



Sudan University of Science and Technology
College of Graduate Studies



Effectiveness of MALL as a Vocabulary Learning Enhancement Tool in Sudanese Universities

**فاعلية استخدام الهاتف السيار في تعزيز التعلم لمفردات اللغة في
الجامعات السودانية**

A WhatssApp based study

**A Thesis Submitted in Fulfillment of M.A Requirements
in Applied Linguistics**

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Dedication

To knowledge, to everyone whose assistance was timely valuable and precious to accomplish this work

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Abstract

The current study focuses on the use of MALL, Mobile Assisted Language Learning which has been represented by the use of WhatsApp messages to help solve vocabulary acquisition for the undergraduate Sudanese university students. In order to collect data, a pretest and a posttest were involved. In addition to that, a questionnaire has been executed as a supportive data source. A group of 20 students of English BA in the third year at Comboni College of Science and technology were selected as a single experimenting group of the study. The group undergone a pretest and a posttest on phrasal verbs which based on an experimental method to get the needed data for the study. They were sent WhatsApp learning messages and mp3files on phrasal verbs for a period of nine sessions. A questionnaire was distributed randomly among 20 of the population of the same level from which the selected group has been chosen. Regarding statistical measurements, means and t- test for the pretest and the posttest frequencies were used in addition to Chi-square test for the questionnaire. The study confirmed the possibility of using modern mobile phone technologies in learning vocabulary with ease for EFL undergraduate Sudanese university students. The researcher recommends further use of mobile technologies by EFL students for better vocabulary acquisition.

المستخلص

ترتكز الدراسة الحالية على استخدام تقنية الهاتف السيار كمساعد في تعزيز عملية التعلم Mobile Assisted Language Learning. استخدم تطبيق WhatsApp (واتس اب) كتطبيق تعليمي له القدرة علي ارسال مواد دراسية مدعمة لدراسة المفردات الإنجليزية للطلاب من قبل اساتذتهم في الجامعات السودانية. خضع 20 طالب في السنة الثالثة بقسم اللغة الإنجليزية بكلية كمبوني للعلوم والتكنولوجيا لاختبار قبلي وبعدي على الأفعال المركبة للغة الإنجليزية مبنيا على التجربة التي امتثلوا لها. أرسلت لهم رسائل تشرح الأفعال المركبة المعتادة مع صور ايضاحية لها بالإضافة لملفات صوتية في نفس الإطار. كما خضع 20 دارسا بنفس المساق لاستبيان عن استخدام تقنية الواتساب من قبل أساتذة الجامعات السودانية لطلابهم وما يتمخض عن ذلك. فيما يختص بالبيانات الإحصائية، فقد خضعت الدراسة لما يعرف بt-test لكل من الاختبار القبلي والبعدي. بالإضافة الي ذلك خضع الاستبيان الخاص بالدراسة لاختبار Chi-Square. اكدت الدراسة على ضرورة استخدام تقنية ارسال الرسائل المتاحة في الهاتف السيار من قبل طلاب الجامعات السودانية لفائدتها لهم. يحث الباحث علي ضرورة تحفيز الطلاب على استخدام تقنيات الهاتف المحمول المتاحة ذات الخصائص التعليمية في المستقبل من قبل دارسي اللغة الإنجليزية كلغة اجنبية من اجل تعلم أفضل.

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CHAPTER ONE
INTRODUCTION

Introduction

1.0. Background

Nowadays, adequate knowledge of vocabulary is crucially a necessity for learning any language. If the students suffer inadequate vocabulary, they may come across immense problems of understanding crucial language items. Of these items are the phrasal verbs. Fortunately, technology has contributed toward solving such problems greatly when Chinnery invented the term MALL, Mobile Assisted Language Learning time after CALL. This field is partially related to both m-learning and CALL, Computer Assisted Language Learning. Shield (2008) stated that MALL is different from CALL in ‘its use of personal, portable device that enables new ways of learning, emphasizing continuity or spontaneity to access and interaction across different content of use’. Accordingly, the way has been paved for the occurrence of modern technologies in the field of learning English. Ally, 2009 Ali & Irvine, 2009 stated that m-learning is represented by smart phones, cell phones, laptops, PCs, tabs and any personal media player. Thus m-learning has become widely accepted for its ability to enhance the four language skills; reading, speaking, writing and listening. Therefore, smart phone features such as cameras and SMS have become normal in facilitating vocabulary learning and as well increasing rapidly and inevitable. Thornton and Houser stressed the significance of using mobile phones in learning English in their study on Japanese college students (Thornton & Houser 2003, 2004, 2005) which has greatly supported the notion of applicability of such contemporary method in learning problematic English language areas as vocabulary.

Difficulties in understanding vocabulary would interrupt learning of a highly demanded language as English for EFL students. In tackling the English vocabulary, the significance of learning phrasal verbs plays an important role in building the language learning. The learners of EFL among them the undergraduate university students deal with the language vocabulary depending on the customary instructions given them by their teachers or as a result of exerted personal efforts. Doubtlessly, reluctant students cannot express themselves in front of others. As a result, in relation to vocabulary acquisition, these learners may encounter vocabulary greater challenges such as

understanding and using phrasal verbs properly. So, the need for encourage innovative learning methods is crucial.

Accordingly, an affiliated MALL feature such as WhatsApp may possibly work hand in hand with the traditional teaching of vocabulary in order to achieve positive pedagogical learning outcomes for EFL students.

Apparently, mobile technologies have become unavoidable in the field of teaching English at the present time. Consequently, mobile phones, tablets, slates, MP3, MP4 and laptops play a considerable role in today's learning and teaching of the languages such as English and precisely the English language vocabulary. Mobility is defined by Elhussein & Gronje as: mobility of technology, mobility of learning and mobility of learner and that the mobility of technology embodies smart phones as one of many aspects such as digital cameras, hand- held computers and their useful applications. These devices are all equipped with wireless Applications Protocol (WAP or Wi-Fi) and they can make learning easier via internet or satellites. Trinder, 2005 stated that mobile technologies enable users to execute variety of interactive social activities when using phones, SMS, SNS, email, memos etc...Also Kukulska- Hulme, 2009 stated that mobility does not mean merely movement, but it as well means enabling time shifting and boundary crossing. Levy & Kennedy (2008) emphasize that it is of importance to help student utilize portion of their social time during the day while waiting for a class or a meeting by sending them regular SMS around the language they are studying. Correspondingly, Sharples (2005) highly recommended reconsidering the autonomy of physical classroom.

For the benefit of the EFL learners, mobile devices have been integrated into a number of features that are used in diverse learning environments. In some mobile learning applications currently available, mobile features have been utilized for various educational practices including the use of SMS, GPS, camera, browsing the net, downloading, Bluetooth, Wi-Fi, voice calls and gaming. Lu (2008) conducted a study on 30 high school students who were divided into two groups. One group learned English vocabulary through mobile phone, the other used usual print materials. The result came out proving the viability of using smart phones in learning vocabulary. Additionally, two studies were conducted by Kennedy and Levy (2008) and Kennedy and Levy (2005), showed positive result of utilizing technology in teaching languages when students were sent Italian words, idioms and example SMS sentences messages

via their mobile phones. Both projects proved the use of SMS in language learning as a successful learning technique.

Prensky (2005) stated that mobile phones are particularly useful computers that fit in a student pocket, are always with students and are nearly on.

Many aspects of English language may represent a crucial pedagogical issue for the Sudanese university students. In this study the researcher will attempt to focus on phrasal verbs as a challenging area of learning English language vocabulary. More importantly, utilizing smart phone's applications such as WhatsApp in teaching a difficult area such as phrasal verbs to students of EFL would increase fair understanding and use of the language by the Sudanese undergraduate university students. WhatsApp as an affiliated domain of MALL, has become one of the effective ways through which vocabulary learning can be enhanced.

1.1 Statement of the problem

Vocabulary learning especially of highly demanded foreign languages such as English represents a greater prominence for EFL students generally. Apparently, lacking sufficient vocabulary in order to learn a language like English leads to inconvenience in understanding it fully. Many of the university students have problems of using English language properly because they do not understand most of the essential words. The reason for that is likely to be linked to the traditional methods of instructing the language. Consequently, learning vocabulary is of great significance and should be dealt with cautiously. Nowadays, technology has contributed to the field of learning English as a foreign language by introducing e-learning. MALL, by now, is the one of these contributed aspects of technology as in e-learning. The pedagogy nature of MALL is to facilitate learning of the language by using mobile phones facilities such as the camera, messaging, mp3 files through mobile applications such as WhatsApp for instance.

More specifically, the learning of phrasal verbs as a problematic aspect of English language may cause indisputable difficulties to the undergraduate university students in understanding English language in general. The combination of verb and a particle or verb with a preposition may cause confusion for the students of EFL to comprehend this mechanism of the

language. Therefore, the role of MALL here is to foster and facilitate the understanding of such problematic feature of the language.

Additionally, this study will try to shade light on the use of WhatsApp as a pedagogical tool for learning associated to MALL (Mobile Assisted Language Learning) in order to improve vocabulary learning among the Sudanese universities students at tertiary level. For its mobility, using WhatsApp by EFL Sudanese universities students can help them learn more comfortably and develop their skills of learning English language vocabulary within and outside classrooms boundaries. However, MALL application may face some obstacles for learning English vocabulary. These barriers can be shown mainly as the internet connection and not possessing suitable devices by all the students. the statement of the problem can be contained in the following question: To what extent can MALL provide effective media for Sudanese university students in learning English language vocabulary especially phrasal verbs?

1.2 Significance of the study

Practicing learning of English vocabulary has become easier in the presence of variety of facilitating mobile learning applications such as *WhatsApp, ESL mobile apps, Busuu, Babbel, Memrise and Duolingo*. Of all these apps stands WhatsApp messaging services for its ability to be utilized as a learning facilitator. In that case, the teachers and the students can utterly play language games to boost the learning process. These games are designed to increase the degree of interaction between the students and the language. As a result, today's classroom of English can be essentially in need for games due to their effect on the way of learning vocabulary. Additionally, for its importance, vocabulary links essentially between the four English language core skills: reading, listening, speaking and writing. Needless to mention, mobile devices of different types have become the hub for learning languages at the present time and English is no exception. As a result, there should be a dedication of efforts towards effective dimension of learning. Thus, the Sudanese university students of English should be encouraged to utilize MALL facilities to increase their knowledge of vocabulary and phrasal verbs in particular. In this circumstance, the students can utilize their mobile phones, tablets, slates and laptops in order

to learn and enhance their English language vocabulary skills inside and outside their class rooms. Obviously, the students spend much time outside their classrooms so they can use their mobile phones including different portable devices in variety of ways for learning.

Accordingly, the teachers should encourage the students to make use of the time spent outside class room to handle their devices for learning properly. The use of different facilities of the mobile devices such as the camera, the sending of SMS can enhance the students' skills of vocabulary learning. More importantly, by using *WhatsApp* as a tool of the social media, the students can learn and enhance their vocabulary practices of writing, reading, listening and speaking skills. The use of such technologies beside the traditional methods of teaching of English can radically change the way of learning the language by the EFL students.

1-3 Objectives of the study

The following represent the objectives of the study which are intended...

- 1- To investigate if the Sudanese university students are in contact with MALL facilities such as WhatsApp application to enhance their vocabulary acquisition inside and outside their English classes.
- 2- To understand if there is a problem of availability of learning applications among the Sudanese university students who use MALL applications.
- 3- Try to realize if the use of MALL applications is limited in and outside EFL Sudanese university students' classroom.

1-4 Questions of the study

The following questions have been posed as part of the methodology which will later be transformed into hypothetical statements:

1. To what extent do Sudanese university students of EFL benefit from MALL applications as an enhancement tool for their English language vocabulary?

2. To what degree do Sudanese university students of EFL have problems of availability of MALL to enhance their vocabulary acquisition?
3. To what extent the students are exposed to MALL in Sudanese university EFL class?

1-5 Hypotheses of the study

The following aspects represent the hypotheses of the study:

1. Sudanese university students of EFL benefit from MALL applications in their studies of English to improve their vocabulary.
2. Sudanese university students of EFL do not face problems of using MALL inside and outside their classes.
3. The use of MALL applications for learning vocabulary by Sudanese university students of EFL is not limited.

1-6 Design and methodology of the study

The analytical quantitative method will be applied in this study. A reliability test will be executed on a number of 10 students out of the population of the study to maintain its reliability. Then, a group of 20 students of the third year at Comboni College will be chosen as an experimental group and will attend a pretest. Phrasal verbs vocabulary based learning WhatsApp SMS and related audio files will be sent to the selected students for a period of nine sessions, one session per day as a treatment. A posttest will be attended by the same students after the treatment. In addition to that, a questionnaire will be executed generally on a group of 20 students from the population of the study. An analysis will be executed on the collected data of the study for the pretest, posttest and the questionnaire. SPSS analytical programme will be used to Analyse the collected data.

1-7 limits of the study

The study will be executed among the third year of English students at tertiary level of Comboni college of Science & Technology. These students will present the population for the needed data of the research. The duration of the study will

be within the first academic semester of 2019. This study will attempt at understanding how the students of EFL in Sudanese universities can benefit from Mobile Assisted Language Learning by using WhatsApp to enhance their English vocabulary skills especially phrasal verbs.

1.8 Definitions of Abbreviations

MALL: Mobile Assisted Language Learning: any device or application that helps in learning a target language.

M-learning: Mobile Learning

Mobile: Any computerized device that is portable: mobile phone, slates, mp3, mp4 and laptops.

EFL: English as a Foreign Language

CHAPTER TWO
THEORETICAL FRAMEWORK AND PREVIOUS
STUDIES

(A)Theoretical Framework

2.1. Introduction

Nowadays vocabulary learning is an imperative task for the learners of any language as L2, English language is no exception. EFL teachers may have come across obstacles in order to facilitate learning of such important aspect for the benefit of their students. Fortunately, technology has contributed in language learning progression by utilizing the popularity of both of the computers and mobile phones technologies. For instance, mobile phones technologies precisely have supported the process of the traditional learning a lot. According to Hwang and Chen.(2013) the use of mobile devices in activities can ease the tension of the learners and facilitate the process of learning. Additionally, Jeng, Wu, Huang, Tan and Yang 2010) stated that multimedia interaction can be guaranteed when the students use mobile technologies.

For its constructive benefits, using mobile technologies in teaching is a must nowadays for the reason that the students cannot be completely prevented from using their mobile devices inside classrooms or even outside classroom. Therefore, the students can be in need for teachers' understanding of implementing such technologies and use them hand in hand with traditional methods as supportive aids in learning the language. Nevertheless, such technologies are easy to use and the students are more likely in contact with them most of the time.

The students of EFL can benefit a lot from mobile technologies when they are wisely instructed on how to use them properly for their learning interests. Fundamentally, Learning vocabulary represents the core of learning any language. M-learning as a facilitator has contributed in that by providing the students with a bunch of useful learning materials which is in turn has become a norm for the students of EFL. Utilizing the social media by sending mobile phone SMS has greatly paved the way for such contemporary pedagogical means of learning. Fortunately, vocabulary for instance is likely to be greatly benefiting of MALL as a result of a massive influx toward such technologies among EFL teachers and students recently.

2.2. Internet Revolution and the Learning of English

The current century has witnessed a rapid increase of gaining information because of the internet. Nowadays, English language as many dominant aspects of life has been affected by the influence of the internet. As a result, smart phones started to provide the students of EFL with valuable pedagogical knowledge. Consequently, a number of considerable smart phones applications have been made to facilitate the learning of English language. For example, there are varieties of different dictionaries and through which the learners look up new words, know the origin of the words, pronunciation and utilize them in different ways of learning. Also, the students of EFL have the opportunity to write with ease as their vocabulary has been checked and corrected by fixed spelling checking tools in their smartphones. Furthermore, teachers can send SMS and as well utilize the social media for the benefit of their students by using WhatsApp for instance.

2.3. Background History of MALL

2.3.1 What is Mobile Learning?

There are many concepts behind the word mobile. And using smart phones in learning represents one of them. Naismith *et al* (2004) define mobile learning as learning with wireless devices such as smartphone, personal digital assistant (PDA), iPod, palmtop, laptop, *etc.* Additionally, (Kukulska - Hulme & Shield, 2008; Sharples *et al.* 2009), claim that mobile learning involves the use of any portable learning materials. For example, books, portable radios and DVD players, mobile learning has usually been anchored on the use of mobile technology. Then there is no exact agreement on the meaning of the word mobile but there is always a shared opinion on its benefits yet.

The potentiality of mobile learning should not be merely described as learning content delivered or accessed on a mobile device. It should be viewed as a way to enhancing the learners understanding levels by providing access to both learning content and giving supporting information, anytime and anywhere. Therefore, the needs of the learners of today as well as the future ones should be considered seriously to be provided with suitable learning materials and devices. Fortunately, unlike other learning technologies, m-Learning is unique in that it can accommodate both formal and informal learning in collaborative or individual learning modes, and within almost any context.

2.3.2 Mobile Assisted Language Learning

Since the term mobile-assisted language learning (MALL) was first coined by Chinnery (2006), the use of mobile devices in supporting language learning has increased significantly. Although, MALL has been considered as a subset of both mobile learning and computer-assisted language learning, Kukulska-Hulme and Shield (2008) noted that MALL differs from CALL “in its use of personal, portable devices that enable new ways of learning, emphasizing continuity or spontaneity of access and interaction across different contexts of use” (p. 273). The literature summarizes the benefits of using MALL as follows. First, MALL enables students to more easily and more promptly access language learning materials and communicate with people at any time, from anywhere. Second, the nature of digital technology facilitates students’ participation in both collaborative and individualized language learning activities synchronously and/or asynchronously allowing rapid development of speaking, listening, reading, and writing, skills. Third, mobile technology provides various resources and tools for language learning that encourage learners to be more motivated, autonomous, situated (site-specific), and socially interactive. Numerous studies have reported on the use of mobile devices being used to develop language skills in the last few decades. Thornton and Houser (2005) used mobile phones for English vocabulary lessons and asserted that, compared with paper, and computer-based lessons, mobile-learners perceived more and preferred learning with mobile phones. Levy and Kennedy (2005) also implemented short message service (SMS) for Italian vocabulary instruction to send word knowledge and to request feedback. 94.4% students responded positively to the project. Kiernan and Aizawa (2004) explored using mobile phones for task-based language learning and concluded that incorporating tasks can promote L2 acquisition and make learners focus on meaning. Cho (2009) and Lee (2010) indicate that smartphones enable the combination of multimedia and the web and heighten the learners’ autonomy and collaboration.

.2.4.1 Mobile phone as a learning tool

A popular technology such as mobile receives so much public attention, often begin with focusing too narrowly on the technology itself, rather than the requirements or learning needs. Ideally, the learning outcome should be the primary driver for making design decisions. However, being familiar with the

capabilities of the different types of handheld devices that learners use may also introduce new ideas and might even help to appropriately narrow the scope of a mobile learning initiative. For now, there is no right or wrong answer for what types of devices are considered to be truly “mobile” as perceptions and technology will continue to change and evolve. The focus should be on how mobile technology can add the most value to the learning context. If there are no obvious benefits or justification for using mobile technology to enhance learning or performance, then it is conceivable that a business case analysis or cost-benefit analysis could be pursued. A cost savings benefit could possibly serve as a secondary driver for designing and developing a mobile solution. Mobile device screen sizes as well as several other form factors collectively introduce many considerations and implications for a mobile learning design strategy. Think about the minimum sizes of text and graphics for various mobile device sizes, preferences for touching or interacting with different device types

2.5 Technologies in Language Learning

No doubt that both of the teacher and the learner benefit a lot from utilizing Technology. Lam and Lawrence (2002) that technology provides learners with regulation of their own learning process and easy access to information the teacher may not be able to afford. The wireless portable devices such as iPods, MP3players, smart phones (like Blackberry, iPhone), and Personal Digital Assistants (PDAs) could offer opportunities to respond to the need of this generation. Evans (2008) considers that a distinguishable feature of mobile learning or M-learning is the potential to study when travelling on transport. Being autonomous is one unique feature of the modernity. EFL students use their portable devices at any possible time almost everywhere

2.5.1 English Language Teaching Stages and Mobile Learning

Language teaching has come through four main Stages:

1. Direct Instruction

This is the beginning of teaching that continued till now. It depends on the existence of the producer (tutor or instructor), the receiver (the learner) in one place. This stage depends on the presence of both of the teacher as a sender of information and the students as a receiver to accomplish the process of teaching and learning process

2. Distance Learning

The existence of distance education has not been isolated from the use of technology to support learners and learning. Nipper (1989) classified three different generations of technology use over distance education in the twentieth century. For him, the initial emphasis was exclusively on the print-based model of teaching. In the mid-century, multimedia teaching was integrated with the use of print with broadcast media, cassettes, and micro-computers. Eventually, in the third generation towards the end of the twentieth century, new interactive communication technologies with previous methods are widespread (Tayebnik, 2012). Today, distance education provides a variety of digital technologies, including websites and digital libraries as well as communication tools such as email, virtual learning environments (VLEs) and the recent application of social

networking and blogging. This is referred to as 'social media' and it relies on free shared digital content that is authored, critiqued, and reconfigured by the community of users rather than individuals' (Lee, 2009).

3. Blended Learning

It characterized the middle stage between this technique of teaching tries to make benefit of both previous ones. Via this stage, researchers make the best use of face to face environment and distance learning environment (Abdul Fattah, 2012)

4. Mobile Learning

There is an influx in using of wireless technologies in education all over the world. In fact, wireless technologies such as laptop computers, palmtop computers and mobile phones are revolutionizing education and transforming the traditional classroom-based learning and teaching into *anytime* and *anywhere* education. The term ‘‘mobile learning’’ or "m-learning", is not a new one. It describes learning of the learners' not defined location or when he or she uses the benefits of mobile technology when learning. Mobile learning was previously limited to laptops, but today it mainly refers to smartphones, tablet PCs or mobile gaming and entertainment consoles. The potencies of mobile learning lie chiefly in the use of learning programs not dependent on time or place, that are in the extremely efficient use of the available time. Periods of idle time between customer meetings or waiting times at airports can be used to access learning modules. Thus, the vision behind learning is to get what you want, where you want and when you want. In fact, Mobile learning importance has become popular since the beginning of the twenty first century.

According to (Warschauer, 1996) the historical background of computer assisted language learning (CALL) can be traced back to the 1960s, but modern computer technology together with the internet have revolutionized the ways in which computers can support language learning. One of the case studies reported by Warschauer is that of a group of Bulgarian students who customarily did not have access to the English speaking world. The class was studying contemporary American short stories and used a variety of technologies to assist in this process. E-mail communication was set up with a group of TESOL students from America so that they could ask questions about the language and cultural references. In addition, concordance software was

used to explore some of the expressions from the texts in a greater range of English language. The American students also made recordings of the texts so that they could be used to improve the Bulgarian students' listening skills (Meskill and Rangelova,1995). Mobile learning in contrast is a much recent development and represents a more personalized style of learning.

2.6 Pedagogical Importance of Mobile Learning

Berger, (2001) lists the implications that mobile technology can bring to teaching and learning:

- Better realization of “anywhere, anytime”,
- Freedom of organization in and out of the classroom,
- Collaboration among students separated geographically,
- Transparent connection to nets,
- Remote sensing and integration of information,
- Shift from “anywhere, anytime” to “everywhere, every time”. According to Singh, (2003) mobile learning is a paradigm shift and it changes existing situations in learning.

2.6.1 Mobile Usages in Language Teaching

Mobiles have a lot of usages inside and outside the classrooms. There are some usages here for that:

1. The use of Text Messaging Feature to Reinforce Vocabulary Learning.

A study by Thornton and Houser (2003) shows that Short Message Service SMS/text messages can be used to send out vocabulary items at spaced intervals, thus increasing student retention. For example, you could text the words covered in class to encourage students to review them outside the school context. By sending out the words multiple times, you increase the chances that students will remember them.

2. The use of Text Messaging Feature for Circular Writing.

The reality is that many students do not like to write. They associate writing in the school context with boring assignments and a punitive environment of criticism and negative feedback. In other words, the fun is missing. However, if one considers writing as any form of textual communication, it becomes clear that students actually write a lot. The number of text messages, status updates on social networking sites, and instant messages (IMs) sent by the average young learner is staggering; clearly, a lot of writing is going on! The challenge is to encourage that type of writing that helps students learn English. If students are not ready to write essays, they can practice with shorter texts to develop their writing skills. One activity is circular writing, where students create a story together by contributing one text message at a time. Each student writes a sentence or two and then sends this on to the next student, who adds another message, and so on until the story is complete. The teacher is copied and has a record of the story as it emerges. You can experiment with different text types such as narratives (as in the example above), or shorter forms such as news reports, instructions, and warnings.

3. The use of Mobile Phone Memory to Distribute Listening Material.

Many phones have memory for graphics, photos, and music that you can use to download listening material for your students, who can in turn transfer them to their phones or other media. This could be a recording of your class, a podcast, or course listening materials.

4. The use of Mobile Phone to Check Student Comprehension and get Feedback.

The previous ideas focus on learning, but mobile phones can also help you in teaching. One way is to add, as a teacher, an element of interactivity to your classes through audience participation. Poll everywhere (www.polleverywhere.com) is a free program that allows the teacher to pose survey questions to students. Students respond by texting their responses and the results show up immediately in a Power Point presentation or on a website. This is very useful for checking student comprehension and to get their opinions. You could, for example, ask students to choose from one of several options for the next classroom activity. This tool is particularly useful in larger classes where it is not easy to get feedback from all students.

2.7 The use of M-learning in Education

Contemporary developments in communications and wireless technologies have resulted in mobile devices becoming widely available, more convenient and less expensive (Wu et al. 2012: 817). New features and applications appeal to digital natives as well as to educators and researchers. Technological advances have prompted educators to research on m-learning, i.e. mobile learning.

M-learning is often associated with electronic learning (e-learning) and computer-assisted language learning (CALL), which emerged in the late 80s and in the 90s. Since then, the increasing availability of portable and wireless devices have been changing the landscape of technology-supported learning (Hashemi et al. 2011: a2477). M-learning can be seen as an extension of e-learning. For example, according to Hashemi et al. (2011: 2478), m-learning can be defined as “exploiting ubiquitous handheld technologies, together with wireless and mobile phone networks, to facilitate, support, enhance and extend the reach of teaching and learning”. Sharma et al. (2004) further point out that e-learning “usually occurs in classroom, [at] home or [in] labs by sitting in front of a computer” whilst m-learning “allows learning to occur in travelling with mobile devices” (cited by Lam et al. 2010:309).

Although the field of mobile learning has grown significantly, m-learning still lacks an agreed upon definition. Winters (2006: 5) identifies four perspectives on m-learning. First, m-learning can be viewed as “an extension of e-learning” and placed on “the e-learning spectrum of portability” (Winters 2006: 5). According to Winters (2006: 5), a second perspective is to consider how m-learning is placed amongst different forms or styles of learning, other than the traditional classroom-based learning. Winters (2006: 5) applies the term formal learning to refer to “face-to-face learning in a stereotypical lecture”. Furthermore, he distinguishes between a techno-centric and a learner-centred perspective on mobile learning. From the techno-centric perspective, mobile learning is viewed as “learning using mobile devices, such as Personal Digital Assistants (PDAs), mobile phones, tablet devices, and notebook devices”, whereas the more student-centred perspective focusses on “the mobility of students” rather than on technological aspects (Winters 2006: 5). Adopting a learner-centred approach to design learning activities for m-learning, Huang et

al. (2012: 11) interpret learner-centeredness to mean that “priority should be given to the act of learning and the needs of individual learners in order to make learning effective and to promote the highest levels of motivation and achievement”.

Most researchers tend to stress such learner-centred approach to define m-learning. Kukulska-Hulme (2008: 273), for instance, points out that m-learning differs from e-learning in its use of “personal, portable devices that enable new ways of learning, emphasizing continuity or spontaneity of access and interaction across different contexts of use”. Taylor (2006: 26) adds the “overall context of contemporary society” which he characterises as “a mobile age”. Similarly, Vavoula (2005) feels m-learning fits with “the unique work style requirements of the mobile workforce” (cited by Huang et al. 2012: 12).

From the pedagogical point of view, Hutchison (2008) confirms that m-learning is designed to cater for the needs of “the learners (who) are continually on the move” and Patokorpi et al. (2007) see m-learning as a supplement for e-learning in terms of “bringing yet a new dimension to technology enhanced education by giving learners expedient, immediate, reusable, persistent, personalised and situated learning experiences anchored in their real surroundings” (cited by Huang et al. 2012: 11). Huang et al.’s (2012: 11) definition m-learning as follows in the following quotation:

‘Any kind of learning that takes place in an informal setting of non-fixed and non-prescheduled times and locations through the interaction with both the virtual and the physical worlds on mobile devices in a personalized, collaborative, and blended manner as well as in a formal setting, where individual inquiry and collaboration are enhanced through the use of mobile technologies.’

This is the only definition which does not see m-learning as an isolated activity but rather a blended one as it embraces m-learning in both informal and formal settings. Looi (2010: 155) found that m-learning research which focuses on either formal or informal settings “fail to examine the integrated and synergetic effects of linking these two contexts of learning”. Instead, by utilizing “affordances” of mobile technology, i.e. their specific enabling features, he proposes “a seamless learning environment which encourages students to learn in naturalistic settings for developing context-specific competences” (Looi 2010: 156).

2.8.Mobile Learning in Higher Education

Emerging mobile technologies and news applications facilitate communication, collaboration, sharing and learning in settings unbounded by time and location. According to Looi et al. (2010: 155) students spend more time in such informal settings than in formal classroom settings. The ubiquity of mobile devices on college campuses makes Cheon et al. (2012: 1055) believe that higher education is “a particularly appropriate venue for the integration of student-centered m-learning”. Traxler (2007: 18) confirms that higher education students may be “ready to adopt m-learning sooner than K-12 students because more college students have their own mobile devices”.

As mobile technologies are being widely applied in different fields of business, a growing number of tertiary educational institutions are integrating m-learning in their learning programmes. For example, the Harvard Medical School (HMS) which has issued personal digital assistants (PDAs) to their medical students in order to “facilitate learning and improve communication amongst mobile groups of students and faculty” (Sybase 2010). The faculty introduced the use of PDAs in face-to-face lessons through the mobile application “MyCourses” (Sybase 2010). According to the associate dean, Dr,Halamka, this new blended learning programme enables students to “focus on learning, wherever is most comfortable and convenient for them” (Sybase 2010). Similarly, the University of Western Sydney (EWS) has moved to a blended learning environment for all degrees (Whibley 2012). The university believes that mobile devices are important to support its new IT-enhanced learning and teaching model (Whibley 2012).

Surveying successful implementation examples of teaching and learning with mobile devices in tertiary education institutions, Lam et al. (2010: 312) believe that m-learning “enhances learning experience in terms of student interest and engagement”. Karchmer-Klein et al. (2012: 288) added that mobile devices encourage students to “use the capabilities technology affords them” and to “develop rich, dynamic, forward-thinking presentations of their knowledge”. According to Johnson et al. (2012:17), mobile technologies and applications affect the way students in higher education learn and have “considerable potential for our focus areas of education”. Affordances found in mobile devices include the easy transfer of their work from mobile to desktop environments, the autocorrect features whilst note-taking, instant learning

assessment and more “in-person courses with incorporated online elements” (Johnson et al. 2012: 17).

In spite of the evidences of the potentiality of mobile devices with enhanced capabilities, higher education leaders have not yet explored their possibilities in depth. Cheon et al. (2012: 1054), who investigated college students’ positive perceptions towards m-learning in higher education, found that it will be hard to “shift a pedagogical culture to a mobile format” because learning with mobile devices involves “the orchestration of students, instructors, content, and institutions”. Similarly, Boyatt et al. (2012: 182) argue that “any shift from a teacher-led learning environment to learner-driven exploration of knowledge” will encounter issues including “finding suitable material, adapting material for the user and supporting users to guide their own learning”. In order to explore m-learning’s potential in higher education, a closer look into its benefits and limitations is needed

2.9. Benefits and Limitations of M-learning

According to Wang et al. (2009: 524), m-learning has been gradually considered as an effective way to support student-centred learning because it can make learning “more flexible, personalised and collaborative”. Students can learn anytime, anywhere, on any device and share their experiences with peers (Want et al. 2009: 524). Similarly, Cheung (2010: 90) attributes the successful adoption of m-learning to three factors, namely “technological feasibility of mobile learning, learners’ needs of flexible learning, and pedagogical benefits”. Kukulska-Hulme (2010: 5) adds that “learners carrying personal tools which can be used for both learning and communication, means that mobile technology acts as a catalyst for an inquiry into learner preferences, skills and study behaviours”.

Cheon et al. (2012) distinguish three types of learning approaches which can be supported by mobile devices, including individualised learning, situated learning and collaborative learning. First, they interpret individualised learning to mean that students can learn “at their own speed and according to their personal learning needs” (Cheon et al. 2012: 1055). Secondly, situated learning is realised as students use mobile devices to “learn within a real context” (Cheon et al. 2012: 1055). Thirdly, m-learning enables collaborative learning when “students use mobile devices to easily interact and communicate with other students” (Cheon et al. 2012: 1055). For example, learners can personalise

their learning experiences by creating their own lists of difficult verbs that they can revise anywhere, anytime. The collaborative aspect consists in sharing their results online and/or challenge their fellow students in the game-play mode.

From an educational point of view, Looi et al. (2010: 156) note that the portability and versatility of mobile devices have significant potential in promoting “a pedagogical shift from didactic teacher-centred to participatory student-centred learning”. The mobility and connectivity of technological tools enable students to become “an active participant, not a passive receiver in learning activities” (Looi et al. 2010: 156). Similarly, Kukulska-Hulme (2010: 12) predicts that “learners will increasingly lead the way by sourcing and producing their own resources and software tools”. Cheung (2012: 89) confirms that “mobile learning essentially enhances the learning effectiveness, allows more flexibility in time and physical location for learning, and encourages active learning and collaborative learning”. He summarises the benefits of m-learning as follows:

“In brief, mobile learning transforms the learning process and changes the way of learning, creates new opportunity beyond the traditional classroom, offers flexibility and mobility in learning, express learning experience in term of time and place, facilitates communications and interactions among teachers, students and course administrators as well as well as encourages the mode of collaborative learning” (Cheung 2012: 90)

Evaluating the effectiveness of m-learning, Wu et al. (2012: 818) found that most research showed positive effectiveness. For example, research by Al-Fahad (2009: 117) confirmed that m-learning could improve retention amongst undergraduate M.D. students and Baya’a & Dahar (2009: 12) found that students responded positively to the use of mobile phones in learning mathematics. Highlighting students’ positive attitude towards mobile devices, Looi et al. (2010: 163) believe that m-learning might trigger an important change in student value and character, which can “gauge students as lifelong learners and persons-to-be”.

Besides benefits, previous studies showed some limitations as well. Cheon et al. (2012) name three main limitations, including technical, psychological and pedagogical limitations. First, the small screens with low resolution display, inadequate memory, slow network speeds, and lack of standardisation and

comparability are regarded as technical limitations (Cheon et al. 2012: 1055). Secondly, users' psychological limitations include students' inclination to "use mobile devices for hedonic uses such as texting with friends, listening to music and checking social network services, rather than for instructional purposes" (Cheon et al. 2012: 1055). Lastly, Cheon et al. (2012: 1055) note that using mobile devices in class may "hinder student concentration and interrupt class progress", which is considered a pedagogical limitation of m-learning.

Nevertheless, Cheon et al. (2012: 1062) add that emerging technologies could resolve the technical limitations found in mobile devices, such as lower resolutions, network speed, and platform comparability, making them useful in many learning activities. Cheung (2012: 93) addresses some of these activities, including reading e-books and course materials, viewing video-taped lectures, doing assignments, browsing the Internet for learning resources, communication with teachers and/or students in e-mails, chatting in discussion forums, and social networking. According to Cheung (2010:89), students have become adapted to m-learning with the advent of new mobile devices benefitting from "sophisticated functional features and user-friendly interfaces". The authors concluded that instructional design models are needed which is considered both advantages and limitation of mobile devices (Cheon et al.201:1055). Have been popular in the communication world (Riyanto,2013).

The most recent popular social network is WhatsApp application. WhatsApp Messenger is a proprietary, cross platform instant messaging application for smart phones. In addition to text messaging, users can send each other images, video, and audio media messages (Wikipedia, 2013). WhatsApp allows its users to use their Internet connection to send messages to each other. WhatsApp is like a chat program for mobile phones. Smart phones are becoming increasingly popular and WhatsApp is available for almost all Smartphone.

2.10. Problems with Smartphones

Smart phone technologies have benefited EFL students a lot. However, there are many critical issues that the students of EFL may come across as they use their smartphones for learning purposes. Firstly, the size of the screen. It is not large enough in some devices to allow reading and writing with comfortably. Thornton & Houser, 2002), stated that there are many problems of smartphone such as the size of the screen and the keyboard. Secondly, most smartphones are

not supported with reliable memory capacities. Inevitably, technical faults of smartphones occurrences are likely to take place. Thirdly, the authenticity of the programmes is not fully guaranteed. Additionally, some teaches oppose the idea of using smart phones as a pedagogical tool for learning in spite of its popularity among the students of EFL. Finally, the availability of the internet service may stand in the way to apply such technology for the sake of learning.

In comparison to CALL, some scholars as Stockwell (2007b) who approximately found preliminary evidence that learners normally need more time to complete vocabulary activities and scored to some extent lower scores on mobile phones when compared to completing the same activities on computers, nonetheless data in the study were incomplete.

2.11. Why Using MALL in Learning?

MALL as a modernised process of learning has contributed in variety of ways in solving serious pedagogical learning issues recently. For instance, learning of vocabulary via smartphones maintains the traditional methods of learning. Communication method precisely has an adjacent link with MALL because the communication method depends on various learning capacities and as it serves a greater number of learners, it can be supported by MALL.

For its popularity among tertiary EFL students, MALL has become the daily practical medium of learning that provides the learners of EFL with approximately authentic learning materials. (Burbules, 2012, 2013, 2014; Cope & Kalantzis, 2009; García-Sánchez, 2014; Peng et al., 2004) support the notion that learning by using mobile phones has made it possible to guarantee that the process of learning can take place anytime and everywhere. The daily contact of EFL students with their smartphones makes it more likely a second nature learning companion. The learners can be in contact with such educational facilitators such as *Doulingo* and varieties of vocabulary apps. Furthermore, the role of customary classroom can be maintained by the presence of the available authentic MALL programmes. The majority of EFL students possess smartphones with the exception that a minority them cannot deal with such pedagogical mean for financial reasons and as well the possibility of the internet access.

2.12. The Pedagogical Benefits of SMS and the Social Media

Conspicuously, smartphones have become a norm as a learning tools for EFL learners and university students. They use them every day, every time and everywhere. They can do most of their activities using them. So utilizing them for learning vocabulary can be an easy task then. Essentially, the only thing to do is to download smartphones apps that can facilitate their learning of vocabulary and other aspects of the language. In the same vein, the students can be sent SMS messages or swap information by sharing these apps and as well discuss with their teachers and classmates. Consequently, the total outcome of that pours into the learners' benefits.

Lu (2008) and Zhang et al. (2011) investigated the effect of SMS messages in comparison to printed materials on learning. The result showed that SMS has the capacity of being a positive mean of learning rather than of the printed materials with a slight difference. Additionally, Suwantarathip and Orawiatnakul (2015) maintain the notion of the validation of sending SMS in their study. It has been conducted in classroom with printed materials and outside classroom by sending SMS messages. The result greatly approved the validity of sending SMS messages. Apparently, the use of SMS and the social media in general has helped in the spread of the notion of MALL among English learners. EFL classrooms and beyond can get the utmost benefit of such technologies for the reason of their popularity among EFL students. In addition to daily contact with their smartphones, the students can send, receive and interact effectively with their teachers and classmates by utilizing SMS and social media means of communication.

2.13. The Intersection Relation between MALL & CALL

There is a strong relation between MALL and CALL. Their presence came out of E-learning revolutionary influx of living computation. The history of MALL rotted back to the time when CALL started to flourish in the last years of the last century. The spread of computers and the greater number of computer users paved the way for CALL to cement its feet. Sooner, as a brain child of CALL, MALL has become reality as a natural extended branch of eLearning.

2.14. M- Learning and education

Kukulka-Hulme, 2009 stated that the use of mobile technologies turns out to be well aligned with educational goals such as extending learning

opportunities, improving students' achievement, supporting differentiation of learning needs, goals and learning styles, and deliver authentic learning materials to students who would otherwise have no access to them. No doubt that, using mobile phones in education has confirmed a considerable acceptance among EFL learners worldwide presently. As a branch of e-learning, it has increased the involvement of the learners in the process of directed learning rather than been passive receivers of what is prepared by their instructors. However, the popularity of such learning aid may encounter some problems of application by some of EFL teachers stand in the way of the application of a such.

2.15. EFL Teachers point view toward MALL

Teachers of English as a Foreign language are not fully in agreement in using Mobile Assisted Language Learning facilities in outside their classes. The rejection is based on many aspects. These aspects can be tackled as merely fears of wasting time and more likely of their personal insufficient knowledge backgrounds in utilizing such devices in teaching generally. Encouragingly, many studies have proven the pedagogical benefits MALL. However, some of EFL teachers have expressed their fears of using their smartphones to instruct their students. Their common ground notion is based on different aspects. (Chinnery 2006) indicated that reduced screen size, inherent in the portability of the mobile phone makes the texts delivered via mobile phone distinct from traditional texts on paper or other texts delivered via big-screened computer. That doubtlessly, leads to difficulties among the students which they may encounter dealing with their learning activities. Advantageously, many studies have proven the validity of such technologies of using the smartphone applications that are already well –functioning and popular among users could facilitate the mobile learning practices considerably. Moreover, applications of mobile learning are advantageous in language teaching (Godwin Jones, 2011). Prensky (2005) maintained the notion of the positivity of using such technology in learning by accepting that mobile phones in particular are useful computers that can fit into the students' pockets and used by them almost always. Additionally, (Hulstijn 2001) assured that such efficient exposure can a base for a number of benefits. Firstly, improves the information processing activities. Secondly, makes the activation and recognition automatic. Thirdly, leads to grater retention over time.

2.16. EFL Students' Vocabulary Learning Challenges

No doubt that learning a target language as English needs a considerable amount of vocabulary in order to obtain a manageable learning process. In most cases, learners of EFL come across serious hindrances concerning vocabulary. The way vocabulary is learnt reflects whether the students of EFL are on the right track of learning or not. The traditional paper materials cannot serve immediate pedagogical results. It always depends on lengthy texts. So by using such modern technology as mobile phone, the EFL learners' learning capabilities increases rapidly.

2.17. Pedagogical Validations of MALL

MALL has proven validity in English language learning for the reason that it has many benefits for the learners of EFL. The students can approximately use authentic mobile apps that are made specially to meet their needs. For instance, dictionaries and illustrated vocabulary apps are popular among the students and have the ability to support their learning. Additionally, the other learning facilitators which make the learning process easier than times before.

The students of EFL can be sent SMS learning materials by their teachers and as well make use of the social media in order to enhance their learning. Moreover, the students can use recommended materials by their teachers such as useful apps or choose a number of them by themselves. However, this learning method relies on the readability of both of the teachers and the students to use such technologies. Hayati et al (2013) in their study of teaching idioms through three different ways (self-study, SMS, and class instruction), the results showed that SMS group improved noticeably and better than the other two groups with positive response on using mobile phones and SMS in learning idioms. Moreover, Basoglu and Akdemir (2010) also confirmed that teaching vocabulary with mobile phones is more dynamic than teaching vocabulary in flashcards. In the same vein, Lu (2008) found that the participants of the SMS group acquired more vocabulary than the group learned vocabulary with printed materials.

Many studies have been done on MALL to examine its authenticity as a learning facilitator. Ally, 2009; Kukulska-Hulme & Traxler, 2005) stated that mobile technologies have become gradually noticeable in the field of education,

as can be realized by the mounting number of periodicals journals and books that have been published the in recent years. A number of them have proven its capacities as being a learning facilitator. However, other studies have shown a slight considerable rejection of the acceptance of MALL as a learning facilitator.

2.18. Vocabulary Learning and MALL

Vocabulary represents the skeleton of the learning of any language. Learning a such has become a serious pedagogical matter. In order to maintain that, technology has contributed greatly to facilitate a such. E-learning represented in computer and mobile technologies have served a pedagogical purpose in facilitating the process of learning the language.

The type of activities focusing on vocabulary learning via mobile phone differs from one research project to another, depending on the level of language proficiency of the learners. Sending e-mail or SMS to students has become a common way of learning new vocabulary based on the lessons covered in the classroom. Kennedy, M. & Levy 2008 in their study gave the learners the option to receive messages covering known words in new contexts through SMS to their mobile phones amounting nine or ten messages per week. The results indicated that the messages were very helpful for learning vocabulary.

Similarly, Thornton P. & C. Houser sent short mini-lessons for learning vocabulary through email to mobile phones of the students three times a day. They used new words in multiple contexts for the learners to infer the meaning. The results showed an improved range of scores on post-tests which were very encouraging.

There are other strategies for learning vocabulary via mobile phones. Learners can be provided with some tailored vocabulary practices based on activities performed in the classroom. They are, then, asked to complete them on their mobile phones and send them back to their instructors.

Learning vocabulary can also be accompanied by the pictorial annotation shown on learners' mobile devices for better understanding of new words. In a study conducted by Chen, et al, (2008) learners were provided with verbal as well as pictorial annotation for learning English vocabulary. Results of a post-

test showed that the pictorial annotation assisted learners with lower verbal and higher visual ability to retain vocabulary.

2.19. MALL vs Traditional Learning

Traditional learning has become in a critical situation. That today's students pay attention to electronic technologies such as mobile phones. If there is no linkage between traditional learning and MALL, it could be difficult for teachers of EFL to cope with their students' contemporary learning needs. However, traditional teaching has a great value in that it does not have the technical faults of smart phones such as screen size, internet connection and the availability of the smart phones among all the students. Both of them can be used to for the benefit of the learner.

2.20. Gaming as a Vocabulary Enhancement Tool

Learners of English have to deal with unfamiliar vocabulary during their language acquisition. So, in order to learn and retain new words, learners should involve in different task-based activities in their classrooms whether it is a guessing task, a describing exercise or conversation making. Such activities also include vocabulary games which especially focus on helping learners develop and use words in different contexts by making the lessons enjoyable. Therefore, it is necessary to explore whether students learn vocabulary effectively through games and how they learn it.

Traditionally, vocabulary has not been a particular subject for students to learn, but has been taught within lessons of speaking, listening, reading and writing. During the lesson, students use their own vocabulary and are introduced to new words provided by the teacher and classmates which they apply to classroom activities. For many learners of English, whenever they think of vocabulary, they think of learning a list of new words with meanings in their native language without any real context practice. A number of learners may share the same experience of looking up words in a bilingual dictionary to find their meanings or definitions when they encounter new words. They may even write down lines of new words without any idea of the real use of them in context. Working this way, after a short period of time, many learners may find out that learning vocabulary in lists is not practical, and they think the cause for it is just their bad memorization, Gnoinska (1998:12). Research and publications have shown that this is not a very effective way to study. Decarrico (2001) states that words should not be learnt separately or by memorization

without understanding. Moreover, "learning new words is a cumulative process, with words enriched and established as they are met again", Nation (2000, p.6). Therefore, the "look and remember" way of vocabulary learning seems to be not very effective for learners of the English language.

Furthermore, some other students may require teachers to give meaning and grammatical function for words that they are not familiar. Learners just wait for teachers who control the lesson to provide new forms of words then they write those words in their notebooks or complete their exercises. They may use words they learn in the exact formats as the original patterns in which those words appeared. This kind of rote verbal memorization is good to a certain extent since it helps learners learn and use the correct form of words. However, according to Decarrico (2001), the vocabulary used in such context is rather simple because grammatical and phonologic aspects are emphasized; and as a result, the lexical aspect is neglected. In other words, learners just know how to use the vocabulary in an exact form, but they do not know how to use it with different shades of meanings in real life communication. Unlike the traditional method of learning and teaching, in a communicative language teaching (CLT) approach, learners are required to take part in a number of meaningful activities with different tasks. This is to improve learners' communicative competence by encouraging them to be a part of the lessons themselves. Newton (2001) refers to this approach as a way that can enable learners to manage their vocabulary meaning and develop their communicative skills at the same time. Many experts of language teaching methodology also agree that playing games is a good way to learn vocabulary, especially in CLT class. With the use of games, the teacher can create various contexts in which students have to use the language to communicate, exchange information and express their own opinions (Wright, Betteridge and Buckby, 1984). Huang (1996: 1) comes to a conclusion that "learning through games could encourage the operation of certain psychological and intellectual factors which could facilitate communication heightened self-esteem, motivation and spontaneity, reinforcing learning, improving intonation and building confidence."

Some experts have also figured out characteristics of games that make vocabulary learning more effectively. Lee (1995:35) lists several main advantages when games are used in the classroom, including "a welcome break from the usual routine of the language class", "motivating and challenging" "effort of learning", and "language practice in the various skills." Ersoz (2000) holds that games are highly appreciated thanks to their amusement and interest.

Teachers can use games to help their students practice more their skills of communication. In addition, Uberman (1998) also affirms the helpful role of games in vocabulary teaching after quoting and analyzing different opinions of experts. From her own teaching experiences, Uberman observed the enthusiasm of her students in learning through games. She considers games a way to help students not only enjoy and entertain with the language they learn, but also practice it incidentally. In summary, games are useful and effective tools that should be applied in vocabulary classes. The use of vocabulary is a way to make the lessons more interesting, enjoyable and effective.

2.21. The Future of implementing MALL as a supportive mean of Learning

The future of MALL is flourishing in spite of the obstacles in the way of its implementation as an authentic pedagogical tool. A rapid influx of English language learning smartphones applications has been thought of and most of them are really used by the students of EFL. Presently, teachers of EFL who do not attempt at using such technologies may come across many critical issues with their students. EFL students of today have the same learning goals of the previous generations but with different means.

2.22. WhatsApp Messenger as a mean of Learning

Information and Communication Technology (ICT) affects greatly in the education world. The use of ICT in education, including language teaching and learning, is a positive response to the development of the information and communication technology in the third millennium (Hartoyo, 2009). There has been a new trend in the ICT world which is called the social network. Social network has been defined by many and generally viewed as referring to networked tools that allow people to meet, interact and share ideas, artifacts and interests with each other (Anderson, 2010). This social network has opened up new opportunities of interaction and collaboration between teachers and learners.

The use of social network has become a popular in everyday communication. It is even used for collaborative learning especially in language learning. Social network applications such as WhatsApp, face book, twitter, LinkedIn and many others are used extensively by the students for learning languages deliberately or accidently during their daily social interactions.

(B) Previous Studies

Introduction

In spite the fact that Mobile Assisted Language Learning is a maiden field of research, a number of studies have been attempted at a such to explore its benefits and, as well, its drawbacks. By concentrating on its benefits, such technology has proved slightly that it is capable of providing authentic pedagogical means of learning. The following comprises a number of researches that have been executed in this field.

Previous Study (1)

Introduction: The use of SMS has been neglected for a considerable time as a authentic mean of learning and considered as ineffective pedagogically. In order to investigate such claims, Almi et al. (2012) experimented sending SMS in comparison with the use of paperback dictionaries in learning vocabulary in order to investigate the usefulness of sending SMS learning materials. A 16-week study of a mobile phone-based SMS vocabulary program for English as L2. The trial involved 28 university students who received 10 words and example sentences twice a week via SMS. Their learning of 320 head words was compared to that of a control group of 17 who studied the same words using an ordinary dictionary.

Objectives: The study focuses on checking the validity of using of MALL represented by SMS messages in providing thorough pedagogical learning assistance for EFL university learners.

Result

1-The study showed the positivity of sending SMS learning materials in spite of the slight difference in the finding between the posttest and the pretest.

2-The students showed tendency toward accepting SMS as an effective tool for learning.

3-The study proved the practicality in using SMS messages in providing pedagogical materials to the present EFL students and anticipate the same to take place in the future

Comment: This study has a significant output which proved the constructive use of SMS in reviving the students level of the language. The linkage between this study and the current one is that of the positivity of utilizing such practical method for the purpose of learning

Previous Study (2)

Introduction: Idioms of English language stand in the way for majority of EFL students to understand and comprehend learning of English vocabulary with ease. As mobile phones have become available and handy, they have been used in this study in order to facilitate learning of such complicated from of the language. Amer, M. (2010). utilised *Idiomobile* for learners of English: A study of learners' usage of mobile learning applications for learning idioms and collocations. PhD dissertation, Indiana University of Pennsylvania. Retrievable from <http://dspace.lib.iup.edu>

Objectives: This study aimed at using mobile phones facilities to study idioms and collocations. The objectives of the study are as follows:

- 1- Exploring the positivity of using mobile phones programmes in learning idioms and collocation of English language.
- 2- Measuring the acceptance of the students of using such technologies for learning purposes.
- 3-Checking the practicality of sending SMS allows the students to understand idioms of English in variety of ways.

Results: The study findings resulted in the following conclusions:

- 1- Using mobile programmes quizzes is a positive technique in delivering such complicated areas of study as idioms and collocations for the students to learn.
- 2- The reactions of the students of using such technologies has been described as positive.
- 3-The use of SMS has been recommended as a valid contemporary mean of learning.

Comment: The above mentioned study showed a greater tendency among the students towards using their mobile phones in learning vocabulary. That comes as a result of the nature of the mobile phone for its popularity and availability

amongst EFL students. This study's finding meets the current one outcome since they both focus on the benefit of EFL students.

Previous Study (3)

Anaraki, F. (2009). A Flash-based mobile learning system for learning English as a second language. *Proceedings International Conference on Computer Engineering and Technology. Singapore* (pp. 400–404).

Retrievable from <http://www.journal.au.edu>

Introduction: This Thai study describes the design and development of a suite of 12 mobile flash-based multimedia lessons for the learning of L2 English. The system was tested for four weeks by 76 university students, who downloaded to their smartphones or PDAs three lessons a week for independent study.

Objectives:

1-The researcher in this study wanted to shade light on the pedagogical viability of using smartphones and PDAs as authentic learning tools.

2-Checking the capability of designing credible mobile learning materials.

Results:

1-Post-testing confirmed significant improvement by all students.

2-Participants felt the most significant impact of mobile English learning on their pronunciation followed by listening skills and conversation.

Comment: This study focuses on designing authentic learning materials for the sake of EFL students. It maintained the notion that mobile phones can be used as a useful tool for learning languages in the presence of authentic learning materials. In the present study, different authentic leaning materials were used for the benefit of students.

Previous Study (4)

Attewell, J. (2005). Mobile technologies and learning: A technology update and m-learning project summary. London, UK: Learning Skills Development Agency. Retrieval from <http://www.mlearning.org>

Introduction: This British report describes three EU funded m-learning projects that used smartphones (i.e., a PDA with telephone connectivity) to promote the learning of 16–24 year olds not enrolled in full-time education. One SMS-based elementary L2 Italian course was trailed in Italy with two groups, one of foreigners ($n = 20$) and the other of Italian dialect speakers ($n = 30$). A course using MMS/SMS-based tutorials and quizzes developed in the UK to support English L1 literacy and numeracy was also used for L2 English in Sweden.

Objectives: 1-To promote the use of smartphones in teaching of 16-24 distant students who are not enrolled in full-time education.

2-To guarantee reasonable understanding of the viability of using such technologies in instructing such type of students.

3-To evaluate the role of sending SMS messages in providing EFL learners with thorough pedagogical benefits.

Results

1-Favorable results are reported, but they are only anecdotal.

2-Learning through SMS messages can be approximately gives a result as traditional learning.

3-The study proved the appropriateness of sending SMS learning messages to part-time enrolled learners which in itself solves the learners problem of full attendance.

Comment: This study may have different intentions from the current one, but the both focus on the benefit of mobile phones from the learning prospect.

Previous Study (5)

Azabdaftari, B., & Mozaheb, M. (2012). Comparing vocabulary learning of EFL learners by using two different strategies: Mobile learning vs. flashcards. *The Eurocall Review*, 20(2), 47–59. Retrievable from http://www.eurocall-languages.org/review/20_2/index.html

Introduction: This seven -week study shed light on vocabulary learning of EFL learners by using two different strategies: Mobile learning vs. flash cards. 80 students comprised the study. Firstly, it was based on using the mobile phone through the internet to send SMS messages to a number of 40 university students as the experimental group. Secondly, a control group of 40 students were given printed flashcards containing English words with pronunciation on one side and corresponding L1/L2 equivalents on the other. The experimental group gave a worthy score in comparison with the control group.

Objectives: 1- To inspect the soundness of using mobile phone technology as an effective pedagogical mean in instructing vocabulary to EFL students.

2- To check whether the traditional strategy of using flashcards is still useable to attract EFL students.

3-To examine the soundness of sending the students SMS in comparison with the traditional printed flashcard effect in the process of learning.

The result:

1-The study confirmed that using mobile phone in instructing EFL students is powerful and effective than the traditional strategies of teaching.

2-Sending SMS has been recommended by the researcher as thorough learning tool.

Comment: The shown study focuses on sending flash cards as SMS to the experimental group timely with providing the control group with pronunciation flash cards. The experimental group finding expressed the viability of using mobile phone in learning English language. The connection between this study and the present on is that they tried to utilize the usability of mobile phone as contemporary pedagogical mean of learning.

Previous study (6)

Başoğlu, E., & Akdemir, O. (2010). A comparison of undergraduate students' English vocabulary learning: Using mobile phones and flash cards. *Turkish Online Journal of Educational Technology*, 9(3),1 –7. Retrievable from <http://www.tojet.net>. This Turkish study describes a six-week pilot test that investigated the effectiveness for L2 English vocabulary acquisition of a mobile phone-based flashcard application (ECTACO) used by 30 university students compared to its printed counterpart used by a control group of the same size. Post-testing confirmed that using the flashcards on mobile phones was more effective in improving students' vocabulary learning than using flashcards on paper.

Mobile phone users also found learning English vocabulary this way effective and entertaining.

Introduction: This study demonstrates the role of using mobile phone and flash cards as a valid instrument for learning vocabulary.

Objectives 1-The aim of the study is to shade light on the effect of using mobile phone technology in sending learning flash cards to students

2- Evaluating the soundness of mobile phone as an effective learning tool.

Results:The outcome of the study proved the authenticity of using such technology in teaching and learning vocabulary.

Comment: This Turkish study aimed at using mobile phone as a mean of learning vocabulary. The researchers tried prove the usability of smart phone in providing pedagogical learning atmosphere. In spite environmental difference between this study and the current one, it has been proved that using smart has a capacity to enhance EFL student acceptability as an effective learning provider.

Previous study (7)

Derakhshan, A., & Kaivanpanah, S. (2011). The impact of text-messaging on EFL freshmen's vocabulary learning. *EUROCALL*, 39-47. Retrievable from <http://eurocall.webs.upv.es>

Introduction: This study describes a 7-week mobile phone-based program that used SMS for L2 English vocabulary acquisition with university students. An experimental group of 21 and a control group of 22 were both taught 15–20 words per session. Students wrote one sentence for each word for their instructor and three classmates. The experimental group sent these via SMS and the control students brought them to class on paper. A post-test and a delayed post-test administered two weeks later both showed no significant difference in word retention between the two groups.

Objectives: To ensure the use of mobile phone as a practical tool in instructing and learning as a competitive method of teaching and learning that complies with today's unavoidable technologies.

Results: No significant difference has been found, but the notion of dealing with mobile technology as an effective learning instrument in teaching and learning has been reinforced.

Comment: The linkage between this study and the one in hand is that they concentrate on the retention of vocabulary of EFL students and the gain of students. The selected study displayed slight difference in tackling vocabulary traditionally and using SMS messages experimentally. In the current study, the focus is on sending SMS messages, but the findings are approximately same in providing EFL students with a beneficiary learning platform.

Previous Study (8)

Castrillo et al. (2014) investigated the role of WhatsApp in fostering negotiation of meaning among 85 Spanish learners of German. Based on the results of the pre-questionnaire. The students were divided into 5 WhatsApp groups of five, where they discussed topics that the author sent. Students' interactions in terms of their negotiation of meaning and engagement with the tasks were analyzed. Students were found to have high levels of motivation and participation as well as having improved their meaning negotiation skill.

Introduction: Using smart phones among students of EFL has become a norm and an everyday tool of communication. Such technologies come with variety of instruments that can be used to improve the learning process. A group of scholars has tried to explore the benefits of utilizing one of these tools which is WhatsApp in learning English language languages.

Objectives: This study aimed at using the popular application WhatsApp to negotiate meaning as a topic of discussion in order to check to viability of using such technologies in learning.

Result: The finding of the study has been regarded as positive and motivating instrumental learning tool for EFL learners.

Comment: For its motivating and encouraging characteristics, mobile phone is used in the selected study as a mean for discussion by send SMS messages to the participants. The study assures the practicality of using such contemporary learning tool in providing valuable learning experience. The current study is associated to the recent one in that, they both aim at evolving the level of the students' vocabulary.

CHAPTER THREE

METODOLGY

3.0 Introduction

The purpose of this chapter is to show the methodology of the research. It provides statistical information about how it has been fulfilled. It will show the mean score of the pretest and the posttest as a result of using mobile technology in order to enhance the learning of English language vocabulary. Also a questionnaire is used to explore to what degree the use of such technology is able to boost the students learning of English vocabulary. In the same vain, it will give the indications of the validity and reliability of both of the test and the questionnaire.

3.1 Research Method

In order to achieve the objectives of study, the quantitative method has been dealt with in this study. A single experimental group of students was selected for the study to check the validity of using MALL as an authentic pedagogical enhancer mean of learning. A pretest and a posttest were given to the group. SMS WhatsApp learning materials were sent to the group. A questionnaire was used as a qualitative method to explore the acceptability of such method among the students.

3.2 Research Population

The third level of English language BA programme students at Comboni College of Sciences and Technology comprises the population of the study during the first semester of the academic year of 2019.

3.3 Research Sample

Twenty students of English language BA programme at Comboni College of Science and technology have involved in the sample of the study.

3.4.0 Research Instrument

A pretest was given to the group before they attended the treatment sessions. WhatsApp SMS messages have been sent to the sample the for a period of nine consecutive days. They were sent these messages within a time of their preferences. The students agreed upon daily messaging while they were away from college. By the end of the allocated period they attended a posttest. As well, a questionnaire has been distributed to check the validity of using MALL as supportive learning tool.

3.4.1 Test Description

The test is made of 20 MCQs based on Phrasal verbs. Each of the MCQs sentence was given one mark. The total marks of the test were 20. It is used:

- 1) To understand the use of phrasal verbs by the students
- 2) To check any development after being tackled as a post test

The test lasted for 30 minutes. It can be retrieved at the appendix section

3.4.2 Procedure of Data Collection

3.4.2.1 Pretest

A pretest was given to a number of 20 students and the data for mean1 was collected.

3.4.2.2 Treatment

The selected students of the study were sent a variety of illustrated phrasal verbs learning materials with explanations and as well related mp3 files. The feedback of the students was positive and they demanded continuity of sending them WhatsApp materials.

3.4.2.3 Posttest

A posttest was executed by the end of the treatment period which comprises mean2. By deducting mean2-mean1 the result came as a positive gain.

3.4.3 Validity Test

The result of the test has shown an increase in the performance of the selected students. Validity has been described by (Bond, 2003, p. 179) as the core of any form of assessment that is trustworthy and accurate.

3.4.4 Reliability Test

According to (Fraenkel & Wallen, 2003; McMillan & Schumacher, 2001, 2006; Moss, 1994; Neuman, 2003) reliability is the degree to which a test is free from measurement errors, since the more measurement errors occur the less reliable the test. Therefore, the test has been given to a number of ten students who were not included in the experiment for reliability. To find out the reliability of the test, Pearson's Product Moment Correlation Coefficient was used. Ten responses of subjects from outside the sample were correlated. The five odd numbers 1, 3, 5, 7 and 9 were correlated with the even numbers 2, 4, 6, 8 and 10. Their results were nearly equal.

$$1, 3, 5, 7, 9 = 42$$

$$2, 4, 6, 8, 10 = 48$$

CHAPTER FOUR
DATA ANALYSIS, RESULT, AND DISCUSSION

4.0 Introduction

In this chapter the researcher tackles the research questions and hypotheses of the problem.

The mean source will be used to verify or reject the research hypotheses.

4.1 Statistical Data analysis of the selected experimental group pretest/posttest

The researcher executed a pretest on the selected experimental group before the treatment. The test was based on phrasal verbs MCQs as an important segment of vocabulary. They were about twenty. Each sentence was given one mark. The students' performance in the pretest and the posttest were analyzed statistically. The result of both pretest and posttest are shown in the following tables.

Key words

M: Mean

Std. Standard Deviation

T: Test

Std. Error

Std. Error Mean

Independent Sample Tests

Pertest result																							
No	Name	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total	
1	Abdelgadir Alkhair	1	1	1	0	1	1	0	1	0	1	1	1	1	1	0	0	1	1	1	1	0	14
2	Afnan Bashir	1	1	0	0	0	1	0	0	0	1	1	1	1	0	0	0	0	0	1	1	1	15
3	Amna Adam	1	1	0	0	0	1	0	0	0	1	1	1	1	0	0	0	0	0	1	1	1	09
4	Ester Othman	0	1	1	0	1	0	1	0	1	1	0	1	1	1	0	0	0	0	1	1	0	10
5	Elsa Hadush	1	1	1	0	1	1	1	0	0	1	1	1	1	0	0	0	1	1	1	1	0	13
6	Fatima Ali	1	1	1	0	1	0	0	1	0	1	0	0	0	0	0	0	0	1	0	0	0	07
7	Fihaa Babikir	1	1	1	0	0	1	1	1	0	1	1	1	1	0	1	1	1	1	1	1	1	16
8	Hoyda Ahmed	1	1	0	1	1	0	1	0	1	1	1	1	0	1	0	0	0	1	1	1	1	13
9	Mokhtar Omar	1	1	1	0	1	0	1	1	1	1	1	1	1	0	1	1	0	1	1	1	1	16
10	Mohammed Haroun	1	1	0	0	1	0	0	0	1	1	1	1	1	0	0	0	0	0	1	1	0	09
11	Mohamed Mokhtar	1	1	0	0	0	1	0	0	1	1	0	0	1	0	1	1	1	1	1	1	1	12
12	Negoom Isa	1	0	0	0	1	1	0	0	0	1	1	1	1	1	0	1	1	1	1	1	1	13
13	Nora Treza	1	1	0	0	1	1	1	0	1	1	1	0	1	0	0	1	0	1	1	1	0	12
14	Rabab Sidig	1	1	1	0	1	0	0	0	0	1	0	1	0	1	0	1	0	0	1	0	0	08
15	Remon John	1	1	1	0	1	1	0	0	1	1	0	1	1	0	0	0	1	1	1	1	0	12
16	Sami Abdalah	1	1	0	0	1	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	16
17	Sejod Mustafa	1	1	1	0	1	1	1	1	0	0	0	0	1	1	0	0	0	0	1	1	1	11
18	Sana Abdalah	1	1	0	0	1	0	1	0	1	1	0	0	1	0	1	0	0	1	1	1	1	11
19	Sundy Chol	1	1	0	0	1	0	0	0	0	1	1	0	1	1	0	1	1	1	1	1	0	10
20	Tomas Batistota	1	1	1	0	0	1	1	1	1	1	1	0	1	1	1	1	1	0	1	1	1	16
																							243

Table (1) Shows the pretest result of the selected population.

Post-test result																							
No	Name	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total	
1	Abdelgadir Alkhair	1	1	1	0	1	0	1	0	0	1	0	0	0	0	1	0	1	1	0	0	0	09
2	Afnan Bashir	1	1	0	0	1	1	1	1	1	1	0	0	1	0	0	0	1	1	1	1	1	13
3	Amna Adam	1	1	0	0	1	0	1	1	0	1	1	0	1	1	1	0	1	1	1	1	0	13
4	Ester Othman	1	0	1	0	1	0	1	0	0	1	1	1	1	1	1	0	0	1	1	1	0	12
5	Elsa Hadush	1	1	1	0	1	1	1	1	1	1	1	0	1	0	0	1	1	1	1	1	0	15
6	Fatima Ali	1	1	1	0	1	0	1	0	1	1	0	1	0	0	1	1	1	1	1	1	1	14
7	Fihaa Babikir	1	1	1	0	1	1	1	1	1	1	1	1	1	0	0	1	0	1	1	1	1	16
8	Hoyda Ahmed	1	0	1	0	1	1	1	0	0	1	0	0	1	0	0	1	0	1	1	1	1	11
9	Mokhtar Omar	1	1	1	0	1	1	1	1	0	1	1	1	1	1	1	1	0	1	1	1	1	17
10	Mohammed Haroun	1	0	1	0	1	0	0	1	0	1	1	0	0	0	1	0	0	0	1	0	0	08
11	Mohamed Mokhtar	1	1	1	0	1	1	0	0	0	1	0	0	1	0	1	0	1	1	1	1	0	11
12	Negoom Isa	1	1	1	1	0	1	0	0	0	1	1	0	0	0	0	0	0	1	1	1	1	10
13	Nora Treza	1	1	1	0	1	1	1	0	1	1	1	0	1	0	0	1	0	1	1	1	0	13
14	Rabab Sidig	1	1	1	0	0	0	0	0	1	1	0	1	0	1	0	0	0	0	1	0	0	08
15	Remon John	1	1	0	0	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	16
16	Sami Abdalah	1	1	0	0	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	17
17	Sejod Mustafa	1	1	1	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	1	0	0	10
18	Sana Abdalah	1	1	0	0	1	0	1	0	0	1	0	0	1	0	0	0	1	1	1	1	0	08
19	Sundy Chol	1	1	1	1	1	0	1	0	1	1	0	0	1	1	1	0	1	1	1	1	1	15
20	Tomas Batistota	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	17
																							253

Table (2) Shows the posttest result of the selected population.

	Mean	N	Std. Deviation	Std. Error Mean
Pair1	.57	400	.496	.025
Pretest	.62	400	.487	.024
Posttest				

Mean Std. Deviation of the Samples

Table (3)

The table above shows that the mean of the sample of the pretest is 57% Whereas the mean of the sample of the post test is 62% which indicates the positivity of the mean of the posttest. The standard error of the mean in the posttest of the sample is 24% which is lower than of the pretest.

Paired Sample Correlation

	N	Correlation	Sig.
Pair Pretest&Posttest	400	.216	.000

Table(4)

The correlation between the two samples is 0.216 and the sig. is. 000 which indicated the validity of the test.

Paired Sample Test

	Pair Differences					t	df	Sig. (2 detailed)
	Mean	Std. Devi ation	Std. Error Mean	95% confidence Interval of the Difference				
				Lowe	Upper			
Pair Pretest- Posttest	-.045-	.616	.031	-.106-	.016	- 1.462-	399	.145

Table(5)

The Standard Deviation is .616 and the standard deviation of the mean is .031, the value of t is -1.462- which indicates the positivity of the treatment.

4.2 Discussion

After collecting the results of both of the pretest and the posttest, a statistical analysis was executed. The result of the mean in the pretest was 57% whereas the result of mean in the posttest was 62%. That designates the treatment and the posttest as valid. Therefore, using mobile phone in the process of learning vocabulary is a positive instrument in providing EFL students with a useful pedagogical need.

4.2 Questionnaire:

A questionnaire has been given to the selected students in order to understand the viability of using smart phones as learning enhancement tool.

The questionnaire has been distributed among the third level students of Comboni College of Science & Technology. A number of 20 students from the population were selected for the questionnaire. It was a 100% participation of the population.

The following tables and figures of the questionnaire are based on the following demographical factors and the analysis of the hypothesis of the study:

(1) Gender

Gender	Frequency	Percent	Valid Percent	Cumulative Percent
Male	7	35.0	35.0	35.0
Female	13	65.0	65.0	100.0
Total	20	100.0	100.0	

Table(6)

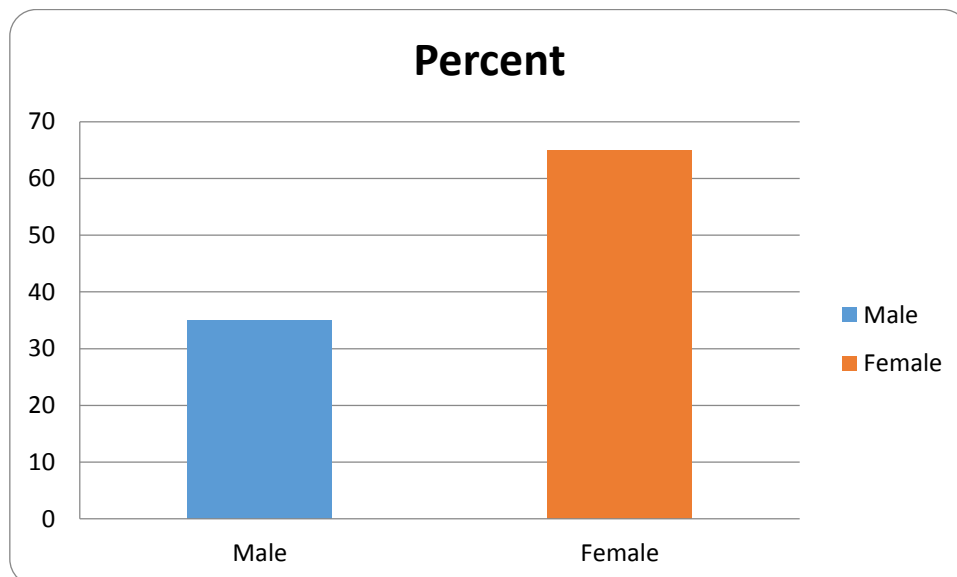


Figure (1)

Table (6) and Figure (6) show the percentage of male is 35% and female is

65% from population of the study.

(2) Nationality

Nationality	Frequency	Percent	Valid Percent	Cumulative Percent
Sudanese	14	70.0	70.0	70.0
Others	6	30.0	30.0	100.0
Total	20	100.0	100.0	

Table(7)

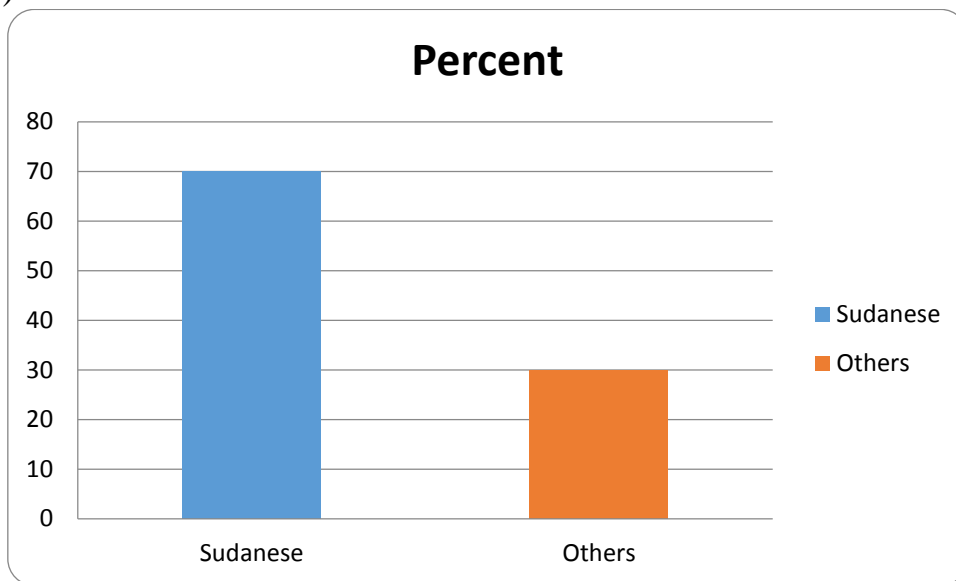


Figure (2)

Table (7) and Figure (2) show the percentage of Sudanese is 70% and Others is 30% from the population of the study.

Age

Age range	Frequenc y	Percent	Valid Percent	Cumulative Percent
<=20	1	5.0	5.0	5.0
20-25	15	75.0	75.0	80.0
25-30	2	10.0	10.0	90.0
>30	2	10.0	10.0	100.0
Total	20	100.0	100.0	

Table (8)

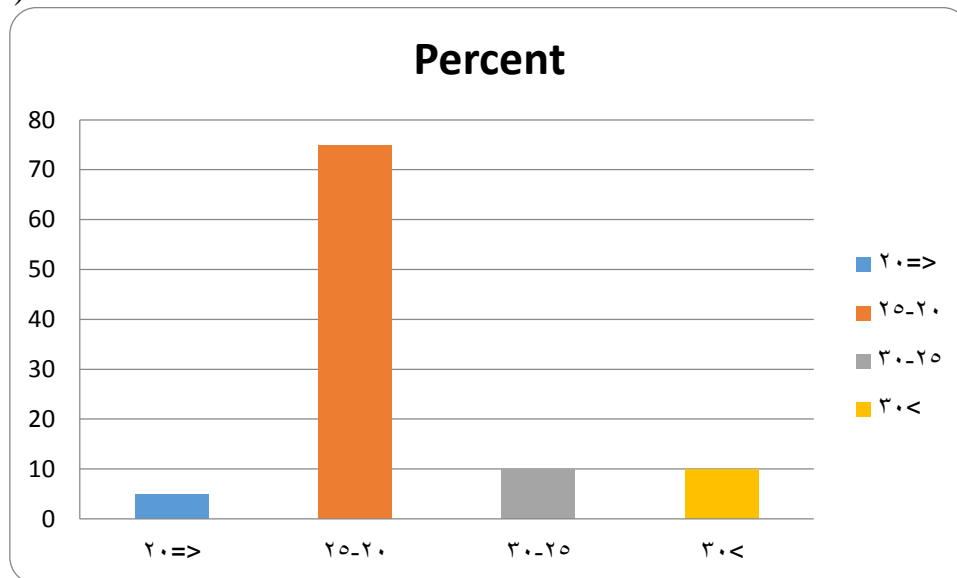


Figure (3)

Table (8) and Figure (3) refer to (5%) of sample in age group (≥ 20) year ,75% age group (20-25) year, (10%) the age group (25-30) year and (10%) the age group (< 30) year from the population of the study.

Table (9)

English Mark in the High school Certificate				
English Mark	Frequency	Percent	Valid Percent	Cumulative Percent
<=59	7	35.0	35.0	35.0
60-69	7	35.0	35.0	70.0
70-79	3	15.0	15.0	85.0
>=80	3	15.0	15.0	100.0
Total	20	100.0	100.0	

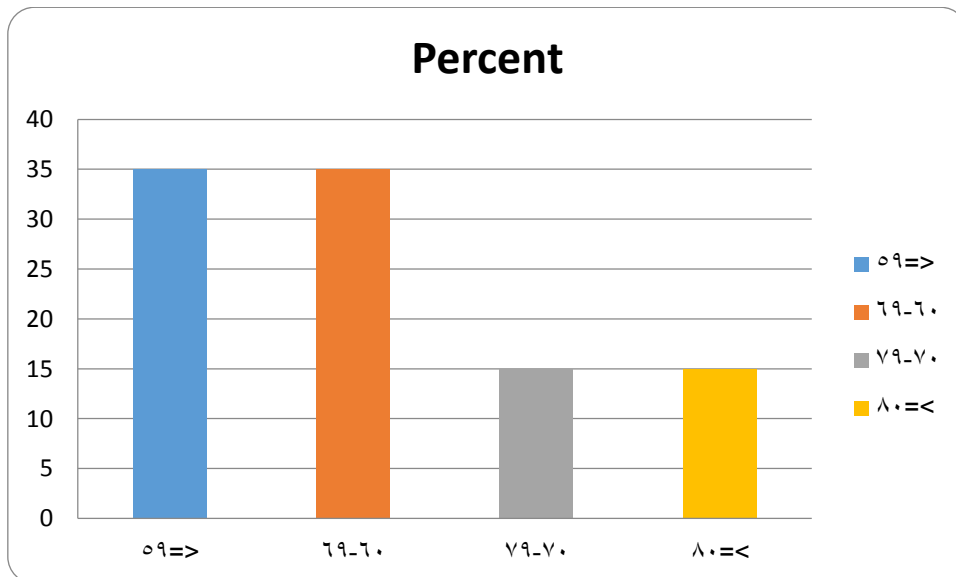


Figure (4)

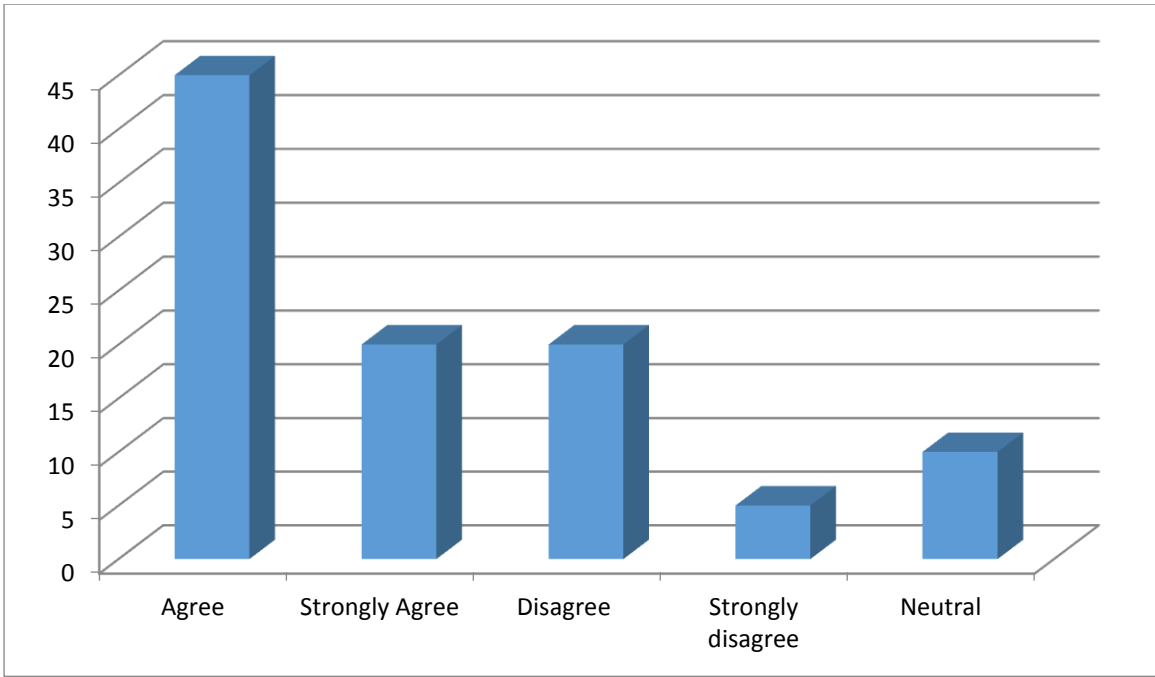
Table (9) and Figure (4) refer to (35%) of sample in English Mark in the High school Certificate is (≥ 59), 35% English Mark in the High school Certificate between (60-69), (15%) also between (70-79) and (15%) in English Mark in the High school Certificate is ≤ 80 from population of the study.

The following tables and figures comprises the responses of the population on University student of EFL face problems of using MALL inside and outside their classes

Table (10) I benefit a lot when I have been sent WhatsApp learning messages by our teachers:

Answer	Frequency	Percent%
Agree	9	45
Strongly Agree	4	20
Disagree	4	20
Strongly Disagree	1	5
Neutral	2	10
Total	20	100

figure (5) shows population according to Question

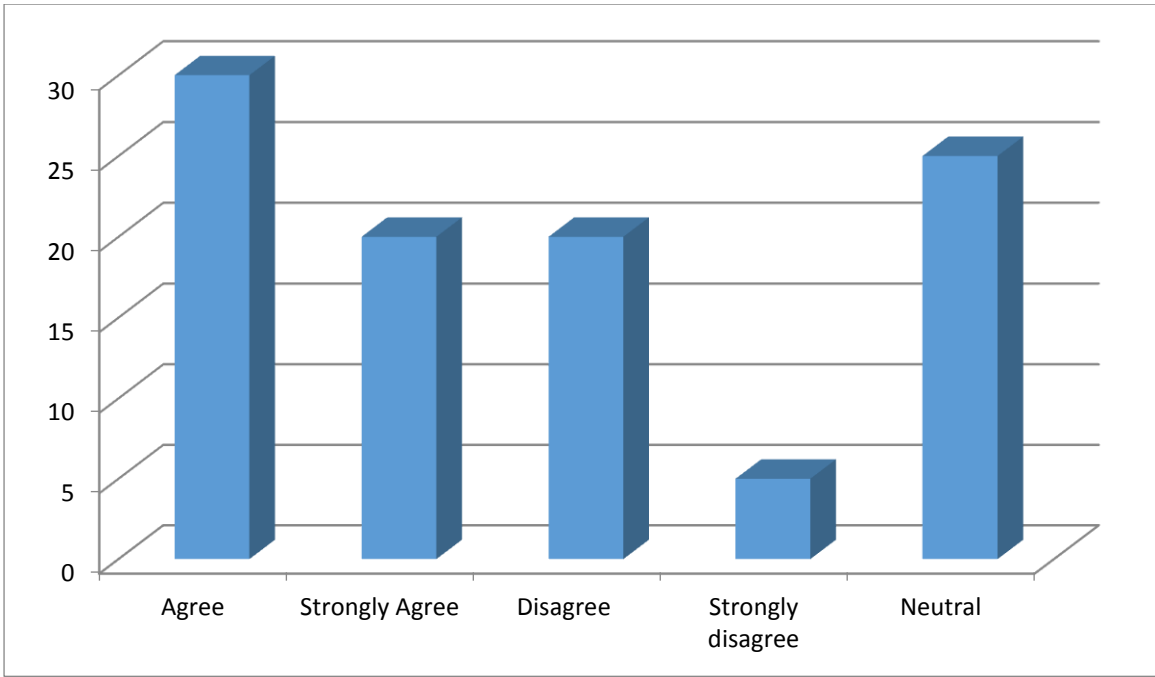


Form table and figure above we notice that the most of population answered agree with percent (45%), while (20%) of them answered Strongly agree, while (20%) of them answered Disagree, while (5%) of them answered Strongly disagree, while (10%) of them answered Neutral.

Table (11) We are sent learning materials by our teachers:

Answer	Frequency	Percent%
Agree	6	30
Strongly Agree	4	20
Disagree	4	20
Strongly disagree	1	5
Neutral	5	25
Total	20	100

figure (6) shows population according to Question

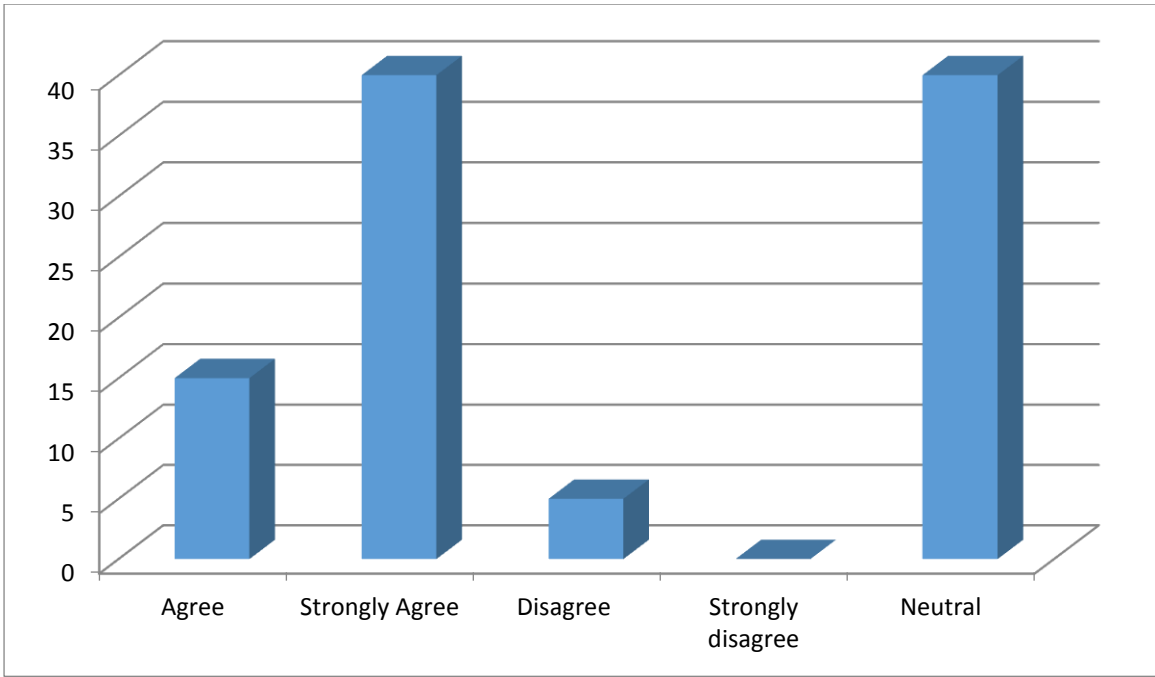


Form table and figure above we notice that the most of population answered agree with percent (30%), while (20%) of them answered Strongly agree, while (20%) of them answered Disagree, while (5%) of them answered Strongly disagree, while (25%) of them answered Neutral.

Table (12) I sometimes have a problem of internet connection:

Answer	Frequency	Percent%
Agree	3	15
Strongly Agree	8	40
Disagree	1	5
Strongly disagree	0	0
Neutral	8	40
Total	20	100

figure (7) shows population according to Question

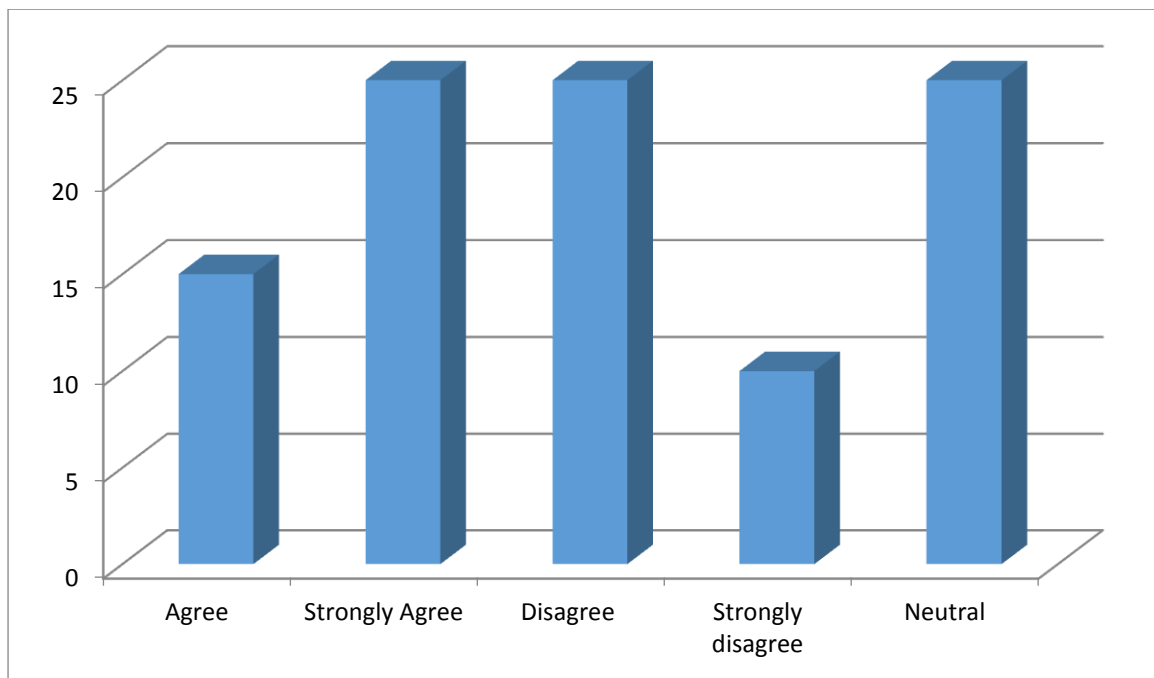


Form table and figure above we notice that the most of population answered agree with percent (15%), while (40%) of them answered Strongly agree, while (5%) of them answered Disagree, while (40%) of them answered Neutral.

Table (13) There are some problems of authentic smart phone learning materials:

Answer	Frequency	Percent%
Agree	3	15
Strongly Agree	5	25
Disagree	5	25
Strongly disagree	2	10
Neutral	5	25
Total	20	100

figure (8) shows population according to Question

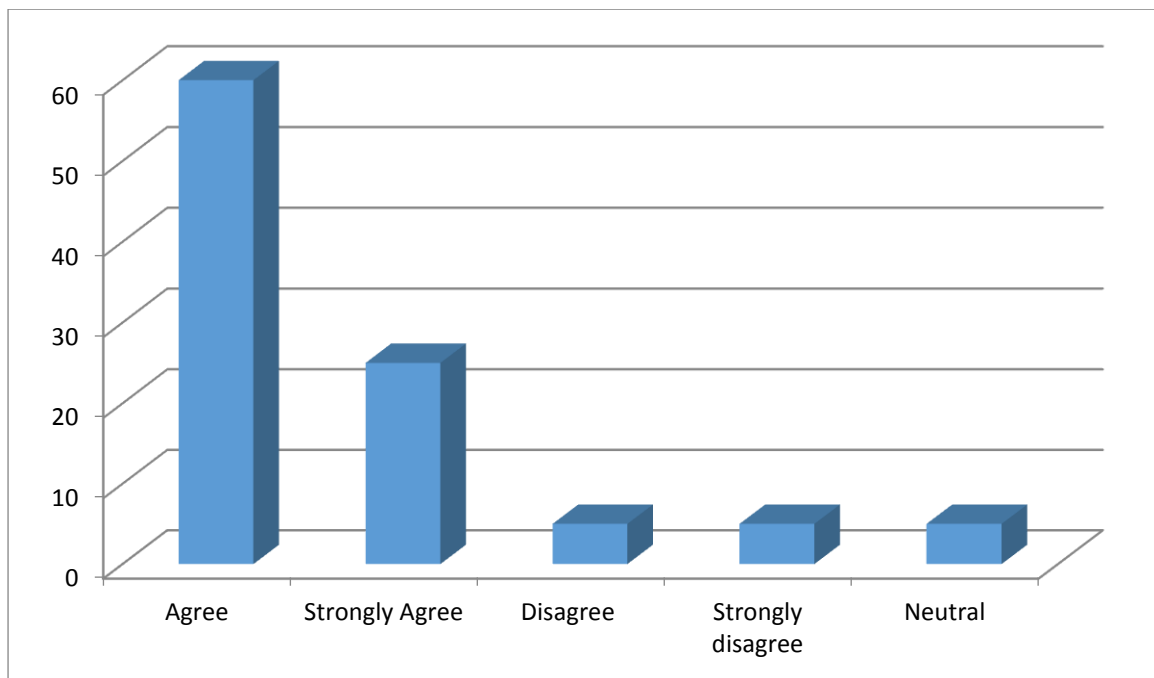


Form table and figure above we notice that the most of population answered agree with percent (15%), while (25%) of them answered Strongly agree, while (25%) of them answered Disagree, while (10%) of them answered Strongly disagree, while (25%) of them answered Neutral. The use of MALL for learning vocabulary by Sudanese university students of EFL is not limited

Table (14) We are allowed to use our smart phones in class such as dictionaries and vocabulary learning applications:

Answer	Frequency	Percent%
Agree	12	60
Strongly Agree	5	25
Disagree	1	5
Strongly disagree	1	5
Neutral	1	5
Total	20	100

figure (9) shows population according to Question

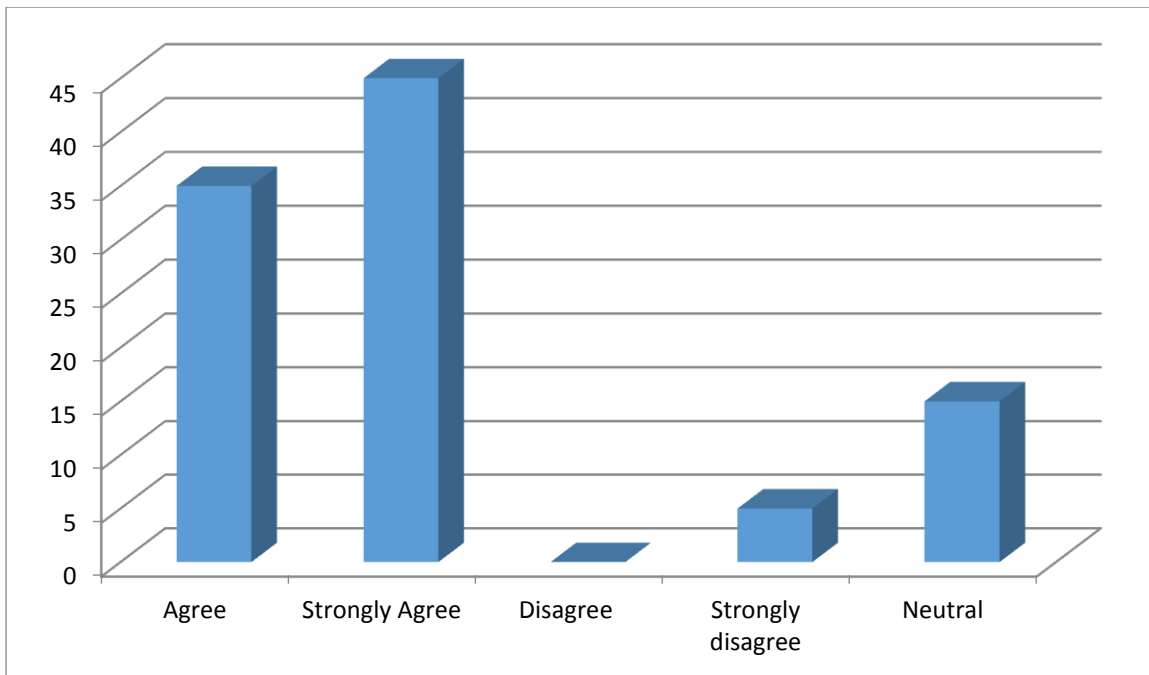


Form table and figure above we notice that the most of population answered agree with percent (60%), while (25%) of them answered Strongly agree, while (5%) of them answered Disagree, while (5%) of them answered Strongly disagree, while (5%) of them answered Neutral.

Table (15) Teachers of EFL in Sundanese universities need to understand the benefit of using smart phone in and outside their classes:

Answer	Frequency	Percent%
Agree	7	35
Strongly Agree	9	45
Disagree	0	0
Strongly disagree	1	5
Neutral	3	15
Total	20	100

figure (10) shows population according to Question

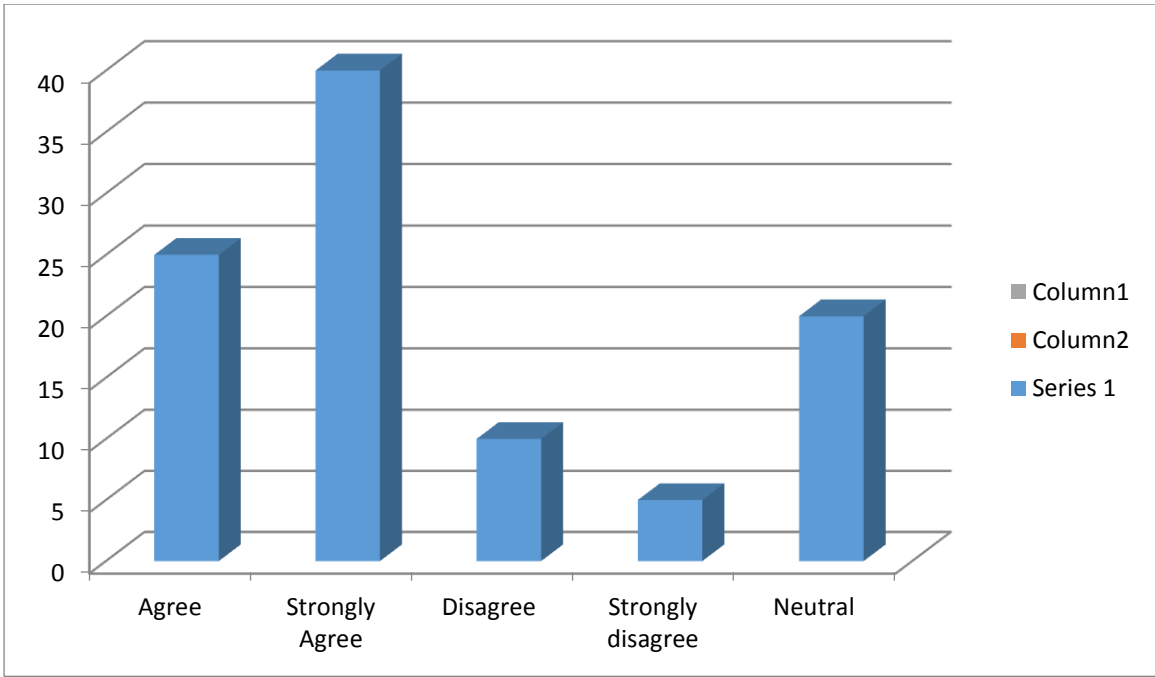


Form table and figure above we notice that the most of population answered agree with percent (35%), while (45%) of them answered Strongly agree, while (5%) of them answered Strongly disagree, while (15%) of them answered Neutral.

Table (16) Teachers of EFL should consider MALL as appositve learning tool:

Answer	Frequency	Percent%
Agree	5	25
Strongly Agree	8	40
Disagree	2	10
Strongly disagree	1	5
Neutral	4	20
Total	20	100

figure (11) shows population according to Question

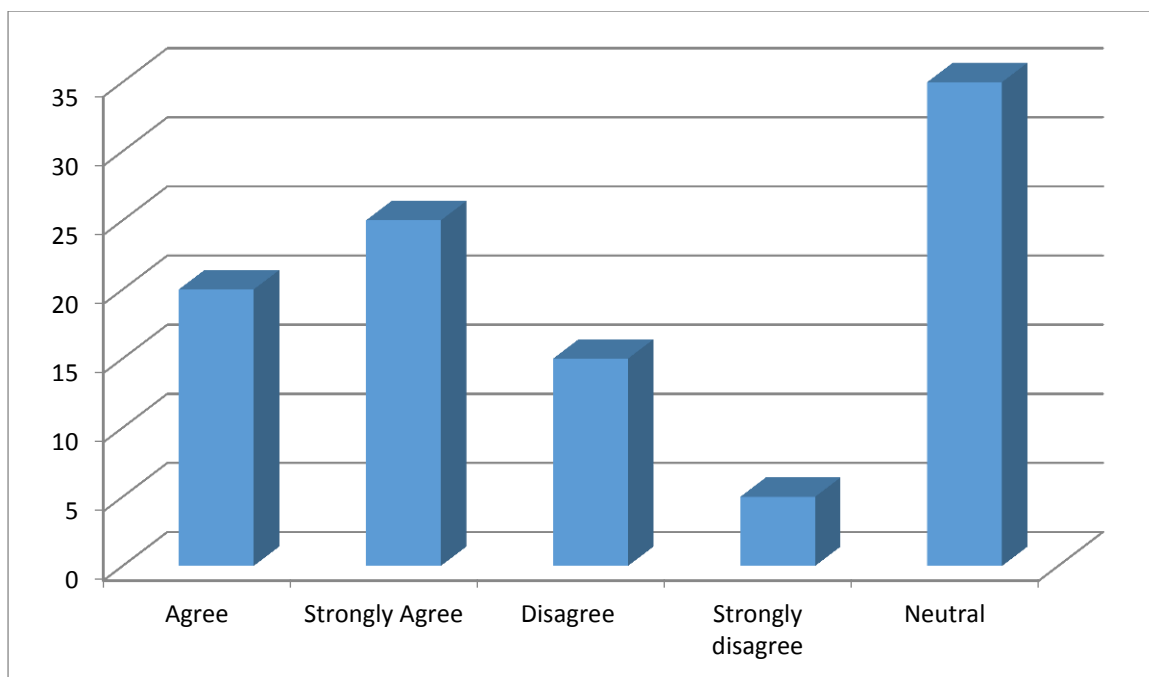


Form table and figure above we notice that the most of population answered agree with percent (25%), while (40%) of them answered Strongly agree, while (10%) of them answered Disagree, while (5%) of them answered Strongly disagree, while (20%) of them answered Neutral.

Table (17) Most of the students use smart phone learning materials:

Answer	Frequency	Percent%
Agree	4	20
Strongly Agree	5	25
Disagree	3	15
Strongly disagree	1	5
Neutral	7	35
Total	20	100

figure (12) shows population according to Question

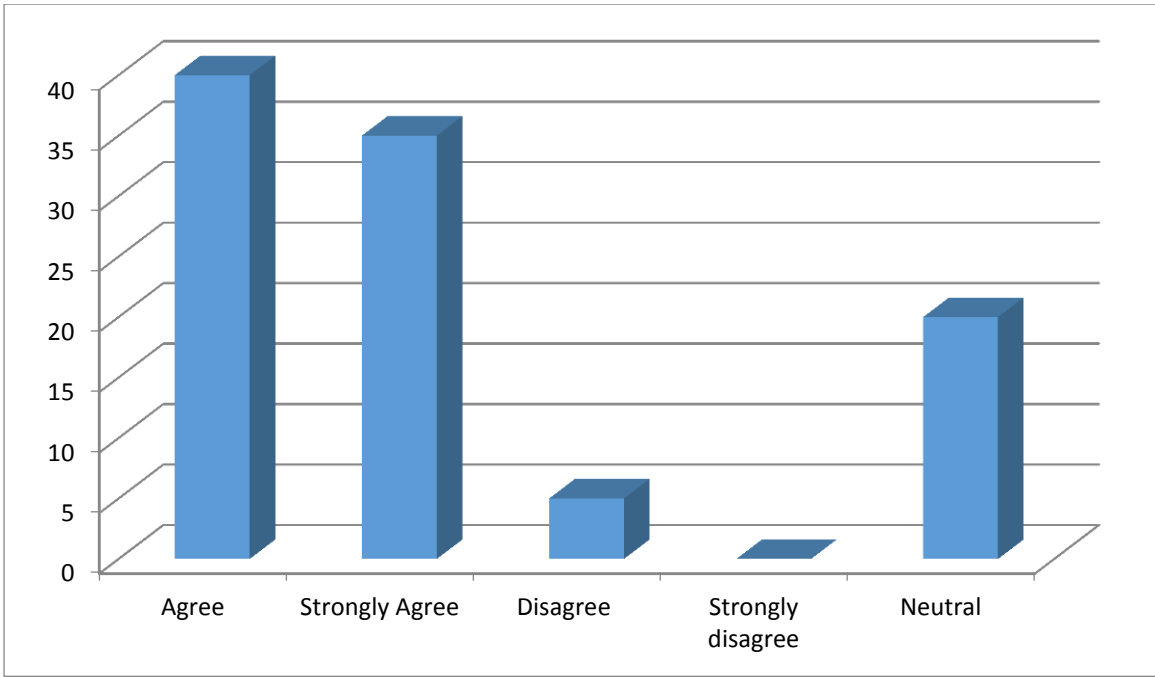


Form table and figure above we notice that the most of population answered agree with percent (20%), while (25%) of them answered Strongly agree, while (15%) of them answered Disagree, while (5%) of them answered Strongly disagree, while (35%) of them answered Neutral. University students of EFL benefit from MALL applications in their studies in their studies of English to improve their vocabulary.

Table (18) I have a mobile phone and I use it for vocabulary learning purposes:

Answer	Frequency	Percent%
Agree	8	40
Strongly Agree	7	35
Disagree	1	5
Strongly disagree	0	0
Neutral	4	20
Total	20	100

figure (13) shows population according to Question

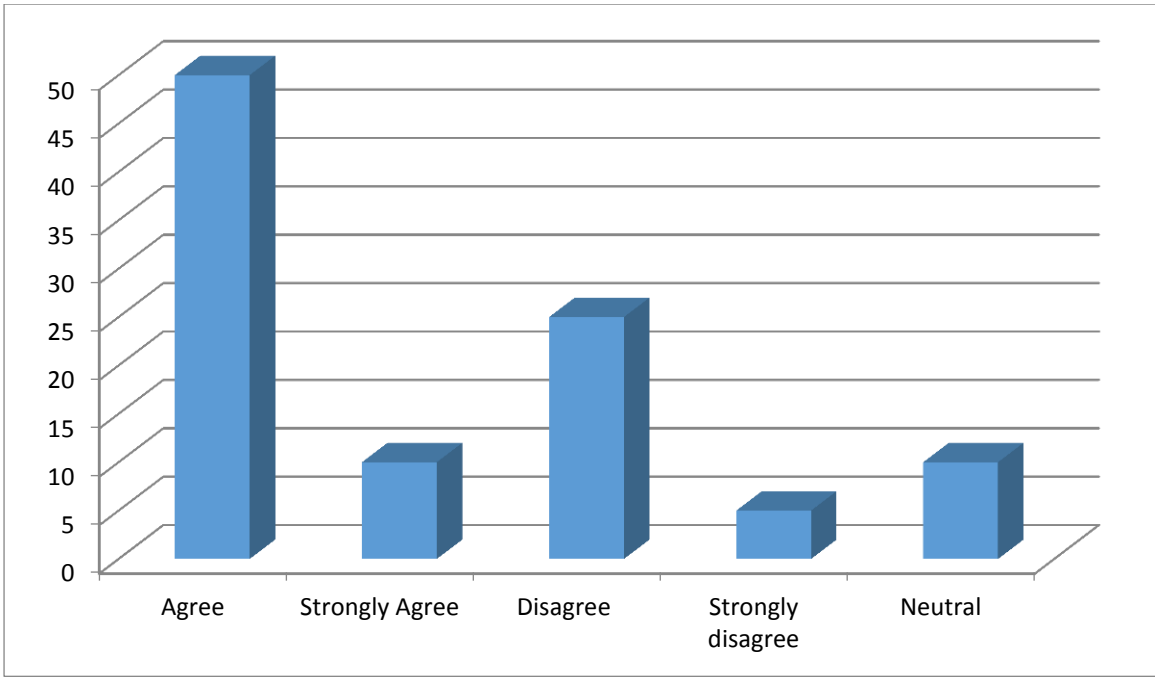


Form table and figure above we notice that the most of population answered agree with percent (40%), while (35%) of them answered Strongly agree, while (5%) of them answered Disagree, while (20%) of them answered Neutral.

Table (19) I use WhatsApp in learning vocabulary:

Answer	Frequency	Percent%
Agree	10	50
Strongly Agree	2	10
Disagree	5	25
Strongly disagree	1	5
Neutral	2	10
Total	20	100

figure (14) shows population according to Question

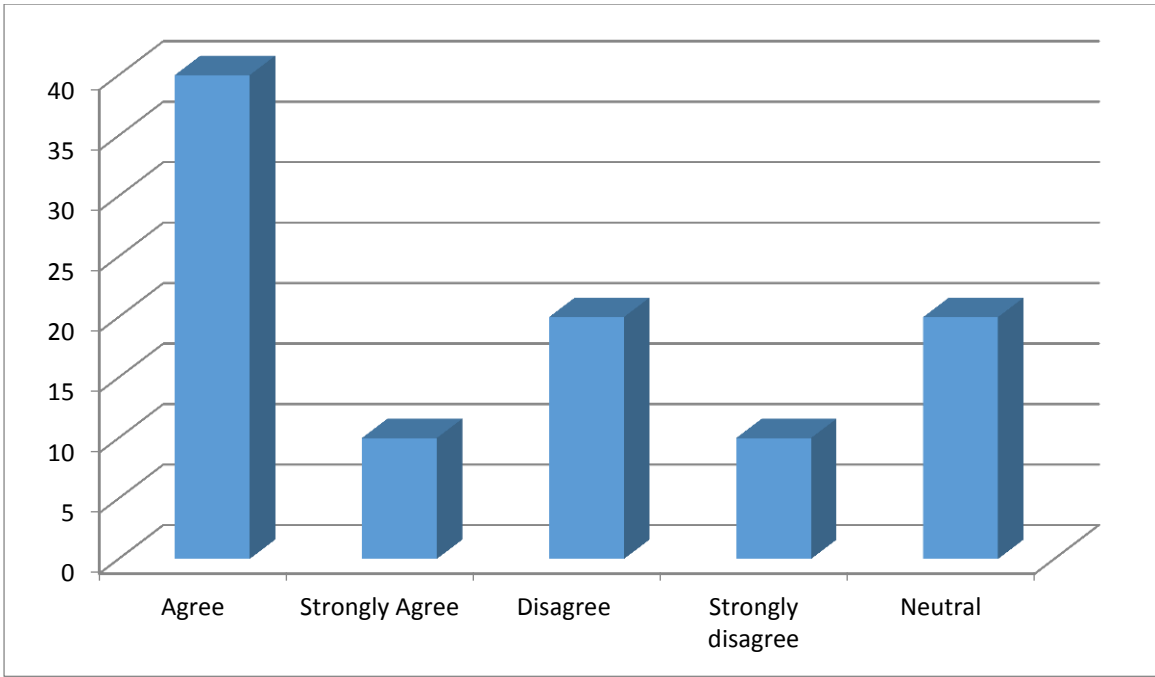


Form table and figure above we notice that the most of population answered agree with percent (50%), while (10%) of them answered Strongly agree, while (25%) of them answered Disagree, while (5%) of them answered Strongly disagree, while (10%) of them answered Neutral.

Table (20) I have no problem of validity in using smart phones learning applications:

Answer	Frequency	Percent%
Agree	8	40
Strongly Agree	2	10
Disagree	4	20
Strongly disagree	2	10
Neutral	4	20
Total	20	100

figure (15) shows population according to Question

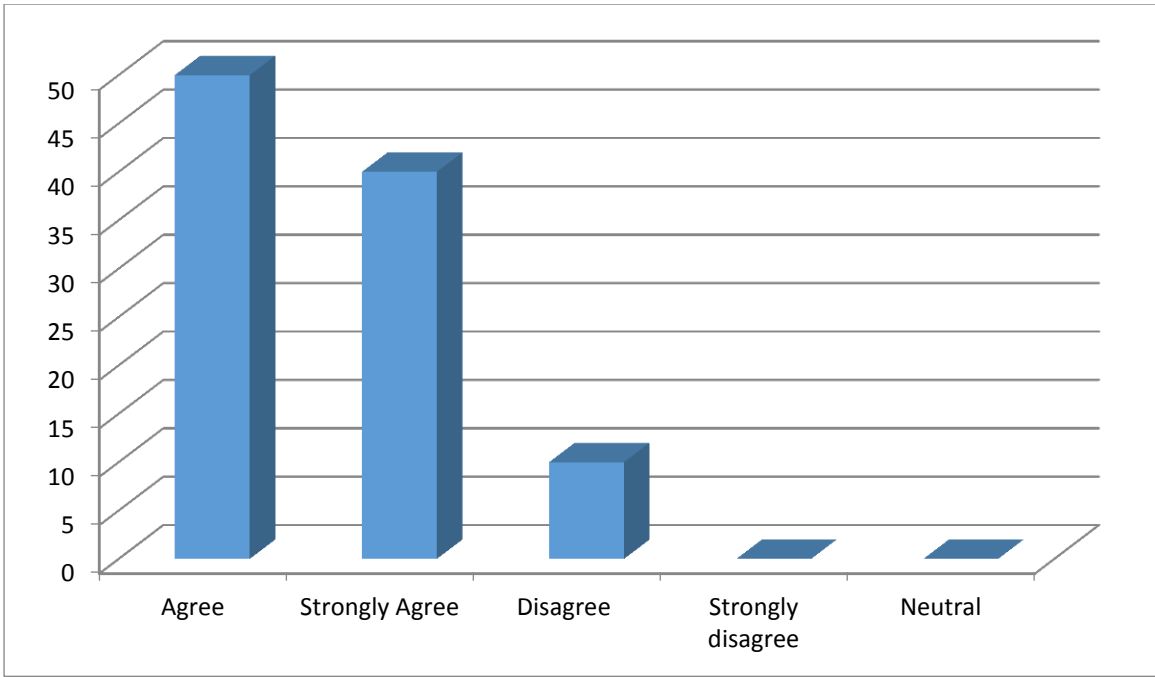


Form table and figure above we notice that the most of population answered agree with percent (40%), while (10%) of them answered Strongly agree, while (20%) of them answered Disagree, while (10%) of them answered Strongly disagree, while (20%) of them answered Neutral.

Table (21) I can understand difficult vocabulary items through WhatsApp:

Answer	Frequency	Percent%
Agree	10	50
Strongly Agree	8	40
Disagree	2	10
Strongly disagree	0	0
Neutral	0	0
Total	20	100

figure (16) shows population according to Question



Form table and figure above we notice that the most of population answered agree with percent (50%), while (40%) of them answered Strongly agree, while (10%) of them answered Disagree.

The following tables show the study’s three hypotheses and their relation to the questions of the study and the questionnaire.

The First hypothesis

Table (22) University students of EFL benefit from MALL applications in their studies of English to improve their vocabulary.

Factor one	Mean	Std. Deviation	Result
I have a mobile phone and I use it for vocabulary learning purposes	2.25	1.517	Agree
I use WhatsApp in learning vocabulary	2.15	1.387	agree
I have no problem of validity in using smart phones learning applications	2.60	1.603	Agree
I can understand difficult vocabulary items through WhatsApp	1.60	.681	neutral
Factor one Result			agree

Relying on the result of the statements in relation to the first hypothesis and in relation to first question (To what extent do Sudanese university students of EFL benefit from MALL applications as an enhancement tool for their English language vocabulary?), the result comes as agree and which is a positive indication that MALL is acceptable as a tool for learning by the Sudanese EFL university students.

The Second Hypothesis

Table (23) University student of EFL do not face problems of using MALL inside and outside their classes

Factor Two	Mean	Std. Deviation	Result
I benefit a lot when I have been sent WhatsApp learning messages by our teachers	2.15	1.348	Agree
We are sent learning materials by our teachers	2.75	1.585	agree
I sometimes have a problem of internet connection	3.10	1.651	Agree
There are some problems of authentic smart phone learning materials	3.05	1.432	neutral
Factor Two Result			agree

Relying on the result of the statements in relation to the second hypothesis and in relation to the second question (To what degree do Sudanese university students of EFL have problems of availability of MALL to enhance their vocabulary acquisition?), the result comes as agree and which a positive indication that MALL has no problems in reaching and providing EFL Sudanese university students with valuable outcome.

The Third Hypothesis

Table (24) The use of MALL for learning vocabulary by Sudanese university students of EFL is not limited

Factor Three	Mean	Std. Deviation	Result
We are allowed to use our smart phones in class such as dictionaries and vocabulary learning applications	1.70	1.129	Agree
Teachers of EFL in Sudanese's universities need to understand the benefit of using smart phone in and outside their classes	2.20	1.399	agree
Teachers of EFL should consider MALL as apposite learning tool	2.55	1.468	Agree
Most of the student use smart phone learning materials	3.10	1.619	neutral
Factor three Result			agree

Relying on the result of the statements in relation to the third hypothesis and in relation to the third question (To what extent the students are exposed to MALL in Sudanese university EFL class? the result comes as agree and which is a positive indication that MALL is not limited in use by EFL Sudanese university students.

4.3 Discussion

According to the finding, MALL has been found as a positive tool for providing EFL students with practical opportunity to practice their vocabulary learning. Nowadays students are different from the late educational years. The use of mobile phone in learning languages has become a norm because the students use their mobile devices anywhere anytime. Therefore, teaching and learning have changed. The students can be sent learning materials and they can respond to that immediately and timely, in their way to their houses or at home during their social time. WhatsApp as a social media has impacted the field of learning, at least EFL can practice vocabulary when they write to their mates in English.

Conclusion

- 1- Today's learners have great expectations to use technology through a school or a language course (Sharama-2005). That indicates a lot. Mobile phone can play that role if used practically through its facilities; the camera, SMS, voice recorder and its other useful features to learn vocabulary.
- 2- Mobile Assisted Language Learning should be taken seriously by the instructors of English as a Foreign Language for the sake of adequate vocabulary learning of their students.
- 3- Social media has to be used to its maximum for the sake of learning vocabulary by EFL learners, among them EFL students.
- 4- Initiatives such as of the African-Arabian Conference towards intelligent education should be supported. Technology has invaded education positively and that of no doubt support the use of MALL in High Education.
- 5- EFL instructors have to create suitable applications in order to ensure the credibility of the sources used by their students.
- 6- Learners of EFL can be directed to use authentic applications for their learning of vocabulary.

CHAPTER FIVE
MAIN FINDINGS, CONCLUSION, AND
SUGGESTION

5.0 Introduction

This chapter illustrates the conclusion, the result, the recommendations and the suggestions for further studies.

5.1 Conclusion

According to the obtained findings, the students who attended the experiment showed greater tendency towards using their smart phones for vocabulary learning purposes. As a result, the need for using smart phones in learning languages such as English for EFL students has become an essential learning priority because of the wide spread of different types of mobile technologies and their accessibility anytime anywhere. Most of the students can be hardly ever found without being in contact with their mobile devices utilizing them in variety of ways. The students can use dictionaries and learning applications or even the social media to practice their language. WhatsApp as an affiliated app to MALL has been used in this study to check the ability for such facilitator to provide the students of EFL with authentic learning materials. It has been proved that such learning tool can have the attention of EFL students because it is autonomous, modern and easy utilize with capability of providing pedagogical means of learning.

5.2 Result

The result of the study according to the statistical figures, showed a number of factors. Firstly, the third level students of English at Comboni College awareness of phrasal verbs has increased slightly after they were given the post-test. That means the use of WhatsApp SMS benefited them and proved the possibility of using such technologies in learning languages. Secondly, most of the students agreed upon using their mobile phone in order to learn vocabulary based on the fact that they use different learning applications directly or indirectly most off the time. Finally, gender, nationality, age and their marks in English in the high school certificate have no greater effect on their consideration of mobile phone as an effective learning tool.

5.3 Recommendations

1-Nowadays, mobile technologies cannot be avoided in the field of learning vocabulary. As a result, the students of EFL should be encouraged to invest a considerable portion of time to use their mobile phones practically for the purpose of learning.

2- Mobile language learning applications should be guided by the teachers to allow sound learning atmosphere by EFL students.

3-Teachers of EFL should highly consider the importance of sending learning materials to their students. That in itself motivates the students to learn more efficiently.

4-Universities should make wireless internet available in their campuses. Clearly, it is not available for most of the students to pay for the internet charges.

5- WhatsApp and the other available learning apps can be used directly and indirectly in learning of English vocabulary. In spite its social use, it can play a crucial role in providing authentic learning atmosphere. Teachers of EFL should make use of a such in different ways for the benefit of their students.

6- EFL students should be enlightened on the use of Mobile Assisted Language Learning role for their vocabulary studies.

7-Sudane university students have to be given more freedom in using their mobile devices in class and being equally treated by sending them learning SMS.

5.4 Further Studies Suggestions

1-Teachers of EFL should be targeted as a field of study for the purpose of understanding their tendencies toward using technologies in teaching. If they are fully aware of MALL benefits, they will exploit it effectively for the sake of their students.

2-More investigations on the capabilities of smart phone in learning vocabulary and paying attention to the pedagogical content of the learning apps.

3-Mobile Assisted Language Learning does not merely refer to smart phones. It refers to any device that has the ability of being portable such as PCs, laptops

PDAs, and such categories. Thus, different areas of research can be focused at as facilitators that has a characteristic of portability to provide authentic language learning provision.

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Appendices

Appendix1

Affiliated online web sites on phrasal verbs that has been used in the study.

[-https://www.home.com/tag/phrasal-verbs/page3](https://www.home.com/tag/phrasal-verbs/page3)

English language remedial web site provider vocabulary issues.

[-https://www.woodwarenglish.com/lesson/take-to-phrasal-verb-meanings-example/](https://www.woodwarenglish.com/lesson/take-to-phrasal-verb-meanings-example/)

An English language web site that provides educational services on English language learning. Its services revolve around grammar, vocabulary, free English courses and teacher resources.

[-https://www.7esl.com/collocations-with-get/](https://www.7esl.com/collocations-with-get/)

An online English language learning web site which affords learning facilities including vocabulary.

[-https://www.pinterest.comlpin/677862181392479337/](https://www.pinterest.comlpin/677862181392479337/)

A commercial learning web site that delivers different learning materials for learning English language and other learning issues.

[-https://www.englishteamdev.com/phrasalverbs](https://www.englishteamdev.com/phrasalverbs)

A useful learning web site that provide learners with immediate remedial for English language issues. Its tutors are ready to the handle language problematic issues.

[-https://www.englishlanguageclub.co.uk/phrasal-verbs-look/](https://www.englishlanguageclub.co.uk/phrasal-verbs-look/)

An affiliated English language web site for learning which is dedicated for learning English language skills online.

[-https://www.content.cambly.com/2017/01/06/lesson-14how-to-learn-and-use-phrasal-verbs/](https://www.content.cambly.com/2017/01/06/lesson-14how-to-learn-and-use-phrasal-verbs/)

A web site that is designed for reviving ESL leaners' level of English

[-https://www.pinterest.at/pin/104356916351491921/english_academy](https://www.pinterest.at/pin/104356916351491921/english_academy)

A commercial learning web site that delivers different learning materials for learning English language and other learning issues.

[-https://www.teachespayteachers.com/product/phrasal-verbs-health-3105813](https://www.teachespayteachers.com/product/phrasal-verbs-health-3105813)

An educational resources web site.

[-https://www.englishstudyhere.com/phrasal-verbs-read/](https://www.englishstudyhere.com/phrasal-verbs-read/)

- Skills based web site for ESL learners.

[-https://www.slideplayer.com/slide/8551205\(modern family\)](https://www.slideplayer.com/slide/8551205(modern-family))

An English language learning ready-made slides web site

Audio Files at:

[-https://www.vocapp.com/phrasal-verbs-a-d-english-vocabulary-flashcards-1025](https://www.vocapp.com/phrasal-verbs-a-d-english-vocabulary-flashcards-1025)

A learning web site mp3 web site that is dedicated for English language.

Other sources

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Oxford dictionary

Seidle Jennifer & Mc Mordie (2000). English Idio

Appendix 2

Pre/Posttest

Dear student,

You are kindly requested to choose the correct answers of the following test. The test is based on 20 sentences from the common English phrasal verbs.

1. We-----at 7am this morning.
a) got up b) got out c) got up
- 2 I don't want to cook tonight- let's-----
a) eat out b) eat in c) eat up
- 3.The taxi -----on the way to the airport and we missed our flight
a) broke off b) broke up c) broke down
- 4.I'm going to-----for a new computer.
a) save up b) look up c) wait up
- 5.Do you-----ghost? (you are sure they exist)
a) make b) believe in c) tell off
- 6.I was very unhappy yesterday, but I have-----today.
a) looked up b) cheered up c) cheered on
- 7.I 've -----smoking. (Stopped)
a) given back b) given away c) given up
8. We -----from Rom at 7 am. (We started our journey at 7am)
a) set in b) set up c) set off
- 9.The horse race has been ----- . (the horse race has been cancelled)
- 10.We -----in small flat in London.
a) grew up b) grew into c) grew on

11.They have decided to-----their wedding until John has recovered from his accident.

a) put on b) put out c) put off

12.He -----petrol on his way to work

A) ran off b) ran out c) ran over

13.Don't drop your coat on the floor-----

a) hang up b) hang it up c) hang on

14. We have bought a new house and we 're -----next week.

a) moving in b) moving a long c) moving on

15.She's recently -----photography. (She recently started doing something)

a) taken up b) taken out c) taken over

16.She ...the names of the winners.

a) read back b) read out c) read up on

17.My friend and I -----over money, (we stopped been friendly)

a) fell over b) fell in c) fell out

18.Dinnaer is ready. Go and -----please. (American- clean your hand)

a) wash down b) wash up c) wash out

19.-----and get dressed, you are late for school.

a) hurry up b) hurry on c) hang on

20.I'm in London on Wednesday, let's-----for lunch.

a) meet with b) meet up c) hang around

Appendix 3

Questionnaire

Dear student you are kindly requested to fill the following questionnaire for a research purposes

Statement	Agree	Strongly Agree	Disagree	Strongly Disagree	Neutral
Sudanese university students of EFL benefit from MALL applications in their studies of English to improve their vocabulary.					
1-I have a mobile phone and I use it for vocabulary learning purposes					
2-I use WhatsApp in learning vocabulary					
3-I have no problem of using smart phone learning applications					
4- I can understand difficult vocabulary items through WhatsApp					
Sudanese university students of EFL do not face problems of using MALL inside and outside their classes.					
5-I benefit a lot when I have been sent WhatsApp learning messages by our teachers					

6-We are sent SMS learning materials by our teachers					
7-I sometimes have a problem of internet connection					
8-There are some problems of authentic smart phone learning materials					
The use of MALL applications for learning vocabulary by Sudanese university students is not limited.					
9-We are allowed to use our smartphones in class such as dictionaries and vocabulary learning applications					
10-Teachers of EFL in Sudanese universities need to understand the benefit of using smart phone in and outside their classes					
11-Teachers of EFL should consider MALL as positive learning tool					
12-Most of the students use smart phone learning materials					

