supported by mobile devices: A case study in Portuguese high education institutions. In Á. Rocha, A.M. Correia, S. Costanzo, & L.P. Reis (Eds.). *New advances in information systems and technologies*(pp.157-167). Springer International Publishing.

Noyan ,E.,& Kocoglu,Z.(2019). Developing EFL writing skills through WhatsApp dialogue journaling . *Advances in Language and Literary Studies ,10*(2),38-48.

Nunan, D. (2003). *Practical English language teaching.* New York :McGraw Hill.

Pence, H. E. (2007). Preparing for the real web generation. *Journal of Educational Technology Systems, 35*(3), 347-356.

Plana, M. G. C., Escofet, M. I. G., Figueras, I. T., Gimeno, A., Appel, C., & Hopkins, J. (2013). Improving learners' reading skills through instant short messages: A sample study using WhatsApp. *Paper presented at the global perspectives on computer-assisted language learning.* Glasgow.

Quan-Haase, A. (2008). Instant messaging on campus: Use and integration in university students' everyday

communication. *The Information Society, 24*(2), 105–115.

Rahmawati, F. (2017). *The effectiveness of using WhatsApp to improve writing ability in announcement text at the tenth grade students of SMAN 1 Klirong in the academic year of 2016/2017.*Unpublished doctoral dissertation, Faculty of Teacher Training and Education, Purworejo Muhammadiyah University.

Rambe, P., & Bere, A. (2013). Using mobile instant messaging to leverage learner participation and transform pedagogy at a South African University of Technology. *British Journal of Educational Technology, 44*(4), 544-561.

Rambe, P., & Chipunza, C. (2013). *Using mobile devices to leverage student access to collaboratively-generated resources: A case of Whatsapp instant messaging at a South African University.* Proceedings of the 2013 International Conference on Advanced ICT and Education (ICAICTE-13).Retrieved December 5, 2019, from https://dx.doi.org/10.2991/icaicte.2013.66.

Sa'aleek, A.O.A. (2014). The review of emerging technologies. *Asian Journal of Education and E-Learning, 2* (6), 469 – 475 .

Sahu, M.S. (2014). An analysis of WhatsApp Forensics in Android smartphones. *International Journal of Engineering Research, 3*(5), 349-350.

Shariffuddin, S. A., Shaaidi, W. R. W., & Hashim, S. M. (2017). Social networks as instructional tools beyond a classroom. *International Journal of Advanced and Applied Sciences, 4*(12), 185-192.

Shirvani, H. (2009). Does your elementary mathematics methodology class correspond to constructivist epistemology? *Journal of Instructional Psychology, 36*(3), 245- 258.

The Effectiveness of Whats App-Mediated
Learning Activities in Developing EFL Higher
Education Students'Writing Performance

Dr. Yasser Ahmed Eldesouky

So,S.(2016). Mobile instant messaging support for teaching and learning in higher education . *The Internet and Higher Education, 31*, 32–42.

Srivastava ,S., & Gulati, V. P. (2014). M-learning-on path to integration with organization systems. *Paper presented at the 10th International Conference on Mobile Learning*. International Association for Development of the Information Society. Spain,Madrid.

Susanti, A., & Tarmuji, A. (2016). Techniques of optimizing WhatsApp as an instructional tool for teaching EFL writing in Indonesian senior high schools. *International Journal on Studies in English Language and Literature (IJSELL), 4*(10), 26-31.

Susilo , A .(2014). Exploring Facebook and WhatsApp as supporting social network applications for English learning in higher education. *Paper presented at the PDE Professional Development in Education Conference*.Indonesia, Bandung.

Sussex, R.(2012). Text input and editing as a bottleneck in mobile devices for language learning. In Felicia Zhang (Eds.). *Computer-enhanced and mobile- assisted language learning: Emerging issues and trends* (pp.220-234) . USA: IGI Global.

Ta'amneh, M. (2017). The effect of using "WhatsApp Messenger" in learning English language among university students. *International Journal of Humanities and Applied Social Science,2*(2) ,15-22.

Thang , S .M., Lee, K .W., Murugaiah , P., Jaafar,N.M.,Tan,C.K., & Bukhari,N.I.A. (2016). ICT tools patterns of use among Malaysian ESL undergraduates. *GEMA Online Journal of Language Studies, 16*(1) , 49-65.

Trevor, M.(2013) . *WhatsApp-hits-250 million active user*s. Retrieved January 15, 2019, from http://www.digitaltrends.com/mobile.

Van der Vyver, A. G., Williams, B., & Marais,M.A. (2015). Using social media as a managerial platform for an educational development project: Cofimvaba. *International Journal of Information and Education Technology, 5*(12), 910-913.

Vavoula, G.N., & Sharples, M. (2008). Challenges in evaluating mobile informal learning. *Proceedings of the mLearn 2008 conference* (pp. 296-303). UK: Wolverhampton.

Virdyna , N . K . (2016).Teaching writing skill by using brain writing strategy . *OKARA : Journal of Languages and Literature,10*(1) ,67-77.

Wil, C. S. C., Yunus, M. M., & Suliman, A. (2019). The use of social media to assist writing skills among secondary pupils. *International Journal of Academic Research in Progressive Education and Development,8*(3), 224–236.

Wilson, K .B. , & Boateng, K .A . (2014). Integrating ICTs into the teaching process: Issues in pedagogical practices in teacher education. *International Journal of Computing Academic Research (IJCAR), 3*(4) , 96-103.

Yavuz,F.(2016). Do smartphones spur or deter learning: A WhatsApp case study. *International Journal of Educational Sciences*, *15*(3), 408-415.

Yeboah, J., & Ewur, G. D. (2014). The impact of WhatsApp messenger usage on students' performance in tertiary institutions in Ghana. *Journal of Education and practice, 5*(6), 157-164.

Zayed, N.M. (2016) . Special designed activities for learning English language through the application of Whatsapp!. *English Language Teaching, 9*(2) , 199-204.

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Appendix A

EFL Writing Performance Test

Write an essay about one of the following topics:

1- Importance of mobile technology and its devices in our society.

2- Improving commerce, finance and business using management information systems.

Appendix B
Scoring Rubric for Assessing EFL Writing Performance

Categories	Rating			
	(1)	**(2)**	**(3)**	**(4)**
Organizati on	Ideas are stated and organized illogically and too difficult to follow.	Ideas are stated and organized partially logically.	Ideas are stated and organized logically but lack logical sequence.	Ideas are stated and organized logically.
Content	Content is irrelevant and in sufficient.	Content is partially relevant and sufficient	Most of the content is relevant and sufficient	Content is relevant and sufficient
Mechanics	Serious errors in punctuation and capitalization (no mastery of mechanics.	Frequent errors in punctuation and capitalization but meaning is obscured.	Occasional errors in punctuation and capitalization but meaning is not obscured.	Few or no errors in punctuation and capitalizatio n(mastery of mechanics).
Word Choice	Inadequate and ineffective word choice.	Frequent errors in word choice but meaning is obscured.	Occasional errors in word choice but meaning is not obscured.	Adequate and effective word choice.
Language Use	Serious errors in spelling and grammar.	Frequent errors in spelling and grammar but meaning is obscured.	Occasional errors in spelling and grammar but meaning is not obscured.	Few or no errors in spelling and grammar.