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The Impact of Mobile-Assisted Language Learning (Application) on EFL Student's Vocabulary Learning: A Case Study of Third Year Students at the Department of Foreign Languages. Mila University Center

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Dedication

*First of all, I give my gratitude to the most graceful and most compassionate **Allah** the*

almightily that has provided me with uncounted blessings to finish this work.

I dedicate this work to:

To my mother **RANIA** and my father **M'HAMED**, the source of happiness and success in my

life.

I would like to thank them for their love, patience, support, and prayers which help me a lot

to complete this work.

I am grateful for the support you provided

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"I miss you brother, wish you were here"

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My three little nephews Tamim Lyne, and Miral

Abstract

Mobile-assisted Language Learning is a learning method that is increasingly gaining popularity due to the widespread of various mobile technologies used to enhance language learning. Therefore, this study highlights the current use of mobile devices applications among EFL students and its impact on learning vocabulary in the Algerian context. To do so, an experiment was conducted with third-year English students at Abdelhafid Boussouf University Canter, in order to examine the research hypothesis that if students use applications provided in mobile-assisted language learning their vocabulary acquisition will be increased. The experiment is supported by two questionnaires: the first was administrated before we start the experiment to see whether students rely on applications to enhance their vocabulary and which one is appropriate for them. The second questionnaire was administered to oral and written expression teachers at the same department to know their attitudes towards the use of mobile assisted language learning in general and mobile applications in particular.Indeed, the period in which the experimental participants received the instruction has resulted in higher mean scores for the post-test in comparison to the mean scores for the pre-test. Likewise, teachers' responses to the questionnaire point to their agreement on the suitability of using mobile applications as supporting tools to help EFL Algerian students improve their vocabulary acquisition .

List of Acronyms and Abbreviations

Apps: Applications

BBC: British Broadcasting Corporation

CAI: Computer-assisted Instruction

CALL: Computer-assisted Language Learning

EFL: English as a Foreign Language

E-Learning: Electronic Learning

L2: Second Language

MALL: Mobile-assisted Language Learning

M-learning: Mobile Learning

E-learning: Electronic Leaning

SLA: Second Language Acquisition

SLL: Second Language Learning

Vocab: Vocabulary

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General Introduction

1. Statement of the Problem

Mobile devices have recently invaded every aspect of our lives. Their use has been shifted from tools for communication to tools for entertainment and education. To date, mobile technologies are developed to have the ability of computer. But, thanks to their small size these technologies are more popular than computers. The widespread of mobile devices and their ability to handle multifunction tasks have raised the motivation of some scholars to investigate the potential of these technologies for language teaching and learning. Recently, a number of researches have been conducted on mobile assisted language learning, however little investigation is done in Algeria.

The present research focuses more on the significant role MALL plays in acquiring vocabulary in the Algerian context, precisely at Mila University Center. Mobile devices are being used to support vocabulary learning. It is noticed that EFL students are moving away from the traditional methods. Therefore, they tend to maximize the benefits of their mobile devices. Thus, it becomes pivotal to conduct a study in order to explore the role of mobile learning in the process of vocabulary acquisition, especially in the Algerian context.

2. Aim of the Study

The study aims at discovering how students' vocabulary learning can be improved by the use of mobile applications and which one is more effective to be used to support vocabulary learning process.

3. Research Questions

Do students rely on m-learning via apps to enhance their vocabulary?

Does the use of mobile have any impact on the student's vocabulary learning?

4. Hypotheses

1. The majority of students in our population do not use MALL to learn vocabulary.

2. If students use applications provided in mobile assisted language learning their vocabulary acquisition will be enhanced.

5. Significance of the Study

This study tries to find out more about how mobile learning is becoming increasingly integrated within EFL students' daily life, especially in learning foreign languages. In a similar vein, the current study attempts to investigate the materials students are using to enrich their English vocabulary. Hence, the results of this study will serve as a basis stimulus for students in order to start thinking beyond traditional notions of schooling. Also, the results of this study would give the student the opportunity to well-understand the concept of MALL and its impact on the formal learning.

6. Research Methodology

In order to answer the research questions stated earlier and to test the above hypotheses, the data needed is collected by two research means. First, a students' questionnaire was administered to (150) third year EFL students at Mila University Centre. The results are calculated to choose the appropriate sample for the experimental part. Students who shared the same and the appropriate application (the one that advocate the four skills: listening, speaking, reading and writing) were selected. Second, Students are supposed to sit for a pre-test to test their knowledge of a set of key vocabulary. The experimental group will undergo a new experience of learning using their mobile phones to acquire some vocabulary items.

After six sessions of teaching and learning, the students set for the post test in order to examine whether the use of mobile apps has any positive effect on students' rate of learning and efficient use of new vocabulary.

7. Sample

The research work will rely on a conveniently chosen sample of 3rd year students English majors at the department of foreign languages at Mila University Centre. Choosing this specific population is due to their inefficiency in learning and using new English vocabulary. At this level, students are supposed to have rich vocabulary and their use of such vocabulary should be frequent.

8. Structure of the Dissertation

The current study consists of four main chapters. The first and second chapters represent the literature review.

In the first chapter, the study reviews the literature related to the use of technology tools in teaching language and more particularly in teaching English; CALL in the twenty-first century and MALL (Mobil Assisted Language Learning) in the educational sphere.

In the second chapter, a literature review on vocabulary acquisition will be provided. In addition to defining vocabulary, the chapter provides the most essential aspects related to the issue of learning English vocabulary.

Finally, the last chapter concerns the investigation of the effectiveness of Mobile-assisted Language Learning with regard to vocabulary acquisition. The chapter start with presenting the rationale for research approach and describing the research tools. Then, data collected was carefully analysed, interpreted, and discussed. Finally, the chapter ends with some pedagogical drawn from the findings of the study.

Chapter One: Mobile Assisted Language Learning (Application)

Introduction

This chapter attempts to present a brief account of mobile learning as well as the different theories and approaches to MALL .Furthermore, it elaborates upon the authentic materials provided by some language applications for the sake of improving students' vocabulary learning. Different applications are described with the aim of finding out how they contribute to students' vocabulary learning.

1. From Computer-Assisted Language Learning to Mobile-Assisted Language Learning

Every innovation in the world of technology contributes to the existing applications and makes them more efficient and more practical to use. The evolution of mobile learning is clear proof of this statement. Current developments in mobile technologies have contributed greatly to present CALL and e-Learning devices. In 50 years of rapid progress, CALL was greatly empowered by the expansion of e-Learning (electronic or web-based learning) in the 1990s. A decade after this outstanding innovation, M-Learning (mobile learning) enabled CALL users to access the information whenever and wherever they are needed. These attempts were all perceived as breakthroughs by educators and scholars. This process illustrates the swift evolution that the current technologies have undergone.

2. Definition of Mobile-Assisted Language Learning (MALL)

Trifanova et al (2004) define mobile devices as "...any device that is small, autonomous and unobtrusive enough to accompany us in every moment." Typically, m-learning is identified both by being available "anywhere, anytime" (Geddes, 2004) and by the tools used: mobile learning can perhaps be defined as "any educational provision where the sole or dominant technologies are handheld or palmtop devices." (Traxler, 2005), although in reality it is more usually confined to being one aspect of the provision. For our purposes, then,

'mobile learning' refers to learning mediated via handheld devices and potentially available anytime, anywhere. Such learning may be formal or informal.

MALL focuses on the use of mobile technology in language learning. In MALL environment, there is no need for learners to sit in a classroom or in the front of a computer to study. Actually, MALL can be viewed as an ideal solution to language learning barriers in terms of time and place (Miangah & Nezarat, 2012).

Mobile technology gives a mixture of flexibility, accessibility, and interactivity. Unlike typical classroom instrument This combination can facilitate language learning through the access of authentic, contextualized resources, for instance, it offer for students the opportunity to connect to anteriority learned knowledge, acquire new knowledge and further develop problem-solving skills(Navarrete & Wivagg, 2014).

MALL features are provided huge benefits' for students'; according to Banister (2010) learners can use different types of apps on mobile devices to watch online tutorial, read material, and listen to English records, they can stop or fast forward through materials as their desired, giving them the independent control based on the pace they receiving information, it permits students to decide their own learning processes. According to Kukulska & Shield (2007), MALL can encourage collaboration and co-construction of knowledge. Students had to find information and share it with their peers so that they can build up an overall understanding of a realistic problem.

Kukulska and Shield (2007) focused on the impact on the listening and speaking, and they discovered: "MALL is expanding at the speed of two or three years from a teacher-learner, text-based education environment to one that is beginning to support multimedia, collaborative listening and speaking activities and to allow students to co-construct knowledge to figure out problems and fill information gaps." Also stated that comprehensively reported mobile devices have effective influences for language learning

(cited in Qiaochu & Xuan 2014). Furthermore, some researches pay attention to the pedagogical methods that brought by using apps in mobile devices. These mobile devices have an auto-action for collaborative approach and self-regulated approach. For example, exchanging the academic ideas on Internet forum for discussing a project with partners on mobile phones might be encouraging collaboration (Chinnery .G, 2006).

3. Approaches for MALL

A large amount of projects in mobile learning applications have been initiated. To investigate how these projects are underpinned by different learning theories and paradigms will gain educators and technical developers a deeper understanding of mobile learning from a pedagogical perspective (Keskin & Metcalf, 2011). The existing learning theories in relation to mobile learning include behaviourism, constructivism, problem-based learning, context awareness learning, collaborative learning, and communicative approach, etc. (Keskin & Metcalf, 2011). Naismith et al (2004) have succinctly identified four main theories and areas of learning relevant to learning with mobile technologies. They are behaviourist, constructivist, collaborative, and Communicative approach**.**

3.1. Behaviorist Theory

In the behaviorist paradigm, learning occurs and facilitated through the appropriate reinforcement of an association between a particular stimulus and a response. In mobile learning, the association happens which forms the reinforcement (Naismith *et al*., 2004). This paradigm adopts a transmission model that information is transmitted from tutor (the mobile devices) to the user for learning to take place. Despite the limited displays of mobile devices, there is a popularity of using mobile devices as a medium to deliver learning materials. In language learning application through mobile phones, 'drill and feedback' is one of the most popular activities (Keskin & Metcalf, 2011). Other activities could be test, practices, quiz, *etc*. Some scholars argue that behaviorist may encourage learners to only repeat and memorise

learning content. However, reinforcement could stimulate learners to respond actively rather than receiving information passively (Gray & MacBlain, 2012).
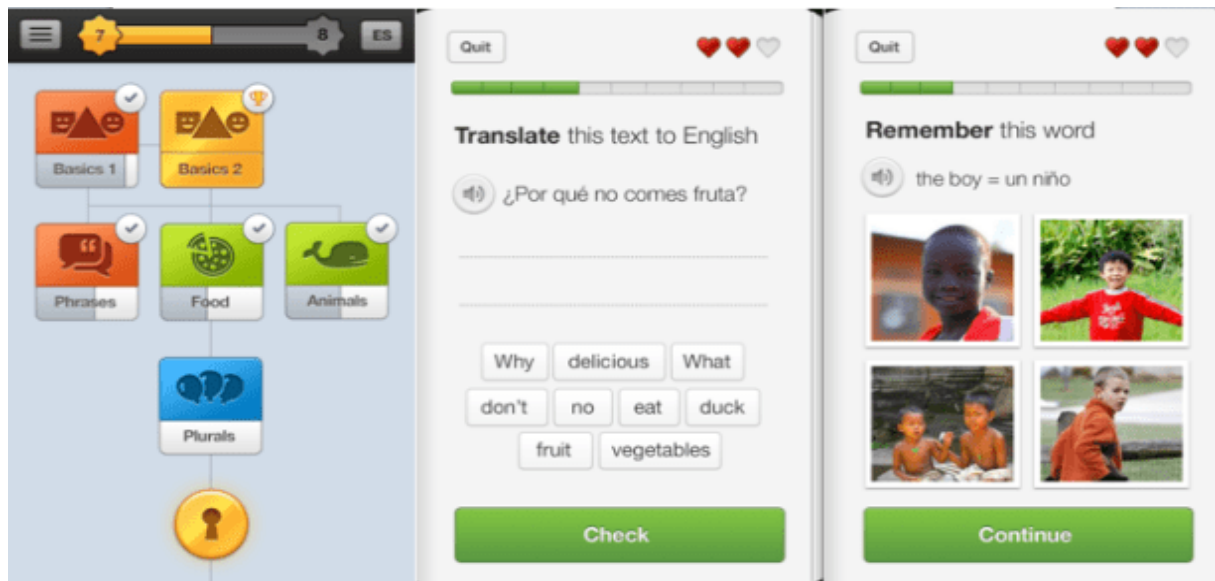
Figure 1: the mobile application present learning materials, obtain responses from learners, and provide appropriate feedback http://www.mobilecomputingtoday.co.uk

3.2. Constructivist Theory

With regard to constructivist learning, learners actively construct new concepts or ideas based on their previous and current knowledge (Bruner, 1966). Learners are encouraged to be active constructors of knowledge. Learning is facilitated when challenging leaners with problems or conditions to be solved rather than delivering direct information (Kadirire, 2009). Mobile devices enable learners to be embedded in a realistic context and provide them with supporting tools at the same time (Naismith *et al*., 2004). Learners then actively construct their own knowledge and build interactive models. The constructivist paradigm focuses on context and content dependent mobile learning such as questions for exploration and problem solved and decision making applications, as well as collaboration and interaction in mobile learning like communication via mobile phones or interaction between learners (Keskin & Metcalf, 2011).

Figure2: mobile learning apps provide questions for exploration and problem solved and decision making based on the constructivism paradigm https://www.quora.com/

3.3. Collaborative Learning

Collaborative learning is another learning theory that considered to be linked to mobile learning (Naismith *et al*., 2004). Collaborative activities promote, facilitate, and enhance learning through social interaction and collaboration between students (Keskin & Metcalf, 2011). Mobile devices enable learners to not only share data and messages between devices, but also communicate via a shared data network. Another theory that is specifically relevant to collaboration using mobile devices is conversation theory, which describes learning in terms of conversations between different systems of knowledge (Sharples, 2002). Effective learning occurs when learners can converse with each other and share their knowledge of the world. For example, if two people can make sense of each other's knowledge by mutual communication, they would be able to share their understanding of the world and learning happens simultaneously. However, mobile technologies may have no difficulty in demonstrating ideas or providing advice at the level of descriptions, there is a limitation for them to explore students' misconceptions for offering practical advice at the level of actions.

Nevertheless, the technology with no doubt can provide a shared learning environment for learners to communicate with other

Collaborative learning helps the learners to support, motivate and evaluate each other to achieve substantial amounts of learning, the property which is almost absent in other kinds of learning. One can attain a good collaborative approach simply by using a mobile device as an environment for learning, which is, of course, highly dependent of the users than the devices. Devices, in fact, act as pencils and calculators which are the basic equipment in a learning process of a student. What is important, here, is the communication between the learners, as an important factor in language learning is the interaction in the target language (claimed Yang Soon 2005).
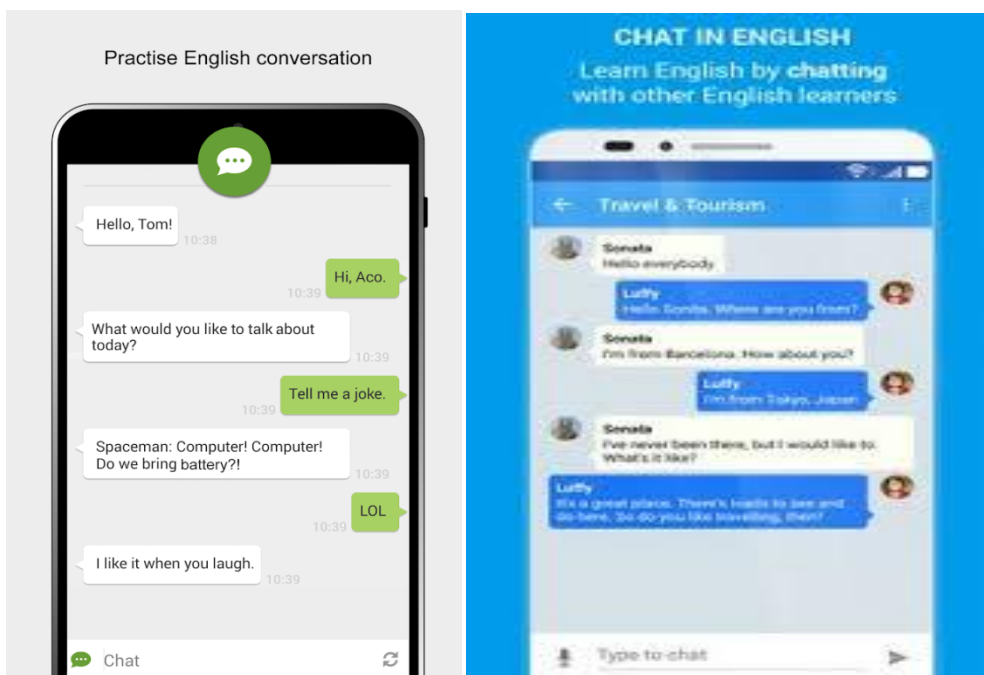
Figure3: an example of chatting rooms in BBC learning English application for

Collaborative Learning (Google play store)

3.4. Communicative Approach

Beatty (2013) claimed that mobile language learning applications may provide the potential to support the communicative approach. The latter is one of the current popular approaches to EFL as it encourages learners to interact with others, communicate, and

negotiate language tasks. According to Zhang (2010), the communicative approach concentrates on autonomy of learners and authenticity of materials. Pictures and videos, namely the ones shared in social media, become stimuli for conversations and negotiations of meaning.

4. Advantages of Mobile Learning

According to Beatty (2013), "mobile phones are the most powerful communication medium among all modern communication devices even richer than email or chat as it can act as a learning device despite its technical limitations. With such a learning device the learner controls the learning process and progress in his/her own space based on his/her cognitive state."

Klopfer (2012), (cited in AL-Qudaimi, 2012) state the following properties of mobile devices:

- **Portability**: such devices can be taken to different places due to small size and weight.

- **Social interactivity**: exchanging data and collaboration with other learners is possible through mobile devices.

- **Context sensitivity**: the data on the mobile devices can be gathered and responded uniquely to the current location and time.

- **Connectivity**: mobile devices can be connected to other devices, data collection devices, or a common network by creating a shared network.

- **Individuality**: activities platform can be customized for individual learner.

5. Mobile learning and motivation

According to Kukulaska & Gardner (2013, p.15) "motivation to learn a second language has long been concern that SLA educators face in Singapore, the practice of bilingualism has promoted learning English as the first language while the ethnic mother

tongues are treated as second languages." Consequently, the mother tongue language teachers, including Algerian language teachers, are facing challenges in motivating students whose proficiency levels in their mother tongues are declining. Finding pedagogically engaging ways to foster students' motivation is thus an important issue. Technology-enhanced learning that helps students connect their language learning endeavors to their daily life has been explored as one possible avenue for improving students' learning motivation. Mobile technologies can enhance authentic learning as they enable students to go beyond the classroom into the real world to learn (Kukulska-Hulme & Traxler, 2013). Vocabulary, which includes mainly verbs, nouns, and adjectives, can be more readily found in the real world than within the classroom confines (Pavlenko, 2009).

6. Mobile Applications

According to Liu and He (2014, p.10) "A mobile app, as a computer program, is designed to run on mobile phones, tablet computers (like iPad) and other mobile devices. The word "app" is a shortening of the term "application software". Apps are easily available through application distribution platform called App Market, and these apps are typically operated by the owner of the mobile operating system, such as the Apple App Store, Google Play, Windows Phone Store, and BlackBerry App World."

6.1. Criteria for English-learning apps

According to Rob James (2013)," the easy availability of apps on mobile devices means that students are increasingly turning to online resources for learning". When encouraging college students on how to best use mobile apps for their English learning, it's important to emphasize critical thinking, and being able to evaluate different sources .At the same time, it's also worth considering the benefits of apps that can help students to organize and compare different sources as part of projects and revision. Unlike similar information found in books, newspapers or television broadcasts, information available on mobile apps is

not regulated for quality or accuracy. Internet has its problems. When using information online as an English learning resource, there are some criteria about the online English learning resources that need to be mentioned.

Practical criteria for English resources were designed by Tomlinson (2010). Some of them are as the following:

- English materials should contain enough spoken and written text.

- Language input in materials should be contextualized.

- Learners should be exposed sufficient samples of language in authentic use.

- English materials should include activities that provide critical thinking and encourage learners to visualize.

- English materials should include interesting and engaging tasks.

According to Howard and Major (2004), a series of specific guidelines was listed for online English resources:

- Online English resources should be stimulate interaction and is generative.

- Learners are encouraged to develop learning skills and strategies when they use online English resources.

-Online English resources should link to each other to develop a progression of skills, understandings and language item.

-Online English resources have appropriate instructions.

-Online English resources should be attractive and flexible.

Furthermore, updatability of apps is one of the most important criteria. In terms of updatability, if students think there is a need for a change in the material depending on the needs and level of what they have learned, they can easily adapt the material (Ahmet, 2013). When self-regulated college students use their smartphones or iPads to learn English, updatability becomes more important, because English resources keep continuously updating

every day. It means that high updatability can save their time, money and energy in the progress of learning English.

6.2. Vocabulary Learning Apps

According to Natalie Boyd (2016) vocabulary learning apps has the following benefits:

-Learn anywhere and anytime: students love to revise their vocabulary quietly in their bed before sleep using language learning apps. When they travel, also listen to some podcasts and the time flies by. It's also possible to learn a language with a book, but it's so much more entertaining when using a language learning app. (cited in study. com)

-Never Waste Time Again: The advantage of a language learning app is that it is always on you. Often times, when we waste time such as waiting for an appointment or on the bus, you can get really annoyed or even stressed. In this case, student could be doing lots of other things besides studying." However, when using a language learning app like BBC learning English, Duolingo …, they will spend time productively when they have to wait around. (Cited in study.com)

-Proceed at your own pace, (without Constraints) when we study on our own with a language learning app we can follow our own rhythm. (Cited in study.com)

-Multimedia and Interactivity Makes it more entertaining a method that contains images, sound and video can be much more effective and motivating! In addition, one can obtain corrections or feedback (feedback) immediately. No need to wait for a correction. (Cited in study. com).

-It's Fun it is possible to learn while having fun, it's called the serious game, and it may well be fun. Mobile, one can imagine a crossword puzzle or game speed to revise its vocabulary, or even role playing to get into situations and dialogue. (Cited in study.com)

-It is Much More Motivating : already the fact that it is fun will help to keep learners motivated, so imagine what the content that is updated regularly, virtual coaching and statistical processions will do to their motivation . (Cited in study.com)

6.3. Best android apps for improving vocabulary

According to Joe Hindi (2018) the best apps for learning English vocabulary are the following:

6.3.1. PowerVocab

Challenging learners by involves choosing a word's appropriate meaning. If the user makes a mistakes; the app will cross out the error and shows the appropriate word very briefly. Every time learners go through word challenges, they not only test their understanding of a word but unlock more words. If they want to check the words that they got rong, the users must be brought to the word's page where they can check the pronunciation, definition, and a number of sentences showing them its correct usage. When the user click on the '*learn words'* option and the app will give a random word. They can choose to either check the word's definition or to move on to the next one until they find a word has no familiarity with. If they want to change someone, user has to tap *challenge others* option to play a 90-second game against someone on the Internet. They will get 10 point for every correct answer and lose 10 point for every wrong one. The first round users need to match the appropriate meaning to a word, but the second round really puts their knowledge of the words to the words to the test by requiring them to fill in the appropriate word in the sentence. (Hindi 2018).

Figure 4: Power Vocab App Icon and Simple of its Use (a mobile screen-shot from Google Play Store)

6.3.2. Vocabulary Builder App

Vocabulary Builder, developed by Gorodon L. Hempton is a sleek, effective, and fun way to review for tests. Build your vocabulary is a free vocabulary game designed for Android phone or tablet. The app was created on the basis that users will quiz themselves every day to learn almost 1200 most important words that was picked by expert tutor reinforced with audio pronunciation, definitions and example sentences for each of word in the app. The app has been divided into too basics: intermediate and advanced vocabulary section. As a special features of the app challenges, each level users can beat unlocks a harder one with advanced words if the users didn't guess the correct meaning he will repeated until they master them based on the repetition technique which has been shown to be a very effective memorization strategy. (Hindi 2018)
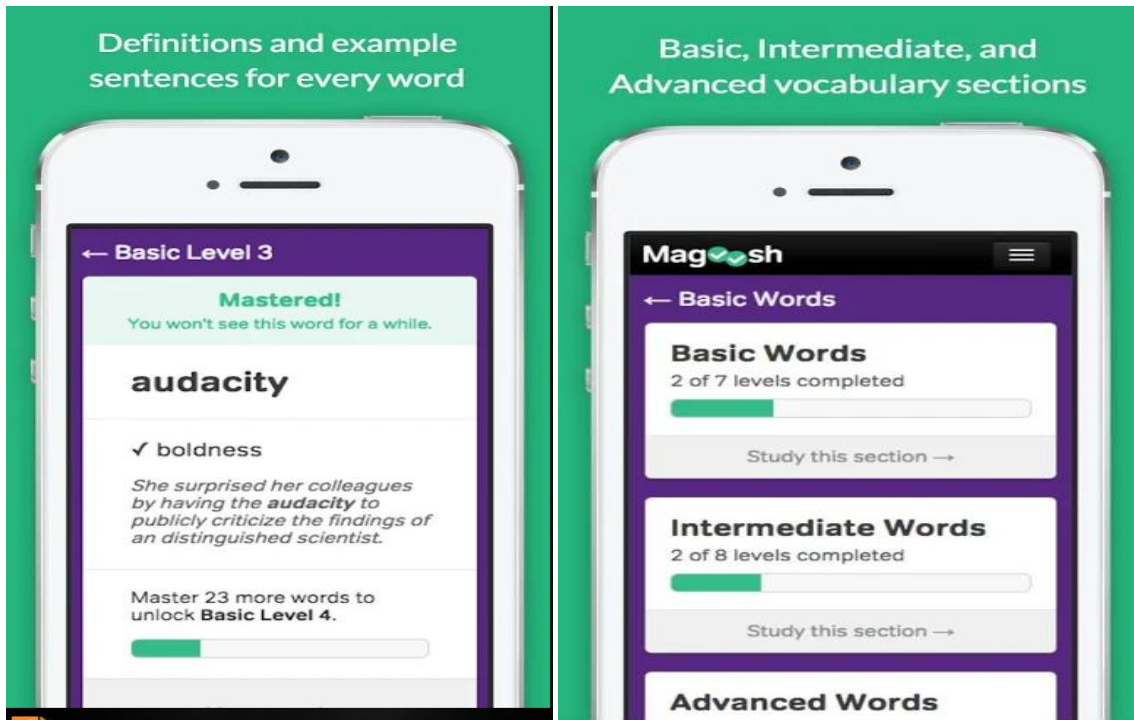
Figure 5: Vocabulary Builder App Icon and Simple of its Use

6.2.3. Test Your Vocabulary App

This app goes for more specific things such as, testing you on words that appear on tests. This app help user expends their English vocabulary. Whereas designed for some specific countries college students that getting ready for college-entry standardized tests, it may also be accustomed improved general vocabulary skills. The app contains tests that self-adjust to the user's level; in apply sessions, every words is introduced with sound, synonyms, antonyms and example sentence. The app also provided for free and it can be used in so many platforms such as iPhone, iPad and so on. (Hindi 2018)
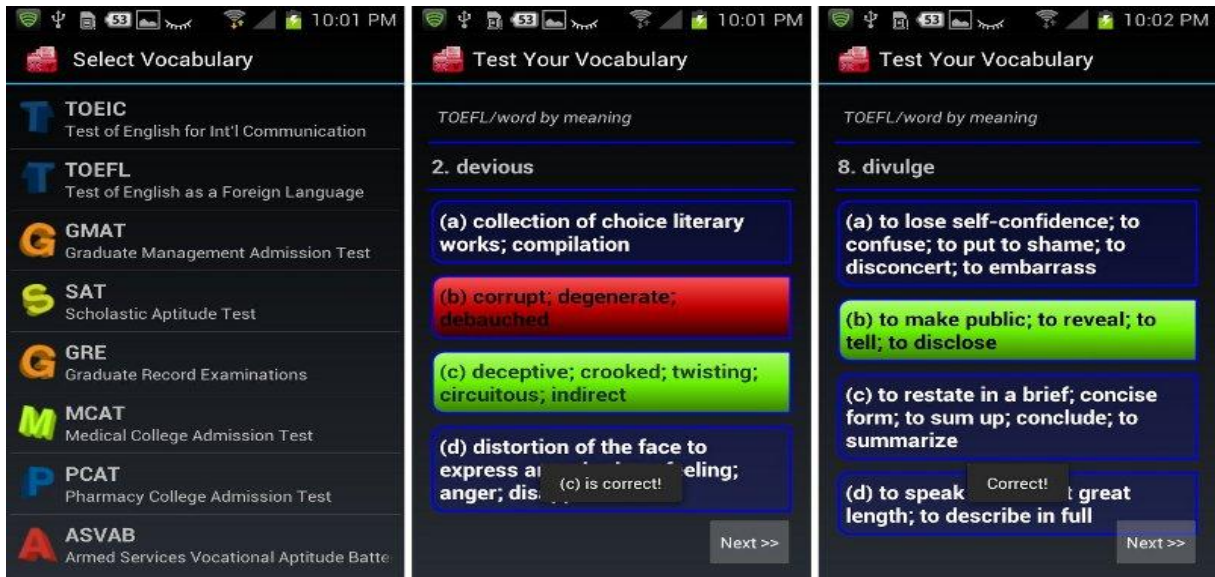
Figure 6: Test your Vocabulary App

6.2.4. BBC Learning English App

As part of the BBC World Service, BBC Learning English has been teaching English to global audiences since 1943, offering free audio, video and text materials to learners around the world. From mobile, English courses in Bangladesh and Latin America to online offer for millions of Chinese and African learners, BBC Learning English provides multimedia English language teaching materials to meet learners' needs (BBC English Learning Website).

6.2.4.1. Characteristics of BBC Learning English Application

According to BBC learning English website, "BBC learning English is a free English-language learning app designed for worldwide English language learners, the app focuses on training English-language learners' English four skills. It provides conversational practice covering a plethora of topics on different subjects such as business, travelling, shopping, and music". Based on a critical evaluation for English language apps designed by Kathleen Schrock (2014) BBC learning English app allow students the following:

a. **Import** a project from the computer version of the software.

b. **Insert** sounds, music, or photos located on the device into the creation.

c. **Export**, email, upload, or network-share the final creation.

d. **Collaborate** in real-time with others to develop the product.

e. **Utilize** a Web-based version of the tool in addition to the iPad /iPhone app.

f. **Use** the touch-screen to effectively draw, develop, type, and manipulate items.

g. **Access** written instructions or tutorials (at the correct reading level) within the app.

h. **Provide** various modalities of instructions, such as written, video, and audio.

i. **Visit** a supporting Web page which provides additional information.

j. **Curriculum connection**: the skills reinforced connected to targeted skill/concept.

k. **Authenticity**: the skills practiced in an authentic format/problem-based environment.

l. **Feedback**: The feedbacks are specific and result in improved student performance.

m. **Differentiation**: the app offers flexibility to alter settings to meet student needs.

n. **User friendliness**: students can launch and navigate within the app independently.

o. **Student motivation**: students motivated to use the app and select it to use often.

p. **Reporting**: the assessment/summary data available electronically to the student/teacher.

q. **Sound**: the music/sound in the app adds to the educational aspects of the content.

r. **Instructions**: the instructions included helpful and the correct reading level for the student.

s. **Support page**: the app's has supporting Web page provide additional useful information (http://www.bbc.co.uk/learningenglish/).

t. **Navigation:** the app use the touch-screen effectively throughout its use.

u. **Modalities:** multiple versions of instructions such as text video, and audio, included.

Figure 7: The Skills Practiced in an Authentic Format/Problem-based Environment Presented in BBC Learning English App

Conclusion

The present chapter has dealt with Mobile Assisted Language Learning (MALL) which has received increasing attention due to its results. This chapter provided a general overview about the theoretical conceptualizations of MALL in terms of the major teaching approaches and relevant learning and teaching factors. In addition to that, it highlighted how MALL contributes to students' vocabulary learning through different techniques.

Chapter Two: Vocabulary Learning

Introduction

In the field of foreign language instruction research, researchers have been searching for the most effective ways to teach vocabulary. It is commonly accepted that the knowledge of word meanings plays a key role in language comprehension. Therefore, vocabulary instruction should be effective in order for learners to use the instructed words meaningfully. One reason for this fact is that students learn more when they are actively involved.

Although it is accepted that the knowledge of vocabulary is one of the main keys for successful communication in language, some English teachers even recognizing the importance of vocabulary knowledge do not reflect about how successfully vocabulary can be presented. There are some course books used in the classroom that often disagree to what experts in methodology perceive as effective vocabulary instruction. Therefore, this chapter will seek to show how vocabulary has been investigated within SLA research.

1. Definition of Vocabulary

It is a fact that vocabulary learning is the heart of any language learning and language use. The word vocabulary itself has been defined differently by many researchers and experts in the field of teaching and learning vocabulary. It has a range of meaning some of them are the following:

The Oxford Learner's Pocket Dictionary (2003 the Third Edition) defines vocabulary in three related ways: 1) all the words that a person knows or uses: the vocabulary of three-years-old 2) all the words in a language 3) list of words with their meaning, especially in a book for learning foreign language. In the same way, Longman Dictionary of English Language and Culture (1992) defined vocabulary as "word known and used. It is also a list of words, used in an alphabetical order and with explanation of their meaning: less complement than a dictionary."

Hormby, (1989) defines the concept of vocabulary as group of words or phrases, learned and needed for speaking and writing (cited in Hadjam, 2013, p. 13)

Harmer (1999) goes beyond Hormby's definition by saying that "vocabulary is more than merely a list of words." It is words which express meaning, but meaning is a slippery concept. Some words may appear to be simple to refer one thing and therefore, easy to teach, but some words may also be difficult to teach because their meaning may change depending on the words they are attached to.

Vygotsky elucidates, "A word is a microcosm of human consciousness "(cited in Thornbury, 2002, p. 1). Tankersly (2003, p. 68) gave another definition "vocabulary is the meaning and pronunciation of words that we use in communication. It is simply the number of words we understand or can actively use to listen, speak, read or write. Each person has four different vocabularies: listening, speaking, reading, and writing."

In short, concerning the definitions above about vocabulary, what they have in common is the fact that vocabulary knowledge requires not only knowing word meanings, but it requires the usage of the words in the appropriate context and in a natural way and also includes the relationship between new words acquired and the ones already acquired. Therefore, teachers should use strategies that teach the meaning of words in context and help students associate the new vocabulary learned and what they already knew and help students memories the words and their meanings.

2. **The Importance of Vocabulary**

The linguist David Wilkins (1972, pp. 111-12) summed up the importance of vocabulary learning as the following"Without grammar very little can be conveyed, without vocabulary nothing can be conveyed." In other words, people with some useful words and expression can communicate even though they did not learn the grammar of language. In the same vein, Lewis (1993, p. 89) went further to hold that "lexis is the core or the heart of

language." Learning a language's not a matter of only memorizing the rules of that language but rather developing sufficient vocabulary in order to be able to communicate either by speaking or writing.

Obviously, vocabulary is an important element in language teaching/ learning, it is the dominant mean of communication, because words are needed in every aspect of our lives, in working, studying and even when we do not want to communicate, we are communicating silently using words. Moreover, we need vocabulary to express our thoughts and feeling in both forms (written and spoken). Words are the most needed element in literature and language, the imperialist poet claiming that words are just like drug for mankind. In addition, people who have a rich vocabulary repertoire can speak and write correctly and fluently.

Gairns and Redman (1985) show clearly the strong relationship between vocabulary and pronunciation. They explain that careful attention to pronunciation is, therefore, an essential part of vocabulary teaching if new lexis is to be used effectively, or understood without difficulty in spoken English" (cited in, Hadjam, 2013, p. 13). Consequently, paying careful attention to students' pronunciation will lead them to recognize the word's nature, position of words, forms and meaning of words, sentences structure (Hadjam, 2013, p. 14).

According to Hamer (1991), the most crucial reason behind reading texts inside the classroom and books outside it, is to provide new language input, with some reference to how EFL works. He stated that without vocabulary knowledge we cannot use grammar, since we use only words to form sentences in meaningful way. Allen (1983, p.12) also supports the same idea, "students who do not learn grammar along with vocabulary will not be able to use the language for communication."

Harmer (1991) also clearly stated that "if language structure makes up the skeleton of language, then it is vocabulary that provides the vital organs and the flesh." what he meant by this is that if someone wants to succeed in using the language effectively, they must build

strong vocabulary (Thornbury, 2002, p. 14). Furthermore, experienced teachers of EFL or ESL perceived the importance of vocabulary learning. They know that students must learn a huge number of words used by native speakers of the target language. To sum up, the importance of vocabulary is a point on which both teachers and learners agree (Allen, 1983).

3. General Principles in Teaching Vocabulary

Many theories about the process of both teaching and learning vocabulary are concerned with effective method to push learners to remember words when they need them. To achieve this objective, certain principles should be followed. Wallace (1988) listed the following principles:

- **The aim**: it is the purpose behind teaching that new vocabulary .to do so, three main questions should be raised; what is to be taught? Which words? And how many words to be taught?

- **The need:** refer to the students' interest and needs; the target vocabulary should direct to fit the students' real purpose.

- **Repetition**: repeating words till they stick on learners memory to recall them in needed situation.

- **Meaningful presentation**: the way teacher present new vocabulary items play an important role on learners understanding of the new words.

Paul Nation in his article teaching vocabulary believed that teachers must follow certain methods when teaching new vocabulary. These methods should be followed and respected to grant successful vocabulary learning some of them are as the following:

- Clear and simple explanation with no complicated definition.

- Make connection between the previous knowledge and the newest one.

- Using teaching aids and oral presentations.

- The use of new words like synonyms, antonyms or words with the same lexical set.

5. Traditional Approaches and Techniques

5.1. Visual Techniques

Visual techniques used especially by elementary and middle schools teachers in other to establish a link between the meaning and the form. In this technique the teacher brings visual objects so that students can learn the word and see it at the same time, using examples from the real life world. By bringing reality and authentic materials' in the classroom, learner will remember words in association with their image. There are a lot of types of visual techniques we mention tree of them:

- **Realia:** by bringing objects into the classroom for example bringing real fruits, pets and family photos.

- **Pictures:** image, photos, and flashcards.

- **Mime:** gestures, actions, and facial expressions.

Not all vocabulary of coerce can be thought through visual techniques, there are other words that cannot understand simply in this case teachers must provide other techniques to explain their meaning (Campillo .1995, p.45)

5.2. Verbal Techniques

Verbal techniques are also teacher-centred, in which teachers can explain vocabulary items through:

- For further clarification the teacher can give instance, or ask them to discover new ones.

- Definitions or synonyms and opposites (Campillo, 1995, pp. 45-46).

5.3. Translation

This technique appeared first in the grammar translation method, when learning was just a matter of translation from the target language to the mother one. Before, the teachers duty was to select the most needed vocabulary items with their meaning in the native

language (Hewitt, 1984 cited in Coady & Hulk 1997, p. 5). Thus, translated words are given to students to be learned by heart. However, translation from the target language to the mother language should be kept under control of the tutor.

The problem with using translation as techniques in teaching new vocabulary is that, students usually give up when they found that the lexeme does not have synonym in mother tong (Campillo, 1995, p. 46).

6. Strategies for Vocabulary Learning

Learning strategies are set of behaviours and attempts made by learners in order to acquire and develop the language. Learners rely on various strategies to acquire new vocabulary according to their individual differences.

6.1. Explicit and Implicit Learning

Vocabulary learning is very important either in first or second language. Consequently, researchers attempt to investigate strategies that may enhance vocabulary development. There are two strategies that can be used in vocabulary learning: Explicit and implicit learning. The distinction between the two strategies is related to the learner's focus when learning i.e. does the learner focus on the language itself or on its use.

6.2. Guessing Meaning from Context

This strategy draws largely on students' ability to deduce meanings of words from either the linguistic environment of the word or the physical context.

6.3. Vocabulary Notebooks

Activities relevant to notebooks can include keeping a count of every time they encounter word within a certain period and noting its frequency, learning roots and derivatives in the word's family by studying what affixes are used to change its part of speech.

6.4.   The Consolidation Strategies

Include social, memory, cognitive and metacognitive strategies. Social strategies can serve as consolidation strategies when practising the meaning of a new word. Memory strategies are other kinds of consolidation strategies. They take mental process where the learner makes association of background knowledge with new words such as keyword strategy (Thornbury, 2002). They are used to memorize words for they said that memorizations of difficult words. Unlike memory strategies, cognitive strategies don't focus on manipulation process. They rather focus on mechanical means to learn vocabulary. As an examples of cognitive strategies are numerous such as the use of flash cards, note taking, repletion, attention, motivation and others. The last kind of above consolidation strategies is the metacognitive strategies. The learner has a control over its learning via monitoring, decision making and evaluation. As an example of metacognitive strategies is self-evaluation. Therefore, they need intensive exposure to input. (Decaricco, 2001, p. 285).

6.5.   Mnemonic Devices

According to Blezza "Mnemonics can be defined as a set of techniques used in memorizing new information and help student to improve later recall of information." (cited in Malhotra,1991, p. 1). In other words, mnemonics are tricks used to help retrieve items or rules that are stored in memory meaning that they help build and retrieve memories. Thornbury (2002, p. 25) defines mnemonics as tricks to help retrieve items or rules that are stored in memory and that are not yet automatically retrievable; he claimed that even native speakers use this techniques in some situations.

6.6.   Using Games

6.6.1.   Classroom Games (traditional games)

Vocabulary items can also be taught through games; learners can learn and enjoy learning in the same time. There are different games which can be beneficial in the learning of

new vocabulary items. For example, in Pictionary when one player has to draw the meaning of the words for the opposite team and they have to guess the word. Another game is called Charades in which player of one team has to act out the title of book, play or movie.

To illustrate, 'Go it' is a simple game planned for students to engage them in learning more and more words. It is a list of vocabulary items given by the teacher to several groups; each group contains four or more students, around one table. Each group receives a list of about 20-30 words written in small cards or even pieces of paper , in which all the words express one idea; for example cooking, oven frying pan, dish, cookies. All cards must be placed in front of the entire group; the job of the teacher is to pick up a word and say it loudly, while the learners' role will be to search for the given word as they it and shout loudly Go it! Each group has to gather large numbers of cards to win the game, whether an extra point in the exam or a simple gift from the teacher. The major goal of this game is to create positive competition inside the classroom, and some teachers may consider it as an effective technique in teaching words (Harmer, 2001, p. 238).

Slattery and Willis (2001), claims that guessing games play a significant role especially in the case of beginner learners. In their words, "games can help children become familiar with new vocabulary in an enjoyable way." (Cited in Hadjam, 2013, p. 20).

6.6.2.Electronic Games (Mobile Games for Vocabulary Learning)

Vocabulary games help learners to build their vocabulary. This kind of applications enables users to quiz themselves every day to learn most frequent words picked by expert tutors. Words include definitions and are illustrated in sentences. There are also different levels of difficulty (e.g. advanced, intermediate, and beginner). Learners can also track their progress as they study. These mobile word games have a lot of challenging words. To sum up, the fun side of English vocabulary games can help both native and foreign speakers of

English build their English language vocabulary skills. There are vocabulary word games for all levels of English.

6.6.2. Learning Vocabulary via Mobiles

Although studies which investigated this issue are not a great many, the available ones do point to the positive impact of using mobile phones on vocabulary learning in EFL contexts. These two studies documented a dramatic change in students' vocabulary repertoire both quantitatively and qualitatively.

To sum-up, Graves suggests that because students actually do most of their learning of new words independently, it makes sense to encourage them "to adopt personal plans to expand their vocabularies over time" (as cited in Hoglen & Lawson, 1996, p. 177). The ultimate aim of developing learning strategies is to develop students' independence and autonomy.

7. The Role of Memory in Vocabulary Acquisition

Learning and developing second language is totally different from the first language, perhaps the most obvious difference is the fact that, by definition language learners already have a first language. And not only do they have the words of their first language, but they have the conceptual system that link these words one with another. Learning a second language involves both learning a new conceptual system, and constructing a new vocabulary network.

To achieve this kind of outcomes, learner needs not only to learn a lot of words, but to remember them. In fact," learning is remembering" stated Thornbury (2002) .Unlike the learning of grammar, which is essentially a rule based system; vocabulary knowledge is largely a question of accumulating individual items. There are few short cuts in the form of generative rules: it is essentially a question for teaching vocabulary? How, then, dos Memory work? (Solso .R.1995)
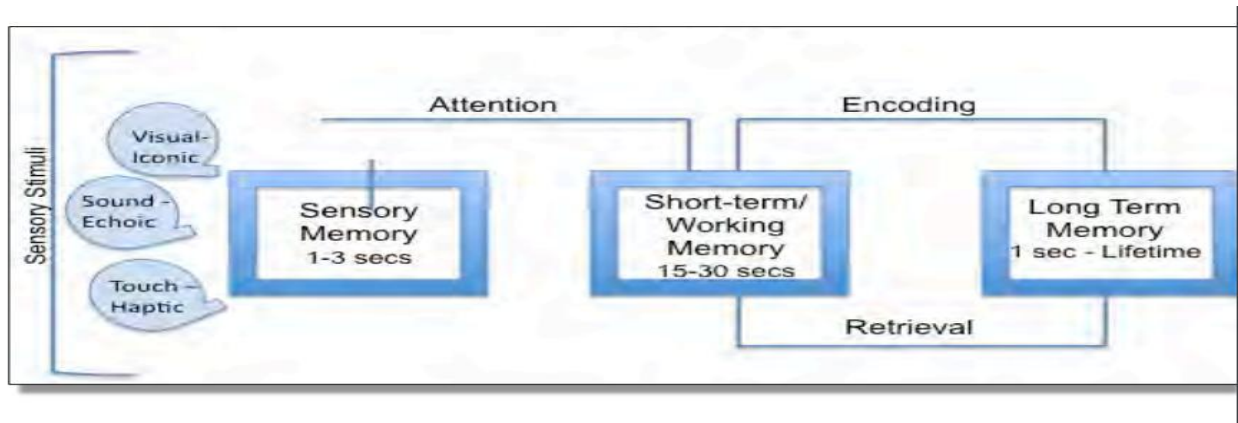
Figure9: How words are remembered (Walker 2001)

Conclusion

This chapter has reviewed some important areas in vocabulary learning. Although there is an abundance of empirical and meta-analytical studies on different methods to acquire and learn vocabulary within EFL settings, our focus was laid on the significant role that mobiles can play to help EFL students improve both the quantity and quality of their vocabularies.

Chapter Three: Methodology and Instruments

Introduction

"The research methodology and design are important for any study as it structures the content and supports the specific research paradigm of the study." (Hofstee, 2015, p.110). The present chapter attempts to outline the methodological approach as well as the research procedures that have been followed in this study in order to investigate their impact of mobile assisted language learning particularly mobile applications on third-year students' vocabulary learning at Mila University Centre.

For this purpose, the study has opted for a mixed-methods approach which includes both quantitative and qualitative methodologies so as to explore the research issue from different angles. Furthermore, the chapter depicts the participants and addresses the procedures of data collection and analysis.

1. Methodological Approach

According to Teddlie and Yu (2007), creativity and flexibility in the sampling design of mixed method research is important. This study aims to examine how students' vocabulary learning can be improved by the use of mobile applications and which one is more effective to be used to support the vocabulary learning process. With that objective in view, it was deemed necessary to choose a mixed-methods approach in which quantitative and qualitative data analyses would supplement each other.

1.1. Qualitative Method

Qualitative research aims to obtain, analyse and understand rich descriptive data pertaining to a specific subject or context (Maree, 2007). A questionnaire, also referred to as a social survey, is a method to collect standardised data from a large number of people. Questionnaires in research are used to learn about people's behaviours, characteristics, attitudes and opinions (Leedy&Ormrod, 2005). When compiling a questionnaire, the

researcher must give careful consideration to define what is going to be measured, as it will determine the type of questions and the scale that is used in order to obtain the required results. Questionnaires were used in this study to collect the following numerical data:

- Data about the general mobile usage patterns of learners.

- Data about what kind of activities students use their mobile for.

- Data about the language learning apps used by students and the most coming used one.

- Data about to what extent students use their mobile to learn vocabulary by themselves.

1.2. The Quantitative Method

According to Boyd (2015), the methodology followed in the quantitative part of this research is **within-subjects design**, which is sometimes called a **repeated measures design**. This type of experimental design is when one set of participants are tested more than once and their scores are compared (between the first and the last performance). It is called 'repeated measures' because the researchers are repeatedly measuring the performance of the participant. The mentioned method was chosen to be followed in this research for its flexibility and simplicity from one part and the other part it is the most suitable one for the lack of both time and instruments (cited in study.com).

2. Population and Sampling

Sampling according to Maree (2007, p. 178), "is used in situations where the sampling is done with a specific purpose in mind." In the case of this study, the research is about the impact of mobile vocabulary applications. For this research project the sampling technique used is 'the non-probability, the purposive sampling'. Non-probability sampling represents a valuable group of sampling techniques that can be used in research that follows **qualitative**, **mixed methods**, and even **quantitative research designs**. Purposive where the researcher chooses a sample based on their knowledge about the population and the study itself. The study participants are chosen based on the study's

purpose.

In the current study, the targeted population is 150 third year LMD English students, at Mila University Centre, for the academic year 2017-2018. The selection of such population was based on the consideration that students of third year are already aware that the level of fluency can only be achieved with an acceptable vocabulary background. With believe that they have some background knowledge about vocabulary learning strategies that enhance their level of proficiency.

Giving the impossibility to conduct the research with the whole population, we have selected a sample made up of 35 (sampled after a pilot study) to represent the entire population. However, our target population of teachers consists of all oral and written expression teachers in the English department at Mila University Centre. The questionnaire is administered to (12) of them as a sample of this study. The selection of such sample was based on the consideration that those teachers have the experience in teaching (at least two years) to make sure that their answers are the production of observations.

3. Research Design

3.1. Vocabulary Test

To study the students' vocabulary ability, two tests were used as a parallel test for pre- and post-testing phases with some slight difference in the post test which the level of difficulty was a bit raised if we compare it to the pre-test. However, the researchers shuffled the questions and multiple choices. The pre-test and post-test were composed of   multiple-choice questions in addition to one small production designed to assess the students' vocabulary proficiency.

3.2.Pre-testing

The experimental participants were subject to the pre-test during the first meeting

through a vocabulary multiple choice task in addition to small production to measure the students' vocabulary learning background.

The time devoted to the pre-test was thirty minutes. Before starting the pre-test, the students were informed that their scores on the test would not affect their scores on the examination; thus, they had to work individually.

3.3. Treatment

According to Shuttleworth (2010), a pilot study is a standard scientific tool for 'soft' research, allowing scientists to conduct a preliminary analysis before committing to a full-blown study or experiment. In the present research, the pilot study facilitates not just the sampling method but also help to identify the most appropriate and the most used apps among students to use it as a tool in the experiment treatment.

The quantitative data revealed that the most used apps among the participant are electronic dictionaries, translation apps and the BBC learning English installed on students mobiles phone. Based on the resolute a research and analysis was made in order to select only one app to work with since it's a bit difficult to work with more than one app in a short time. Student's recommendation was tacked into consideration in the research since the concept of this research is to investigate the impact of e-learning we need to keep student working on something they are already familiar with.

The electronic dictionaries' useful and helpful for students for checking words meaning in just a few seconds unlike the traditional one but to be used to learn a new vocabulary it not efficient enough because the word will not be stored in the long-term memory for just one use of the word at least not for all students. At the same thing after analyzing translation apps, the latter can also help students to check their understanding of the words, terms or even items from language to another mechanically or in another term 'word by word translation.'

According to previous researches about vocabulary learning the best way to learn vocabulary is to use as many vocabulary resources as possible for a successful learning (listening, speaking, reading, and writing) which is not available when we use the electronic dictionaries to learn vocabulary.

The BBC learning English app it was not only the most used one but also the most recommended one. After analyzing the app we have found the following:

- BBC Learning English has been teaching English to global audiences since 1943.

- Free audio, video and text materials to learners.

- The application addresses different levels of proficiency and different skills to enhance learner's vocabulary (lower intermediate, intermediate and advanced level).

- Materials are delivered as full-length courses but each component of the course is standalone and can be studied on its own.

- The learner can choose the best way to study from the app (according to the needs).

- The app provides authentic materials created by experts.

- The content of the app is media-rich and focuses on presenting authentic,

- Up-to-date subjects and real English needed by learners to progress in their English vocabulary.

- The app advocates and train students skills (reading, listening and speaking skills).

- Provides conversational practice about topics on different subjects such as business, travelling, shopping, culture, and music.

- The app reinforced by a free website available anytime.

Beside all, the above positive points about the BBC learning English the app was not just designed to help learners to acquire new vocabulary in both implicit and explicit ways, but the app reinforced with electronic dictionary to check difficult words meaning, and also dictionaries come with almost all the foreign languages for learners to check the meaning of

words in their mother tongue. Learners also can download the app for free and it can be used both online and offline with the condition that it helps the process of the research since we have some instruments limitation.

To sum up, and after carefully analyzing to the pilot study, the result reveals that Mila University students did use mobile applications as a tool to enhance their language learning, which answers one of our questions that we have risen "Do students rely on m-learning via apps to enhance their vocabulary?" In addition to that, the investigation and the careful analysis we made on the app as it is explained before we found that the most appropriate app to use in the experimental part is BBC learning English. However, the quantitative data identified the exact population that will sit for the experiment since we are following 'the non-probability, the purposive sampling'. The statistics show that 45 students share the same apps, and 35 of them not just sharing the apps but also the same free time schedule.

Next, the experimental group received a 60-minute session per week over the period of the study (6 weeks).The group received the lessons from the chosen application (BBC learning English).

After the pre-test, a class survey was administrated to the students (appendix n°3) in order to have an idea about what students are interested in? What kind of parts of vocabulary would they like to feed their memory with from the app? The survey took about five to ten minutes for students to it fill out. The reasons behind this survey are the following:

- The main principle of them-learning is that students are free to choose what kind of subjects they want to learn about.

- Learning from mobiles is a bit informal since there is no examination or classroom pressure.

- Feedback from students about what is helping them learn and what is not in a course.

- Needed to get students to cooperate sufficiently to make the research worthwhile.

- This is a good way to bring the activity to a close and set up the activity from the point of view of the participants.

- It sets up the activity on the front of the class.

- It indicates important points to remember.

- It is tolerant to different opinions expressed by the participants.

- It improves and refines the treatment process.

After that, the experimental group will undergo a new experience of learning using their mobile phones to acquire some vocabulary items. After a period of teaching and learning, the students will sit for the post-test in order to examine whether using mobile phones app has any positive effect on their rate of learning and efficient use of new vocabulary.

3.4. The post test

Through a multiple choice test reinforced with a sentence that rise a bit above the level of difficulty to the test if we compare it to the first one, in order to test whether the participants' really do understand the meaning of the words or sentences in task. In addition, small production was added to measure if there is an improvement in the participants' vocabulary knowledge if we compare it to the first one.

The time devoted to the post-test was 60 minutes (due to the rise of test difficulty the participants' need more time than the post-test). Before starting the post-test, the students were informed that their scores on the test would not affect their scores on the examination; thus, they had to work individually.

3.5. Participants' and Instruments

There are two categories of participants who took part in the present study. The first category is represented by students where the target population of the present study is 150

third year LMD students. The second category is represented by 12 teachers of English at Mila University; both categories seemed indispensable for the purposes of the present investigation.

3.5.1. For Students

For it is quite hard to study the entire population, Deldime and Demoulin claims that "sufficient data can be obtained through the study of a proportion of the population: a sample." Therefore, one pre-exciting group that is assigned after a pilot study was distributed to all third year students at Mila University (150) to discover what kind of technological devices students owned? The most important thing is to know if students used their mobiles to learn English vocabulary. And what are the most used applications among them? How often they use these mobile apps? What is the most appropriate application to be used during the treatment, the one that advocate all the four resources of vocabulary learning (reading, writing, listening and speaking).

After calculating and analysing the questionnaire results, (35) of the sample was selected to be in the experiment for six weeks of teaching and learning after setting for a pre-test to test their knowledge of a set of key vocabulary. The experimental group will undergo a new experience of learning using their mobile phones to acquire some vocabulary items.

After six sessions of teaching and learning, the students will sit for the post-test in order to examine whether using mobile phones has any positive effect on students' rate of learning and efficient use of new vocabulary.

3.5.2. For teachers

The teachers of oral and written expression at Mila University are also consulted to take their views. This category comprises 15 teachers. Since the process of teaching and learning stands for two major parts: students and teachers, it was necessary that both take part in this modest work. Teachers' insights and perceptions toward the effectiveness and the

impact of mobile assisted language learning in general and mobile application in particular to learn and acquire new vocabulary and about the possibility of using it in the future as a formal learning in the classroom setting .To do so, a questionnaire was distributed to collect teachers' opinions about the research .

The questionnaire items are derived from the different topics discussed in the theoretical part of the research. It is a combination of close- ended questions where the participants are asked to tick the appropriate answers, and open-ended questions where they are given the chance to provide their own answers or explanation. There are some close-ended questions that are followed by open-ended questions in order to get more deep insights into the subject. The teachers' questionnaire consists of 13 questions and they are organized in three sections. Each question has either direct or indirect relation to the theoretical part.

➢ **Section one: back ground information (Q1 to Q3)**

This section aims at gathering relevant information about the participants (teachers). It mainly deals with their gender, teaching career, and what modules they are teaching.

➢ **Section two: MALL (mobile assisted language learning) (Q 4to Q9)**

This section is related to the first chapter of the research which investigates the use of mobile assisted language learning. It aims at eliciting teachers' view about the use of m-learning as source of learning English.

➢ **Section three: vocabulary learning via mobile applications (Q10 to Q13)**

This section covers the last two chapters' topics. It attempts to get insights into teachers' perception to the use of mobile applications by students as tool to learn and require new vocabulary.

4. Statistical Analysis Procedures:

The data were collected and computed by using Statistical Package for Social Sciences (SPSS). The following statistical techniques were used:

4.1. The   T-test and its conditions

It is explained in (Makey and Gass, 2005) that, the paired-samples t-test is used to compare one group's means in different two test scores; i.e. participants of the same group participate in two tests, pre-test and a post-test. In other words, the subjects of the same group are paired with themselves on the tests; in which there is treatment period between these two tests. And the main reason behind using the paired-samples t-test is to compare the examined group's mean before and after the treatment period. In addition to that, it is used to compare the obtained results from the paired-samples t-test with those stated in the t-tables helps the researcher to decide whether the differences obtained are due to the impact of mobile apps or occurred due to other external factors.

5. Validity and Reliability

5.1.Validity

According to Bryman & Bell (2011), validity is concerned with the integrity of the conclusion that is generated from a piece of research. Validity encompasses the entire experimental concept and establishes whether the results obtained meet all of their quirements of the scientific research method (Martyn, 2008).There are two main components (internal validity and external validity) to evaluate whether a research is valid or not (Bryman & Bell, 2011).

5.1.1. Internal Validity

The internal validity dictates how an experimental design is structured and encompasses all of the steps of the scientific research method (Martyn, 2008). Besides, internal validity (or logical validity) refers to the causal relationships between variables and

results (Gibbert, Ruigrok& Wick, 2008). If all variables, such as treatments and sampling of subjects, are controlled, then we might say that laboratory conditions pertain and that the experiment is more likely to be internally valid (James, 1988). In our experiment, experimental process included five scientific steps and was designed structurally. We administrate a questionnaire to select both participants' and tool of the experiment set up three groups (35 students and BBC learning English) before the experiment was carried out. The selection of MALL resources as the experimental treatment from the chosen app is based on the class survey recommendations, and these selected lessons to meet the criteria of self-learning. In the pre- and post-tests, the test papers and carefully analysed from the supervisor in other to make sure of its validity and reliability. Furthermore, we conducted another questionnaire to collect teacher's point of view about the mobile learning in general and the mobile apps in particular as a tool to learn vocabulary as a new learning approach. Thus, the research has a strong internal validity.

5.1.2. External Validity

External validity is concerned with whether the results of a study can be generalized beyond the specific context (Bryman & Bell 2011). External validity is the process of examining the results and questioning whether there are any other possible causal relationships. In the research, the participants are college students of 3rd year at Mila University, and they major in different groups, such as group 1, group 3, group 4 and group 5. In the experiment, we adopted randomization method to randomly assign participants to the experimental group.

Experimental tools were selected from the BBC app and matched with the answer of the students in the class survey. Moreover, the experimental operating instructions were designed, and the participants followed it.

In the research, the participants' scores for pre and post-tests were examined twice. The results of the pre-test, which were administered before the treatment and after the treatment (post-test), were also compared. As for the pre-test, no significant difference was observed: the experimental group (N=35). In the post-test, there was no significant difference between the first test and the last one (N=35). On the other hand, when comparing the results of the pre-test and the post-test, participants' marked higher scores (suggesting a higher autonomy) in the post-test.

A t-test was performed and, as it is mentioned before that we have only one group which is the experimental group (N=35) in the frequency of their learning during the 6 weeks (t (34) = -5.843, p>0.5). This indicates that students in the pre-test (M=7.12, SD=1.502) but in the post-test and after the treatment the result were different from the first one (M=12.52, SD=2.232).

5.2. Reliability

Reliability refers to the consistency of a measure of a concept". It represents the degree to which the results of a study are replicable and generalizable when a study is conducted again (Easterby, 2008). The thesis is reliable due to several reasons.

The research model and research process are clearly presented and explained. How to analyze the data is presented distinctly. Besides, the experimental operating instructions and the selection of experimental treatments are explained. Therefore, subsequent research can follow the research process and obtain the similar results.

In the experiment, the data is numerical. It means that we cannot manipulate them with our bias. Furthermore, we use Spss software to conduct statistical analysis. It means that we don't have any room for personal effects to change the result of statistical analysis.

Conclusion

This chapter presented the procedures of designing and applying the instrument, the subjects and the statistical analysis that the researcher adopted in analyzing the results of the pre, post and delayed vocabulary test. The next chapter presents the data analysis and results of the study hypotheses.

Chapter Four: Results Discussion and Interpretation

Introduction

This chapter includes three parts: results of the pilot study; qualitative analysis: result of pre- and post-tests; and quantitative analysis. In order to test the hypothesis (H1) and analyzed which English learning applications were better for students to improve their English learning vocabulary in different aspects.

1.   The Pilot Study

All the research was based on the results of the first questionnaire. One English-learning app was selected as the experimental tool, according to the 'pilot study', recommendations and the top 10 English-learning apps used in Mila University. The resolute of the questionnaire (see appendix n° 1) was as the following:

-students was asked to wrote their full names and the group numbers in other to make things easy for identifying them if there is a possibility to set into the next step of the research. The majority of participants' age was between 20 and 24 years old represented by 115 females and 35 males that owned a diversity of devices.
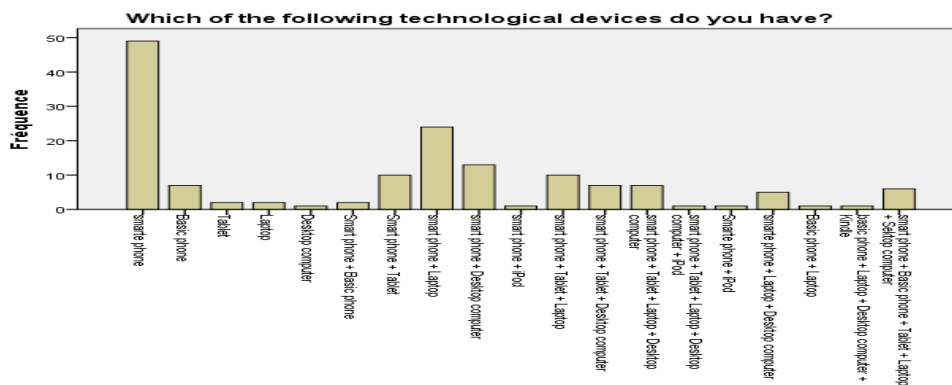
Figure 9: Technological Devices the Participants Have

The next question student were asked was about if they use any apps to learn English since the majority of them owned advanced types of technological devices. The statistics shows that huge number of the sample they do use English apps about 84.7% which open the doors to our research, specially a lot of app students download them for free and its use can be offline. The chart below, it can be seen the different types of apps students have in their mobiles; but the most used one are the electronic dictionaries and BBC learning English followed by listening and speaking apps.
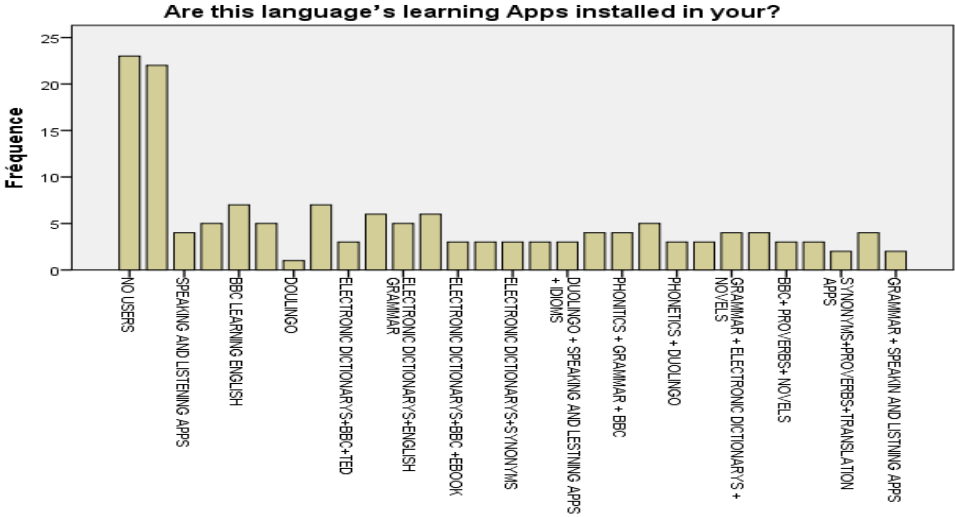
Figure 10: List of Apps the Participants has in their Devices

The participants was asked about how often they use the app to learn, from students answer , 23.3% of participants 'always' use the apps to learn 28% 'sometime' use it 14% 'often' use the apps and 19.3% only 'rarely' use it but 15.3% they 'never' use them.

Participants' use different activities differ from a purpose to another the most used one among them is 'check words meaning and words translation; however the chart shows what kind of activities learner download the apps for.

Figure 11: The Purpose for which Students use Applications

After analyzing student's answers about the purpose of the use English language apps, it defers from learner to another according to the needs. As it can be observed that learners use all the suggested activities to improve their language are more than the ones that used the others. Beside, students were asked to if they use apps for other activities we didn't suggest. After analyzing the results, it turns out that the largest number of students uses apps to enhance their speaking skills. It is also seen that 43.3% of the participants they did not answer the follow up question.
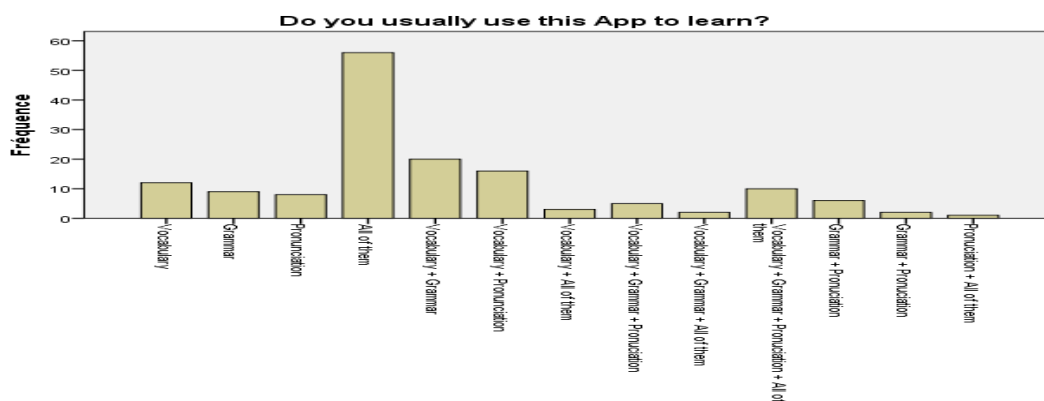
Figure 12: Applications Students use to Learn

To finish our questionnaire, we asked students to help us in choosing the appropriate applications to be used in the experiment. To do so they where spouse to recommend the most

useful app they ever use to learn and the recommendation has play a major role in the work. Figure n represents student's opinion and the BBC learning English was highly recommended beside some other apps such as Duolingo, vocabulary building and novels.
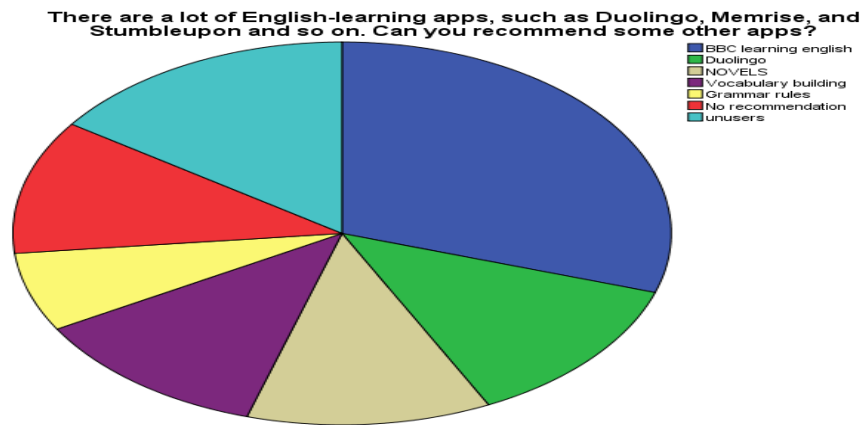
Figure 13: Student's Recommendation for English Learning Apps

2.   Results

After carefully analyzing to the pilot study, the results reveal that students our study use mobile applications as a tool to enhance their language learning. This answers one of our questions that we have raised "Do students rely on m-learning via apps to enhance their vocabulary? .In addition to that, the investigation and the careful analysis we made on the app as it is explained before we found that the most appropriate app to use in the experimental part is BBC learning English. However, the quantitative data identity's the exact population that will sit for the experiment since we are following 'the non-probability, the purposive sampling'. The statistics show that 45 students share the same app, and 35 of them not just sharing the app but also the same free time schedule.

3.   Experiment Analysis

3.1.   Pre-test Scores

As mentioned in chapter three, the experimental participants' were subject to the pre-test during the first confluence through a vocabulary multiple selection task in addition to small output (see appendix 2°) to measure the students vocabulary learning background before starting the treatment. The result was carefully calculated.

The first table shows the marks achieved by the participants: as it can be seen the mean (**M**=7.12), the mode (7), the medium (7), and the standard deviation (**SD** = 1.502).We can clearly notice that the mean, mode and the median are approximately the same. This implies that the group is fairly homogeneous and can tentatively form a normal distribution given that the majority of the scores cluster around the centre. Also, judging by the highest and lowest marks, it is perfectly possible to have approximately two standard deviations (**SD**) above and below the mean.

Students pre-test	Marks	X mean	(X-mean)²
a.	5.5	-1.62	2.62
b.	6	-1.12	1.25
c.	7	-0.12	0.014
d.	9.5	2.38	5.66
e.	8	0.88	0.77
f.	8	0.88	0.77

g.	5	-2.12	4.49
h.	5	-2.12	4.49
i.	7.5	0.38	0.14
j.	9.5	2.38	5.66
k.	5.5	-1.62	2.62
l.	6.5	-0.62	0.38
m.	6	-1.12	1.25
n.	6.5	-0.62	0.38
o.	7	-0.12	0.014
p.	7	-0.12	0.014
q.	6	-1.12	1.25
r.	7	-0.12	0.014
s.	7	-0.12	0.014
t.	5	-2.12	4.49
u.	7	-0.12	0.014
v.	7	-0.12	0.014

w.	11	3.88	15.05
x.	10	2.88	8.29
y.	7	-0.12	0.014
z.	8	0.88	0.77
aa.	6	-1.12	1.25
bb.	7.5	0.38	0.14
cc.	5.5	-1.62	2.62
dd.	5.5	-1.62	2.62
ee.	6	-1.12	1.25
ff.	11	3.88	15.05
gg.	10	2.88	8.29
hh.	6	-1.12	1.25
ii.	7.5	0.38	0.14
Sum	249.5	0.3	76.75
Mean	//	//	7.12
Coefficient of Variation	//	//	17.82%
SD	//	//	1.502
Mode	//	//	7

| Medium | / / | / / | 7 |

Teble n°2; Mean, Variance and Standard Deviation of the Pre-test

3.2. Treatment

After the pre-test, the experimental group has received treatment sessions of 60 minutes during six weeks (one session per week). An analysis for the class survey that has been given to the students before starting the treatment was made; students tend to like updated subjects to learn vocabulary from, history, idioms, proverbs, phrasal verbs, and vocabulary related to their study. Based on their opinion the treatment was designed as the following:

Session	Lesson
Session one	▪ An introduction to the BBC learning English and its sections ▪ Reading and listening 3 conversations from the app each lesson targeted at least 6 vocabulary items: a. Winston Churchill b. You think you're invisible? c. Bitcoin: digital crypto currency
Session two	▪ Idioms by category; in addition, students were asked to use the learned idioms in sentences according to their understanding. ▪ Reading and listening to one

	conversation
	a. Brain training
Session three	▪ Reading and listening to 2 conversations from the section 'English we speaks' a. Do a runner b. Left, right and centre
Session four	▪ Lesson was about proverbs and phrasal verbs from their sections ▪ Reading and listening to a conversation about a. cultural différences
Session five	▪ Game
Session six	▪ Reading, listening and activities about words from the news selected from the app website.

Table 3: Schedule of the Experiment Sessions

3.3.   Post –test

The second table shows the marks achieved by the participants: as it can be seen, there is an improvement in students scores the mean (**M**=12.52),the mode (Mo=12) the medium (Me=13), and the standard deviation (**SD** = 2.232).We can clearly notice that the mean, mode and the median are approximately the same. This improved that the group is

fairly homogeneous and can tentatively form a normal distribution given that the majority of the scores cluster around the centre as the pre-test. Also, judging by the highest and lowest marks, it is perfectly possible to have approximately two standard deviations (**SD**) above and below the mean.

Students post-test	Marks	Y mean	(Y mean)2
a.	14	1.48	18.16
b.	13.5	0.98	1.56
c.	13.5	0.98	1.56
d.	12	-0.52	0.27
e.	12	-0.52	0.27
f.	14	1.48	18.16
g.	11.5	-1.02	1.02
h.	11	-1.52	2.31
i.	14	1.48	18.16
j.	10.5	-2.02	4.08
k.	13	0.48	0.23
l.	9.5	-3.02	9.12

m.	14	1.48	18.16
n.	12	-0.52	0.27
o.	13.5	0.98	1.56
p.	13.5	0.98	1.56
q.	12	-0.52	0.27
r.	15	2.48	6.15
s.	11.5	-1.02	1.02
t.	12	-0.52	0.27
u.	13	0.48	0.23
v.	13	0.48	0.23
w.	12	-0.52	0.27
x.	14.5	1.98	3.92
y.	13.5	0.98	1.56
z.	15	2.48	6.15
aa.	11.5	-1.02	1.02
bb.	8	-4.5	20.25

cc.	12	-0.52	0.27
dd.	10.5	-2.02	4.08
ee.	11.5	-1.02	1.02
ff.	14	1.48	18.16
gg.	14.5	1.48	3.92
hh.	10.5	-2.02	4.08
ii.	13	0.48	0.23
Sum	431	1.3	0.25388
Mean	/ /	/ /	12.52
Coefficient of Variation	/ /	/ /	21.09%
SD	//	//	2.232
Mode	/ /	/ /	12
Medium	/ /	/ /	13

Table 4: Mean mode Medium for the Post-test

The study aims to determine whether the use of mobile application was more effective than the traditional activities in learning vocabulary. It is clear from Table 2 and 3 that the experimental groups had significant vocabulary knowledge gains after the 6-weeks-long study, demonstrating that the participants improved their vocabulary-knowledge significantly. However, as seen in the table, the experimental group achieved significantly better results on the post-test than the pre-test . In other words, when compared to the pre-test scores ,

vocabulary-knowledge gains after the treatment were significantly higher than the post-test scores which appears clearly in the mean, the mode, the medium and the standard deviation results, suggesting that the treatment was successful in teaching vocabulary via BBC learning English app.

3.3.1. The t-test Computation

To test the null hypothesis that the difference between a sample group scores before and after intervention (a period of treatment) is likely to have been a chance finding, the following procedure is followed:

1. Calculate the difference between the pre-test and post-test scores for participants by subtracting the pre-test from the post-test score.

2. Calculate the mean difference.

3. Calculate the standard deviation of the differences, and use it later to calculate the Standard error of the mean difference, hypothesis, and this statistic follows a t-distribution at N-1 degrees of freedom.

4. Enter a table of the t-distribution at N-1 degrees of freedom, choose the level of significance required (normally p = 0.05) and read the critical t-value.

5. If the calculated (observed) t-value exceeds the critical t-value, it can be said that the differences between the two tests' scores are significant at that level of probability. As a result, the null hypothesis is rejected in favor of the research hypothesis.

Following the above mentioned procedure, a paired-samples t-test has been applied to compare the experimental group pre- and post-test scores. The following formula is used for calculating the t-test:

$$T = \frac{\bar{X}pr - \bar{X}po}{\sqrt{\frac{S1}{N} + \frac{S2}{N}}}$$

$\bar{X}$pr= The M.ER of the pre-test.

$\bar{x}$po=The   M.ER   of   the   post-test.

S1-= The sample variance of error rates of the pre-test.

S2= The sample variance of error rates of the post-test.

nE = The number of individual subjects in the experimental group.

➢ **Calculating the standard deviation**

Standard deviation can be difficult to interpret as a single number on its own. Basically, a small standard deviation means that the values in a statistical data set are close to the mean of the data set, on average, and a large standard deviation means that the values in the data set are farther away from the mean, on average. The following formula was followed to compute it:

$$S=\frac{[\sum(Xi-X^-)2]}{N-1}$$

- **S for the pre-test   S for post-test**

$$S2= \left[\frac{169.39}{34}\right] =4.982 \qquad\qquad S1 =\left[\frac{76.75}{34}\right]=2.275$$

➢   S.D= $\sqrt{s}$

$$S.D1= \sqrt{2.275} \quad =1.502 \qquad\qquad S.D2= \sqrt{4.982} \quad =2.232$$

According to Bland (1996), a low standard deviation indicates that the data points tend to be very close to the mean; a high standard deviation indicates that the data points are spread out over a large range of values. Our participants' scores for the pre-test are showed in

table 2. From the table, the means is (7.12) and STD deviations of the groups are also low (1.502), which means that all of the participants have much the same English level.

> **Calculating the t-value**

$$t = \frac{\bar{X}x - \bar{X}y}{\sqrt{\frac{(S1)2}{N} + \frac{(S2)2}{N}}}$$

$$t = \frac{7.12 - 12.52}{\sqrt{\frac{(2.257)2}{35} + \frac{(4.982)2}{35}}}$$

$$t = \frac{-5.4}{\sqrt{0.843}}$$

t= -5.843

The degree of freedom (df = (n-1).e.i, df= (35-1) =34) is 35. Through this degree of freedom, the observed t-value (-5.843) can be located in the table. This observed t-value is compared with the critical t-value, which are (in this case) 1.995at the 0.05 level of significance. The following information is provided: the requested significance level is \alpha =0.05α=0.05, for the two-tailed case.

The t-critical values for a two-tailed test, for a significance level of \alpha= 0.05α=0.05 are

tc = -1.995   and tc = 1.995 $tc = -1.995$ and $tc = 1.995$

> **P   value   and   statistical   significance:**
  The   two-tailed   P   value   is   less   than   0.0001
  by conventional criteria; this difference is considered to be extremely statistically significant.

➤ **Confidence interval:**

The mean of Group One minus Group Two equals -5.40000

95% confidence interval of this difference: From -6.30743 to -4.49257

standard error of difference = 0.455

➤ Population standard deviation estimated using sample T-distribution used Difference between means.

➤ **Comparing pre-test and post-test scores**

	N	$\bar{X}\&\bar{Y}$	SD	T –test					
				T	tc	df	SE	CI	P
Pre-test $\bar{X}$	35	7 .12	1.502	-5.843	1.995	34	0.455	95%	0.0001
Post-test $\bar{Y}$	35	12.52	2.232						

Figure 4: t-distribution Table

After calculating the *t*-statistic, we look at t-distribution table to determine the *t*-value. Since N = 35, the degree of freedom N-1= 34. The *p*-value which is used is *p*= 0.05; therefore the critical *t*-value would be 1.995. Now we compare the critical *t*-value with the observed *t*-value to find that: The observed t-value largely exceeds the critical t-value.

16.0086>1.691

since the observed *t*-value is more than the critical *t*-value; we can notice that the difference between the experimental group's scores on the pre-test and the post-test is highly remarkable and significant. In other words, the obtained results are due to the independent

variable (BBC learning English app) and not due to chance or other external factors. From all what have been said, we reject the null hypothesis. Therefore, we can conclude that mobile assisted language learning apps has a positive effect on learners' vocabulary acquisition and brings about a significant improvement in their vocabulary knowledge of the second language.

3.3.2. **Eta Squared**

The independent variable (mobile apps) has some impact on the dependent variable (students vocabulary learning), another step should be done to measure the strength related between our too variables. This can be done through calculating another statistical test that is known as eta square, or r (the r is the strength of the research). To do so the following formula was used to compute it:

$$r = \frac{t2}{(t2 + df)}$$

$$r = \frac{34.140}{34.140 + 34} = \frac{34.140}{68.140}$$

$$r = 0.501$$

The eta square value is 0.501 which signifies that the strength of association is good (50.1%), taking into account the limitations we encountered during our study.

4. **Teacher's Questionnaire Analysis**

4.1. **Section one: Background Information**

This section aim is gathering relevant information about the participants (teachers). It mainly deals with their gender, teaching career, and what modules they are teaching. The data were collected and carefully analysed and the resoles was as the following:

The sample selection was based on the consideration that those teachers have the experience in teaching (at least two years) to make sure that their answers are the production of observations. As it can be seen clearly from the chart the highest number of teachers has 'more than 10 years' of teaching experience which add more value to this humble research.

Our analysis shows that the sample consists of teachers who have experienced teaching for few years (1-5 years).4 out of 12 of the participants affirm that they have been teaching for more than five years. However, teachers with a long teaching experience (more than ten years). The latter indicates that those teachers are certainly aware of the different strategies used to motivate students. Most importantly, they know exactly what students need. Besides, we cannot neglect the remaining teachers who are starting their career; they might benefit from their experienced colleagues.

Beside the teaching experience, the target population of teachers consists of all oral and written expression teachers in the English department at Mila University. The questionnaire is administered to (12) of them (7 females and 5 males) as a sample of this study. The analysis reveals that 50% of them did or they do teach both oral and written expiration.

Years of teaching english

1-5 years   6-10 years   more than 10 years
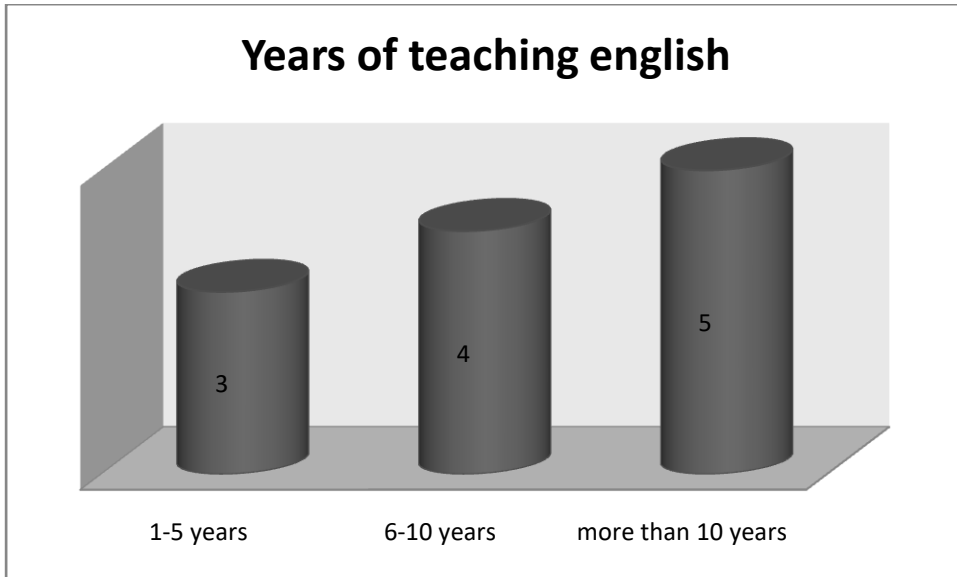
Figure 14: Years of Teaching Experience

4.2. Section Two: MALL (Mobile Assisted Language Learning)

This section is related to the first chapter of the research which investigates the use of mobile assisted language learning. It aims at eliciting teachers' view about the use of m-learning as source to teach English in addition to that teachers were asked about their personal use of mobile devices. The data analysis result was as the following:

-Teachers presented in the population have a diversity of advanced mobile devices but most of them they own more than one for example and as the chart present in (figure n°) 33% of them own Smartphone, laptop computer and tablet at ones.
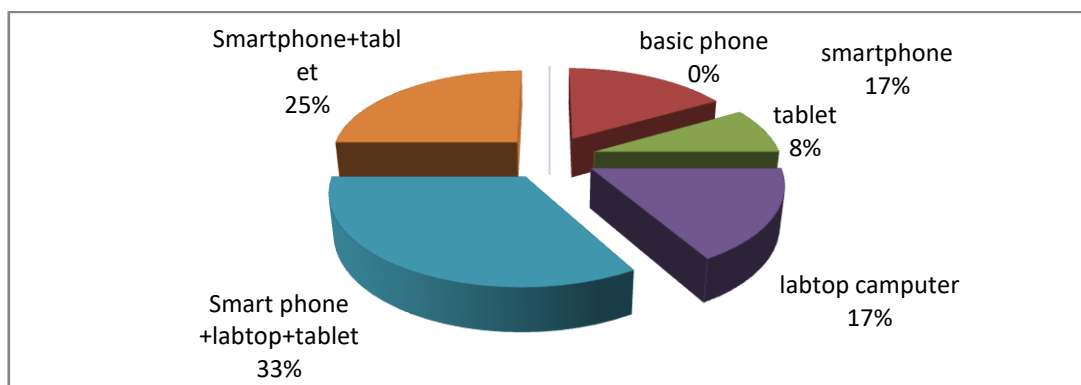
Figure15: Mobile devices that teachers own

- Next, teachers were asked about what kind of activities they often use with their devices.

Results reveal that 33% of teachers use their mobiles only for research purposes. They were also asked in this section "if they use mobile activities MALL in their EFL classes" the majority of teachers represented by 58% they declared that they do use mobile applications' activities in their EFL classes. Not only that but all of them allows to students to use mobiles in the classroom but the extent of the use depends from a teacher to another.
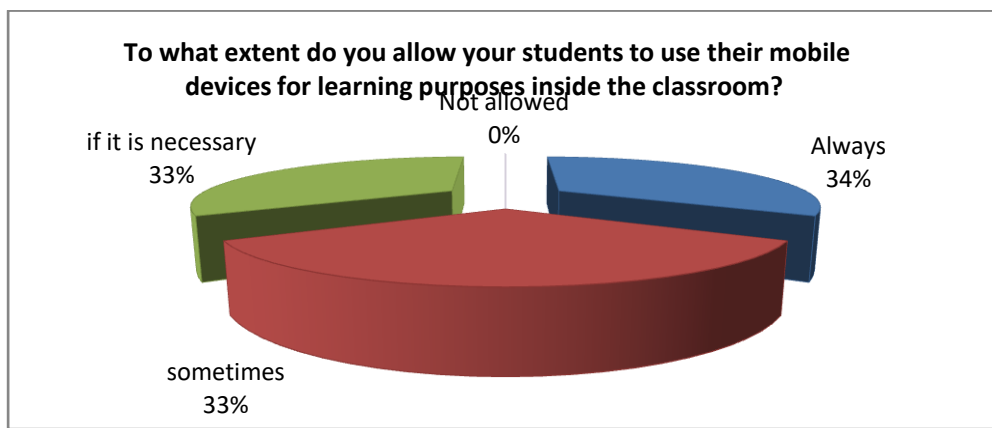
Figure15: The use of Mobile in the Classroom

Another question in the second section teachers were suppose to answer; 'if they think that students will participate more if they could use mobile devices' The analysis shows that almost all of the teachers they do agree on the idea that indeed the mobile can motivate students to be more active in the class. The question has a follow up question to understand more why teachers do agree with the idea and why they did not.The summary of the explanation was as follows:

- Mobile brings benefits for students if they use it for educational purpose.

- He is efficient for learners because mobile facilitate language learning through the access of authentic, contextualized resources.

- Using technology in a right way always beneficial for learners.

Few teachers they disagree with the idea of using it in the class, because they believe that the use of mobile will distract learner's attention.

4.3.   *Section three: vocabulary learning via mobile applications (Q10 to Q13)*

This section covers the last two chapters' topics. It attempts to get insights into teachers' perception to the use of mobile applications by students as tool to learn and require new vocabulary.

The first question in the last section aims to investigate the importance of vocabulary in second language learning. The result shows that all the teachers agree on the same idea:

- Vocabulary is an important element in language teaching/ learning, it is the dominant mean of communication.

- They agree that learners need vocabulary to express their thoughts and feeling in both forms (written and spoken).

- They believe that, the learner who have a rich vocabulary store can speak and write correctly and fluently.

  However, the target sample was asked how 'If it happens that you teach vocabulary, how you teach it?' The answer differs from a teacher to another:

- Explicit and implicit teaching related to the subjects and learners needs and abilities

- The highest number of teacher reviled that reading is the chosen technique they use to teach learners new vocabulary.

- Using authentic materials and technological devices.

- Focusing on the collocations and mind mapping.

- Depending on the subject.

The too last questions are more specific and directly related to our research, the lasts aims to know if teachers do believe that mobile apps can be beneficial to learn vocabulary with, and if they did recommend to their learners to download apps to improve their language

learning.83% of teachers believe that mobile language learning applications can help them to teach different forms of the new word easily, and also the analysis shows that 75% they do recommend the use of mobile apps to their students as a tool to improve their language.

4.4.   Discussion Result

The analysis of the teachers' questionnaire helps us assess not just the degree of teachers' support of the concept of m-learning in general and mobile apps in particular, but also to see the point of view of an educator that have experience the teaching/learning process with different methods ,techniques and aids.

On the basis of this analysis, we noticed that in the first section the fact that the majority of teachers have more than 10 year teaching experience, because they have started teaching English long years ago and therefore they have enough experience to add huge value to this humble work. The second section shows that teachers they do awn and use mobile devices so they are aware of their usefulness. The latest believes that the mobile in the classroom will raise student's participation and facilitate language learning through the access of authentic and contextualized resources, that's why they declared that the use of mobile in the classroom for educational purposes' is allowed depending from a teacher to another the extent of the use.   The last section revels on teachers both altitude about the use of mobile apps to learn vocabulary which was totally supportive and for its use, and techniques they or did used to teach new vocabulary since they insure the important of vocabulary in second language learning. However educators at Mila University centre they said that they always recommend English learning apps for students as a tool to enhance their language learning which support our hypothesis and research results: If students used applications provided in the mobile-assisted language learning their vocabulary acquisition will be increased.

Vocabulary learning is one of the most important aspects of language teaching. The latest is an essential part of second language learning, and a good vocabulary repertoire can

help learners to become proficient in the target language (Boers et al., 2006). However, learning vocabulary is a major difficulty for many language learners in achieving a more natural sounding target language competence (Cooper, 1998, 1999). When it comes to teach words, it becomes more difficult since it is hard to predict some words meaning with the first look (Zhang, 2009). Therefore, there is a door of opportunities for creating appropriate environments to teach vocabulary, particularly with the use of broadly available technologies, one of which is through mobile applications.

This study investigated the effect and benefits of using mobile apps as an English learning tool for college students in Mila university centre. According to the experimental results, using mobile apps in English learning has positive effect on students. The studies reported positive attitudes of both teachers and students towards the use of mobile applications in teaching and learning vocabulary.

Results of the work indicate that the participants in the experimental group significantly improved their knowledge of the vocabulary in different types; idioms, proverbs, phrasal-verbs and some words meaning independent of the activity type used. However, based on the post-test results, participants in the experiment which learned through the use of the mobile application "BBC learning English" achieved significantly better than their counterparts in the post-test score, indicating that use of the mobile application was more effective in teaching vocabulary than the traditional activities.

Learning vocabulary in the classroom may be disadvantageous due to time consummation and the huge responsibility on the learner (Grace, 1998). The advantage of using mobile phones and mobile applications in learning vocabulary is having an opportunity to learn out of classroom limit. In other words, it can be studied anywhere and anytime in a way that learners can be engaged, often asynchronously, with teachers, learning resources

,other learners, native speakers and a lot and a lot of authentic materials ".However, as Kukulska-Hulme (2009, p.164) states:

"... Can also be disadvantageous since the learning outside the classroom is beyond the control of the teacher, thus careful planning should be made to establish a strong connection between "what is best learnt in the classroom, and what should be learnt outside the classroom."

However, results show that students under the treatment hold a positive attitude towards MALL. The results were as follows:

a)   College students' rely on m-learning via apps to enhance their vocabulary after carefully analyzing to the pilot study, the result reveals that Mila University students they do use a diversity of mobile applications as a tool to enhance their language learning. From the questionnaire responses, students suggest some of other apps beside of BBC learning English which was chosen to be the independent variable in our excrement are good, though they are not tested in this research because of the limitation of our study such as the experimental time and instruments such as the internet.

b)   The impact of using the selected app (BBC learning English) in students' English learning has been approved. In the present research, an experiment was conducted to test it. From the result of quantitative analysis in chapter three, when the participants received experimental treatments a remarkable improvements had been noticed on their post-tests, if we camper it the score of the pre-test before the treatment.

   In this case our hypothesis was accepted and improved, beside we have answered one of the questions that we had rise (Q3). It means that there is a positive effect of English learning apps on students' improvement in vocabulary learning. Furthermore, the result is in conformity with some other research's models in chapter one. According to the previous literatures, using mobile apps to learn language is effective and efficient for students.

c)	Teacher's altitude towered the use of mobile assisted language learning in general and mobile apps in particular was positive. they believes that the mobile in the classroom will raise student's participation and facilitate language learning through the access of authentic and contextualized resources, that's why they declared that the use of mobile in the classroom for educational purposes .Although some of the educators has some have some draw backs for their belief that mobile can distract learners in the classroom, they do revels its positive side as a tool that give students a lot of authentic materials teachers are not able to give to student during the learning process.

To conclude, with the development of mobile devices and apps, university students can download English-learning apps directly into their mobile devices, so that they can learn some extra vocabulary individually without the restriction of learning materials, time and place. MALL is a new approach for Algerian college students to study English independently. According to previous literatures, MALL has a positive effect on language learning, and can promote students in self-regulated cycles of learning. A lot of literatures have investigated that self-regulated learning approach is effective and efficient way for Mila university students to learn English.

According to the experimental findings in this research, the selected app enhances significant progress in college student's vocabulary knowledge. According to both qualitative and quantitative data results, the participants held a positive attitude towards using apps to learn vocabulary .They felt motivated, delighted and interested in using mobile apps to learn English by themselves.

5. Research Recommendations and Limitations

5.1. Research Recommendations

A few of literatures have investigated the effectiveness of self-regulated learning approach and its efficient way for Algerian students to learn English. According to the experimental findings in this research, the selected app BBC learning English enhances significant progress in student's vocabulary learning. According to the questionnaire and experiment results, both teachers and learners held a positive attitude towards using apps to learn vocabulary with.

To have a good vocabulary repertoire is a necessity for English language learners. It is known that English has become a necessary tool, especially when graduates are hunting for jobs. For Algerian university students, they have learnt English at least for seven years, but many of the students do not have acceptable vocabulary knowledge in English. Fortunately, with the rise of mobile devices and apps, our recommendation for students is to download English-learning apps directly into their mobile devices, so that they can learn English individually without the restriction of learning materials, time and place. MALL is a new way for language learner to study huge amount of vocabulary independently and stress free.

Other recommendation we would like to suggest to educators in the field to give more interest and to conduct more research concerning the MALL and it benefits since there is major acceptance for its use in the classroom.

5.2. Research Limitations

Although the research has achieved its purposes, there are some limitations. First, the time of experiment is short, only six weeks if we compare it to the process of Learning English vocabulary (Scifryer, 2012). It clear that, there is a time limit. Second, the number of participants in the experiment is the reason behind the limitation in the reliability of the results (only35 students). If there can be more participants involving in this research, or even

if we have more time to apply all the techniques' in the within group design, the reliability and validity of this research can be increased. Besides, all the experiment participants are studying in different groups at Mila University centre (group 1, 3, 5), which implies that the research samples are restricted. In addition, because the assessment of pre- and post-test was conducted by astudent, a certain degree of subjectivity can be found. Moreover, more research needs to be undertaken in order to confirm the strength of the association between mobile applications and their effectiveness in teaching vocabulary.

General Conclusion

This study was carried out with the belief that involving third year university students in Mila university centre in an experience of learning vocabulary via the use of mobile learning applications, the research experiment may lead to an enhancement in their vocabulary knowledge. To achieve this aim, we have asked three related research questions (i) Do students rely on m-learning via apps to enhance their vocabulary? (ii)Does the use of mobile have any effects on the student's vocabulary learning? On the basis of these questions, we hypothesized that if students used applications provided in the mobile assisted language learning their vocabulary acquisition will be increased. Before starting to deal with the experiment, we have provided a theoretical background which served as the basic to all issues raised in the study. It was divided into two chapters. While the first chapter was an overview about the mobile assisted language learning, the second chapter was devoted to talk about vocabulary, strategies for learning and teaching vocabulary and some historical trends for vocabulary learning. Moreover we have discussed also the concept of the 'vocabulary learning apps' since the latter was used as the main material in this study. In order to answer our research questions and to test our hypothesis, a mixed method was used. First a questionnaire was used and data were analysed whish reviles that college students' rely on m-learning via apps to enhance their vocabulary learning, second, experimental method was, hence, adopted. Thus, the participants were first pre-tested in order to explore the students' vocabulary knowledge. After the period of treatment last for six weeks, the participants have been post-tested to see whether there is any enhancement in their vocabulary due to the use of mobile app.

The results of both the post –tests and post –test were positive and went in to the goal with our assumptions in the sense that the experimental group performed better in the post-test (after the treatment) in Compared with the resultsof the pre-test (before the treatment)

where the experimental group have had a score's mean of 12.52 in the post test, while the score's mean in the pre-test was only 7.12. Thus, we concluded that the use of mobile applications leads to a relative enhancement in students' vocabulary knowledge.

Teachers that participate in this modest work altitude towered the use of mobile assisted language learning in general and mobile apps in particular was positive. They believe that the mobile in the classroom will raise student's participation and facilitate language learning through the access of authentic and contextualized resources.

As a final step in this study, some recommendations have been humbly made with the hope that teachers and educators would take them into consideration.

References

Alemi, M., & Tayebi, A. (2011). The influence of incidental and intentional vocabulary acquisition and vocabulary strategy use on learning l2 vocabularies. *Journal of Language Teaching and Research*, *2*(1), 81-98. Academy Publisher Manufactured in Finland.

Ahmet, B. (2011). "ELT Teachers as Online Material Developers", from: http://www.tojdel.net/pdf/v01i02/v01i02-02.pdf

Ahmet, B. 2013, "ELT Teachers as Online Material Developers", from: http://www.tojdel.net/pdf/v01i02/v01i02-02.pdf

Alemi, M., Sarab, M. R. A., & Lari, Z. (2012, September, 26). Successful learning of academic word list via MALL: Mobile Assisted Language Learning. *International Education Studies*, *5*(6), 99–109. Retrievable from http://www.ccsenet.org

Alexander, S. 2001, "e-learning Developments and Experiences", Education & Training, vol. 43, no. 4-5, pp. 240–248.

Alhabahba, M. M., Ali Mahfoodh, O. H., Pandian, A., Mohammad, Y. M., Ahmed, E. W., & Al Bazar, H. (2014, September, 3). Check This Word Out! Exploring the Factors That Affect Students' Vocabulary Learning Using Smartphones via Partial Least Squares. *Hindawi Publishing Corporation Education Research International*, 1-10. Retrieved from http://dx.doi.org/10.1155/2014/672031

AL-Qudaimi, K. (2013, May, 13). Mobile-assisted language learning: a literature review. Retrieved January, 12, 2015, from https://www.academia.edu/6369026/MobileAssisted_Language_Learning_A_Literature_Review.pdf

Baleghizadel, S., & Oladrostam, E. (2010). The effect of mobile assisted language learning (mall) on grammatical accuracy of efl students. *MEXTESOL Journal*, *34*(2), 1-10.

Banister, S. (2010)."Integrating the iPod Touch in K-12 education: Vision and vices", Computers in the Schools, vol.27, pp.121-131

Beatty, K. (2003). *Teaching and researching computer-assisted language learning.* Essex: Pearson.

Beatty, K. (2013). *Beyond the classroom: Mobile learning the wider world*. Monterey CA: The International Research Foundation for English Language Education. Retrieved from http://www.tirfonline.org/english-in-the-workforce/mobile-assistedlanguage-learning/

Belanger, Y. (2005). Duke University iPod first year experience final evaluation report. Retrieved October 24, 2009 from http://cit.duke.edu/pdf/ipod_initiative_04_05.pdf

Blake, R. J., & Delforge, A. M. 2004, "Language learning at a distance: Spanish without walls", NFLRC Symposium.

Bloomfield, L. (1933). Language. New York: Holt, Rinehart and Winston.

Brown, R. (1973). A first language. Cambridge: Harvard University Press

Bruner, J. S. (1966). *Toward a theory of instruction* (Vol. 59): Harvard University Press

Bryman, A. & Bell, E. 2011, "Business research methods", Oxford University Press, Oxford

Carter, R. (1998). Vocabulary: Applied linguistics perspectives. London: Routledge.

Chastain, K. (1988). Developing second language skills: Theory and Practice. Florida: Harcourt Brace Jovanovich.

Chen, C. M. & S.-H. Hsu. (2008). "Personalized Intelligent Mobile Learning System for Supporting Effective English Learning". Educational Technology & Society, 11 (3), pp. 153-180.

Chinnery, G. M. (2006). Emerging technologies going to the mall: mobile assisted language learning. *Language Learning & Technology*, *10*(1), 9-16. Retrieved February, 21, 2015 from http://llt.msu.edu/vol10num1/emerging/

Coady, J. &. Huckin, T. (1997). Second language vocabulary acquisition. Cambridge: Cambridge University Press.

Coady, J. &. Huckin, T. (1997). Second language vocabulary acquisition. Cambridge: Cambridge University Press.

Cruz, Y., Boughzala, I. & Assar, S.(2012).Opportunities and obstacles for mobile learning in a Business School, *Communications and Information Technology* (ICCIT), 2012 International Conference on, pp.58-61, 26-28, Available from http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=6285824&isnumber=6285764

Darian, S. G. (1972). English as a foreign language: History, development, and methods of teaching. Norman: University of Oklahoma Press.

Davies G. (ed.) *Information and Communications Technology for Language Teachers (ICT4LT)*, Slough, Thames Valley University   [Online]: http://www.ict4lt.org/en/en_mod1-5.htm

Decaricco, J. (2001). Vocabulary learning and teaching. In M. Celce- Murcia, (Ed), *Teaching English as a second or foreign language,* (pp.285-299), Boston, MA: Heinle & Heinle.

Easterby-Smith, M. Thorpe, R., Jackson, P. & Lowe, A. (2008).Management Research Sage, London.

Fries, C. (1945). Teaching and learning English as a foreign language. Ann Arbor: University of Michigan Press.

Gairns, R. Redman, S.(1986) *Working with words*. CUP.

Gibbert, M., Ruigrok, W., & Wicki, B. (2008).What passes as a rigorous case study, Strategic Management Journal. vol. 29, no. 13, pp. 1465-1474.

Hadjam,B.(2013).*The effect of Guessing Games on Enhancing Student's Vocabulary*

Halliday, M. A. K. (1973). Explanations in the functions of language. London: Edward Arnold.

Harmer,J. (1991) . The Practice of English Language Teaching 1ˢᵗ ed.Longman:New York.

Hatch, E., & Brown, C. (1995). Vocabulary, semantics and language education. Cambridge: Cambridge University Press.

Hornby, A.(2000) . Oxford Advenced Learner's Dictionary . In : 3ʳᵈ ed . Oxford:Oxford University.

Howard, J. & J. Major. 2004, "Guidelines for designing effective English language teaching materials", Available from http://www.paaljapan.org/resources/proceedings/PAAL9/pdf/Howard.pdf

Hubbared, P., Hywel, J., Thornton, B., & Wheeler, R. (1983). A training course in TEFL. Hong Kong: Oxford University Press.

Hunt. A., & Beglar. D. (2002). Current research and practice in teaching vocabulary. In J.C. Richards, & W. A. Renandya (Eds.). Methodology in language teaching: An anthology of current practice. (p. 258-266).

Hymes, D. (1972). On communicative competence, J. P. Pride & J. Holmes (Eds.) In Sociolinguistics: Selected readings, Harmondsworth, UK: Penguin

James, D. B. 1988,"Reliability and Validity"from: http://krpb.pbworks.com/f/RELIABILITY%26VALIDITY.pdf

Kennedy, C. & M. Levy. (2008). "L'italiano al telefonino: Using SMS to support beginners' language learning". ReCALL, 20(3), pp. 315–350.

Kitsantas, A., & Dabbagh, N. 2010, "Learning to learn with Integrative Learning Technologies (ILT): A practical guide for academic success", Greenwich, CT: Information Age Publishing.

Klopfer, E, Squire, K and Jenkins, H. "Environmental Detectives: PDAs as a window into a virtual simulated world." Proceedings of IEEE International Workshop on Wireless and Mobile Technologies in Education. Vaxjo, Sweden: IEEE Computer Society, 95-98 2002

Kolb, D. A. (1983). *Experiential learning: Experience as the source of learning and development.* Englewood Cliffs, NJ: Prentice Hall.

Kramarski, B. & Gutman, M. 2006, "How can self- regulated learning be supported in mathematical E- learning environments?", Journal of Computer Assisted Learning, vol. 22, no. 1, pp. 24-33.

Krashen, S. (1981). *Second language learning and second language acquisition.*Oxford: Pergamon.

Krashen, S. (1982). *Principles and practices in second language acquisition,*Oxford, Pergamon.

Krashen, S. (1988). Research on second language spelling and vocabulary acquisition. Presentation at the Symposium on Research Perspectives on Adult Language Learning and Acquisition, The Ohio State University, Columbus, OH.

Krashen, S.D. (1985). *The input hypothesis: Issues and implications*. New York, Longman.

Kukulska-Hulme A. and L. Shield. (2008). "An Overview of Mobile Assisted Language Learning: Can Mobile Devices Support Collaborative Practice in Speaking and listening?" http://portal.acm.org/citation.cfm?id=1520087 , accessed Jul. 2009.

Kukulska-Hulme, A., & Shield, L. 2007, "An Overview of Mobile Assisted Language Learning: Can mobile devices support collaborative practice in speaking and listening", EuroCALL 2007

Kukulska-Hulme, A., & Traxler, J. (2013). Design principles for mobile learning. In H. Beetham & R. Sharpe (Eds.), *Rethinking Pedagogy for a Digital Age: Designing for 21st Century Learning* (2nd ed., pp. 244-257). New York, NY: Routledge.

Larsen-Freeman, D. (2000). Techniques and principles in language teaching, Oxford: Oxford University Press.

Larsen-Freeman, D. (2000). Techniques and principles in language teaching, Oxford: Oxford

Longman Dictionary of English Language and Culture. (1992) . In : 1st ed

Lopez-Morteo, G. & López, G. (2007). Computer support for learning mathematics: A learning environment based on recreational learning objects.Computers & Education, vol. 48, no. 4, pp. 618-641.

Martyn Shuttleworth (Jul 14, 2010). Pilot Study. Retrieved Apr 14, 2018 from Explorable.com: https://explorable.com/pilot-study

Martyn, S.(2008)."Validity and Reliability", from: https://explorable.com/validity-andreliability

Motteram, G. (2013).Innovations in learning technologies for English language teaching". alearning-resource

Mutiara, D., Zuhairi, A., & Kurniati, S. (2007).Designing, Developing, Producing And Assuring The Quality Of Multi-Media Learning Materials For Distance Learners*: Lessons Learnt From Indonesia's Universitas Terbuka*: Turkish Online Journal of Distance Education TOJDE, vol. 8, no. 2.

Nichols, M.(2003). "A Theory for e-learning", Educational Technology & Society, vol. 6, no. 2, ISSN 1436-4522, pp. 1-10.

Northover, M., & Donald, C. (2001).The development of online learning at UNITEC-same environment, new landscape, In Meeting at the Crossroads: Proceedings 18th ASCILITE Conference, pp. 443-451.

Oxford, R. & D. Crookall. (1990). Issues and problems in L2 vocabulary learning.Submitted.

Oxford, R.(1990) .*Language learning strategies.* Newbury House.

Pegrum M. (2009). *From blogs to bombs: The future of digital technologies in education*, Perth: University of Western Australia Press.

Prendergast, T. (1864). The mastery of language, or the art of speaking foreign tongue idiomatically. London: R. Bentley.

Richards and Rodgers. (1986). Approaches and methods in language teaching: A description and analysis. Cambridge: Cambridge University Press.

Richards J. C. & Rodgers, T. S. (2003). Approaches and methods in language teaching, 2nd edition, Cambridge: Cambridge University Press.

Schmidt, N. (2000). Vocabulary in second language teaching, Cambridge: Cambridge University Press.

Schmitt, N. (2000). Vocabulary in language teaching. Cambridge: Cambridge University Press.

Scifryer. (2012). Project Based Learning.

Shih, R. C.(2011).Can Web 2.0 technology assist college students in learning English writing? *Integrating Facebook and peer assessment with blended learning*, Australasian Journal of Educational Technology, vol. 27, no. 5, pp. 829-845.

Skinner, B. F. (1957). Verbal behavior. New York: Appleton, Century, Crofts.

Solso, R. L. Cognitive psychology (1995). Boston: Allyn and Bacon.

Sudiran, M.Hum (2007). The role of English proverbs in the development of writing skill, Celt,(7). 129-141

Sweet, H. (1899). The practical study of language. (reprinted) London: Oxford University Press.

Takefuta, J. & Takefuta, Y. (1996). Development of course ware for teaching vocabulary to Japanese students of English, unpublished M.A thesis, Chiba University.

Tankersley,K.(2003) . the threads of reading U.S.A: *Assosiation for Supervision and Curriculum Development.1st ed.*

Terrell, T.D. (1977). A natural approach to the acquisition and learning of a language. *Modern Language Journal, 61*. 325-336.

Thornbury, S. (1998) 'The lexical approach: a journey without maps'. *MET,* 7 (4), pp. 7-13

Thornbury,S. (2002) .*How to teach vocabulary*.1st ed .Harlow:Longman.

Thornton, P. & C.Houser. (2005). Using mobile phones in English education in Japan. Journal of Computer Assisted Learning. 21(3), pp. 217–228.

Tomlinson, B.(2010). *Principles of effective materials development*, In N. Harwood (ed.), English language teaching materials, pp. 81-108, NY: CUP.

Tomlinson, B. 2010, "Principles of effective materials development", In N. Harwood (ed.), English language teaching materials, pp. 81-108, NY: CUP

Traore, M. & Kyei-Blankson, L. (2011), "Using Literature and Multiple Technologies in ESL Instruction", Journal of Language Teaching and Research, vol. 2, no. 3, pp. 561-568.

Ur,P. (1991). *A cource in language teaching* . 1st ed Cambridge [u.a.]: Cambridge Univ.Press.

Voogt, J. (2010). Teacher factors associated with innovative curriculum goals and pedagogical practices: differences between extensive and non-extensive ICT-using science teachers. *Journal of Computer Assisted Learning, 26*(6), 453-464.

Walker R., Davies G. & Hewer S. (2011) Introduction to the Internet. Module 1.5 in Davies G. (ed.) *Information and Communications Technology for Language Teachers (ICT4LT)*, Slough, Thames Valley University [Online]: http://www.ict4lt.org/en/en_mod1-5.htm

West, M. (1941). Learning to read a foreign language. London: Longman.

Wong, L.-H., Chai, C. S., Chen, W., & Chin, C. K. (2013). Measuring Singaporean students' motivation and strategies of bilingual learning. *The Asia-Pacific Education Researcher, 22*(3), 263-272.

www.study.com

Yang Soon. G. (2005). "Technology for Foreign Language Learning".n http://www.readingmatrix.com/conference/pp/proceedings/gohyingsoon.pdf,   accessed Dec 2010.

Yiping, W. & Lei, W. (2010).*The practice of students-centered teaching mode*. From: http://wenku.baidu.com

Zimmerman, C. B. (1997) Historical trends in second language vocabulary instruction: In J. Coady & T. Huckin (eds.) *Second language vocabulary acquisition,* Cambridge: Cambridge University Press.

Appendixes

Appendix 1: Students' Questionnaire

Dear Students,

You are kindly invited to participate in this research work by filling up this questionnaire with utmost honesty. Please, tick off the right box (√) or provide a full statement when necessary. Thank you very much indeed!

1. Student's Full Name …………...…………..………………………………………..

2. Age..

3. Gender

Male ☐ Female ☐

4. Class Group...

5. Which of the following technological devices do you have?

Smart Phone ☐ Basic Phone ☐ Tablet ☐ Laptop ☐ Desktop Computer ☐

Kindle ☐ iPod ☐

Other Devices …………………...……………………………………………………

6. Do you use any Apps to learn English?

Yes ☐ No ☐

7. If your answer is yes, would you please list them down? (Give its/ their name/s)

……………………………………………………………………………………………

……………………………………………………………………………………………

……………………………………………………………………………………………

8. Are this language's learning Apps installed in your?

Smart Phone ☐ Tablet ☐ Laptop ☐ Desktop Computer ☐

☐

Kindle

Other Devices …………………...………………………………………………………………

9. Did you get this App for free or with money?

Paid ☐   For Free ☐

10. Would you please classify these Apps in the following table?

Paid Apps ☐   Free Apps ☐

11. How often do you use these Apps to learn?

Always ☐   Sometimes ☐   Often ☐   Rarely ☐   Never ☐

12. For which purpose are you using this App?

Reading ☐   Listening ☐   Check the Word meaning ☐   Word Translation ☐

13. Do you usually use this App to learn?

Vocabulary ☐   Grammar ☐   Pronunciation ☐   All of them ☐

Others ……………………………………………………………………………………...

14. There are a lot of English-learning apps, such as Duolingo, Memrise, and Stumble upon and so on. Can you recommend some other apps?

....

....

....

15. Do you use this app online or offline?

Online (Internet connection is required) ☐   Offline (No internet connection is required) ☐

Appendix 2: Class survey

1) Hello, What's your name? _____

2) How are you?   ☺   ☺   ☹   (Circle the correct answer)

4) What are your favourite modules? _____

4) What's your favorite school subject?   (Circle the answers in the box below)

6) What are your worst subjects? _____

7) What is the most important module? _____

_____

	Drama	English at work
news report		ESP
	Shakespeare speaks	
English idioms & phrases		
	English proverbs	
	must common phrases	
Cultural expressions/ terms		
		up dated subjects
	The English we speak	
novels		stories

Thank you very much, goodbye

Appendix 3: Pre-test

TICK THE CORRECT ANSWER

1. *give up a fight and submit to the enemy*

a. win ☐

b. victory ☐

c. surrender ☐

2. *describes something people disagree about*

a. undisputed ☐

b. incontrovertible ☐

c. controversial ☐

3. *someone who doesn't give up on something easily*

a. vacillating ☐

b. flixible ☐

c. determined ☐

4. *avoid means ??*

a. overview ☐

b. dwell on ☐

c. skate over ☐

5. *got the wrong opinion*

a. interpreted ☐

b. underestimated ☐

c. misjudged ☐

6. *weak in character*

a. good ☐

b. flawed ☐

c.   unblemished   ☐

7.   *plan of action*

a.   honesty   ☐

b.   strategy   ☐

c.   openness   ☐

8.   *dull, uninspiring*

a.   lacklustre   ☐

b.   enthusiastic   ☐

c.   spirited   ☐

9.   *Be assertive and ready to initiate action (related to the meaning "attack")*

a.   pile up   ☐

b.   rush into   ☐

c.   go for it   ☐

d.   get offwith   ☐

10.   *Distribute*

a.   give out   ☐

b.   stik by   ☐
                       ☐
c.   square up

d.   drop back   ☐

11.   *Attempt*

a.   hang up   ☐

b.   be out to   ☐

c.   key in   ☐
                   ☐
d.   get after

12. *a long piece of material worn like a coat around the shoulders*

a.   truth   ☐

b.   cloak   ☐

c.   sheet   ☐

d.   rug   ☐

13. *something that seems real but isn't*

a.   reality   ☐

b.   truth   ☐

c.   illusion   ☐

d.   correction   ☐

14. *difference between two things they're two things*

a.   mismatch   ☐

b.   similarity   ☐

c.   evenness   ☐

d.   sameness   ☐

15. *means feeling extra aware of an aspect of ourselves*

a.   secure   ☐

b.   hollow   ☐

c.   self-counsious   ☐

d.   shallow   ☐

16. *money that's being used in a given country at a certain time*

a.   supply   ☐

b.   treasure   ☐

c.   currency   ☐

d.   wealth   ☐

17.   *mysterious or difficult to understand*

a.   sure ▭

b.   strightforward ▭

c.   cryptic ▭

d.   certain ▭

18.   *changes in level or amount*

a.   hold ▭

b.   stay ▭

c.   persist ▭

d.   fluctuates ▭

19.   *doubt that something is real or true*

a.   sureness ▭

b.   trust ▭

c.   belife ▭

d.   Scepticism ▭

20.   *People always want revenge*

a.   don't count your chickens before they're hatched ▭

b.   charity begins at home ▭

c.   blood will out ▭

d.   blood will have blood ▭

21.   *Times goes by very quickly when you are happy and very slowly when you are sad*

a.   every picture tells a story ▭

b.   a day of sorrow is longer than a month of joy ▭

c.   needs must when the devil drives ▭

d.   keep something for a rainy day ▭

22. *really wealthy people do not talk about money*

a. man cannot live on bread alone

b. a loaded wagon makes no noise

c. Mark , learn and inwardly digest

d. nothing ventured , nothing gained

23. *all people are equal when they die*

a. if you chase two rabbits , you will not catch either one

b. death is the graet leveller

c. adversity makes strange bed fellows

d. aprl showers bring may flowers

24. An idiom people use it when they are asking you very sharply to hurry up or be quick about something:

a) Look down one's nose

b) Face like a bulldog chewing a wasp

c) Make it snappy

d) Cross to bear

……………………………………………………………………………………………

……………………………………………………………………………………………

……………………………………………………………………………………………

25. Idiom used when someone call for help when you are not really in danger:

a) Cry wolf

b) Big fish in a small pond

c) Too big for your boots

d) One over the eight

……

……

……

26. Connect with someone or contact them:

a)   Live off   ☐

b)   Link up with   ☐

c)   Move into   ☐

d)   Trot off to   ☐

……

……

……

27. In the American slang, to die means:

a)   Zone out   ☐

b)   Sad   ☐

c)   Croak   ☐
                                                ☐

d)   Roll out the red carpet

……

……

28. A person who is …………………………….., Is thought to be untrustworthy or even

dangerous.

a)   Tricks of the trade   ☐

b)   Hairy at the heel   ☐

c)   Down in the mouth   ☐

29. People who think ………………………. try to find innovative ideas or solutions

a)   Read the riot of spring ☐

b)   Explore all avenues ☐
☐
c)   Think outside the box

30. Did you know, that scientists believe learning a second language can boost brainpower? *Bilingualism* – or speaking two languages equally well – is a form of brain training. In a short paragraph and according to your understanding explain what brain training mean?

Appendix 4

-TICK THE CORRECT ANSWER AND TRY TO USE IT IN A CORRECT SENTENCE

ACCORDING TO YOUR UNDRSTANDING (WEHEN IT IS NESSESERY)

1.   <u>If you do something …………………..you intend to do it but you pretend that it was</u>

<u>an accident</u>

a.   Add fuel to fire   ☐

b.   Badger someone   ☐

c.   Bark up wrong tree   ☐

d.   Accidentally on purpose   ☐

………………………………………………………………………………………………

………………………………………………………………………………………………

……

2.   <u>Do not interfere in other people's affairs means?</u>

                                                                                    ☐

a.   Fine words butter no parsnips

                                                                                    ☐

b.   Mind your own business

                                                                                    ☐

c.   An ounce of prevention is worth a pound of cure

                                                                                    ☐

d.   Laughter is the best medicine

....

....

....

3.   <u>If someone who …. … . …………………. does something to spoil their good record</u>

<u>or reputation</u>

a.   On the bottle   ☐

b.   Break every rule in the book   ☐

c.   Blot one's copy book   ☐

d.   Bury the hatchet   ▭

……………………………………………………………………………………………………

……………………………………………………………………………………………………

…………………………………………………

4.   To improve relationships between people who are very different or do not like each

other

a.   Build bridges   ▭

b.   Burn your bridges   ▭

c.   Bury the hatchet   ▭

d.   Butter somebody   ▭

……………………………………………………………………………………………………

……………………………………………………………………………………………………

……………….....................................

5.   If someone ……………………….they are watching you too closely and making you

feel uncomfortable

a.   Backseat driver   ▭

b.   Bark up wrong tree   ▭

c.   Breathe down neck   ▭

d.   Burn your fingers   ▭

……………………………………………………………………………………………………

………………………………………………………………………………………./…………………

…………………………………………

6.   Surrender means?

a.   Give up a fight and submit to the enemy   ▭

b.   Never give up a fight or submit to the enemy   ▭

c.   Someone who doesn't give up on something easily   ☐

……………………………………………………………………………………………………

……………………………………………………………………………………………………

………………………………………………………

7.   <u>Flawed means?</u>

a.   Weak in character   ☐

b.   Underestimated   ☐

c.   Unblemished   ☐

d.   Determined   ☐

……………………………………………………………………………………………………

……………………………………………………………………………………………………

………………………

8.   <u>Lacklustre means ?</u>

a.   Be assertive and ready to initiate action   ☐

b.   Dull, uninspiring   ☐

c.   Plan of action   ☐

d.   Related to the meaning "attack"   ☐

……………………………………………………………………………………………………

……………………………………………………………………………………………………

………………………

9.   <u>Get after means?</u>

a.   Hang up   ☐

b.   Be out to   ☐

c.   Key in   ☐

d.   Attempt   ☐

………

………

………………

10.   Currency means?

a.   Money that's being used in a given country at a certain time   ☐

b.   Mysterious or difficult to understand   ☐

c.   Cryptic   ☐

d.   Wealth   ☐

………

………

…………

11.   Fluctuates means?

☐

a.   Doubt that something is real or true

☐

b.   Changes in level or amount

☐

c.   Mysterious or difficult to understand

☐

d.   Something that seems real but isn't

………

………

………………………………………………………

12.   Idiom used when someone call for help when you are not really in danger:

a.   Cry wolf   ☐

b.   Big fish in a small pond   ☐

c.   Too big for your boots   ☐

13.   Parallels is ?

a. Similar to, reminds of   ▢

b. Similar to honest   ▢

c. Similar to less importance   ▢

…………………………………………………………………………………………………

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14. <u>A phrase repeatedly used in connection with a person, organization, or product, especially in publicity</u>

a. Highly candid   ▢

b. To play down   ▢

c. Tag line   ▢

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15. <u>Full of unusual, striking images</u>

a. A fascinating insight   ▢

b. Painstakingly   ▢

c. A visual feast   ▢

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16. <u>Belonging to the class of people with a high social rank</u>

a. Duchess   ▢

b. Aristocratic   ▢

c.   Countess   ☐

d.   King   ☐

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17.   <u>Words has no association with royalty and aristocracy</u>

a.   Knight   ☐

b.   Countess   ☐

c.   Dame   ☐

d.   Queen bee   ☐

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18.   <u>To make something become more active</u>

a.   Stimulate   ☐

b.   Attentional   ☐

c.   Involves   ☐

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19.   <u>If you put someone's mind at rest means?</u>

a.   Someone's brain needs constant stimulation   ☐

b.   Stop someone from being worried   ☐

c.   To build up that cognitive reserve   ☐

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20.   If someone makes you so angry that you want them to be punished

a.   Avoid a difficult or unpleasant situation   ▭

b.   Want someone's head on a platter   ▭

c.   Bee in one's bonnet   ▭

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21.   Underline in the following paragraph words or vocabulary related o some cultural

differences

"There are plenty of gestures you need to be careful with when you're meeting and greeting

people from a culture that's different to your own – to avoid offending people – or making an

awkward faux pas…"

"...Erin Meyer was worried because her student and the man on the street were shouting and

gesticulating at each other. She thought they were having a fight when in fact they were just

being emotionally expressive...."

22.   Our family is more important to us than any friend

a.   The truth is in the wine   ▭

b.   Blood is thicker than water   ▭

c.   In for penny , in for a pound   ▭

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23.   <u>Really wealthy people do not talk about money</u>

a.   Man cannot live on bread alone   ☐

b.   A loaded wagon makes no noise   ☐

c.   Mark , learn and inwardly digest   ☐

d.   Nothing ventured , nothing gained   ☐

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24.   <u>All people are equal when they die</u>

a.   If you chase two rabbits , you will not catch either one   ☐

b.   Death is the graet leveller   ☐

c.   Adversity makes strange bedfellows   ☐

d.   Aprl showers bring may flowers   ☐

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25.   <u>People always want revenge</u>

a.   Don't count your chickens before they're hatched   ☐

b.   Charity begins at home   ☐

c.   Blood will out   ☐

d.   Blood will have blood   ☐

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26.   Try to match each phrase to its definition.

a.   People shared important news   1. Left, right, and centre

b.   Do a runner   2. Avoid a difficult or

unpleasant situation

c.   Everywhere or all the time.   3. To put someone on the

map

d.   Become famous or become more prominent   4. Shout it from the rooftops

27.   In the American slang , to die means :

a.   Zone out   ▢

b.   Sad   ▢

c.   Croak   ▢

d.   Roll out the red carpet   ▢

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28.   When one's financial situation deteriorates, friends tend to disappear

a.   Least said, soonest mended   ▢

b.   A mouse my help a lion   ▢

c.   A empty purse frighten away friends   ▭

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29.   Winston Churchill – the British prime minister during the Second World War who is

well-known

throughout the world. With three lines in which you describe some of his personal qualities.

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30.   Did you know, that scientists believe learning a second language can boost

brainpower? *Bilingualism* – or speaking two languages equally well – is a form of brain

training. In a short paragraph and according to your understanding explain what is meant by

brain training?

Appendix 5: Teachers Questionnaire

Dear teachers,

You are kindly invited to participate in this research work by filling up this questionnaire with utmost honesty. Please, tick off the right box (√) or provide a full statement when necessary. Thank you very much indeed!

<div align="center">

Miss. **Asma boudra**

Department of Foreign Languages

Institute of Letters and Languages

University Center of Abdelhafid Boussouf-Mila

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Section One: Background Information

1.   Please specify the following.

Female ☐   Male ☐

2. Years of English teaching experience.

   a. 1 – 5 years

   b. 6 – 10 years

   c. Over 10 years

3. What modules did/ do you teach?

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Section Two: MALL (Mobile Assisted Language Learning)

4.   What kind of mobile devices do you have? *(you may tick more than one option)*

a. Basic-phone (no camera/video, no applications)   ☐

b.   Tablet ☐

c.   Smartphone ☐

d.   Laptop computer ☐

e.   Tablet ☐

f.   Other technological devices ☐

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5.What kind of MALL activities do you often use?

a.   Social networking ☐

b.   Entertainment ☐

c.   Researches ☐

d.   Only for calling ☐

e.   Other ☐   use

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6.   Do you use mobile applications' activities (MALL) in your EFL classes?

  Yes   ☐   No   ☐

7.   To what extent do you allow your students to use their mobile devices inside the classroom?

a.   Always ☐

b.   sometimes ☐

c.   if it is necessary ☐

d.   Not allowed ☐

8.   Do you think that students will participate more if they could use mobile devices?

Yes   ☐   No   ☐

9.   Do you think using MALL in EFL classes is efficient?

        Yes   ☐   No   ☐

•   Please, explain why.

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Section three: learning vocabulary via mobile applications

10.   In your opinion, what is the position of vocabulary in language teaching?

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11. How do you usually teach vocabulary?

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12.Do you think that it will be easy to teach the different forms of a new word by using the

available mobile language learning applications?

Yes   ☐   No   ☐

13. Have you ever suggest to your students to download on their mobiles English learning

applications?

        Yes   ☐   No   ☐

14. Do you consider that the self-regulated learning approach is helpful and the most suitable approach for Mila University students?

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الملخص

تعلم اللغات المدعوم بالهواتف المحمولة هو طريقة تعلم تزداد شعبيتها بشكل متزايد بسبب انتشار تقنيات المحمول المختلفة والمستخدمة لتعزيز تعلم اللغة. ولهذا، فإن هذه الدراسة تسلط الضوء على الاستخدام الحالي لتطبيقات الأجهزة المحمولة بين طلاب اللغة الإنجليزية كلغة أجنبية ومدى تأثيرها على تعلم المفردات في السياق الجزائري. للقيام بذلك ، تم إجراء تجربة مع طلاب اللغة الإنجليزية في السنة الثالثة في جامعة عبد الحفيظ بو الصوف من أجل دراسة فرضية البحث التي تفيد بأنه إذا استخدم الطلاب التطبيقات المقدمة في اللغة بمساعدة المحمول ، سيتم زيادة اكتسابهم للمفردات. يتم دعم التجربة من خلال استبيانين: الأول تم توزيعه قبل بدء التجربة لمعرفة ما إذا كان الطلاب يعتمدون على التطبيقات لتعزيز مفرداتهم وأي منها مناسب لهم. قدم الاستبيان الثاني لمعلمي التعبير الشفهي والمكتوب في نفس القسم لمعرفة أرائهم تجاه استخدام الهاتف النقال عموما و التطبيقات المحملة لتعلم اللغة على وجه الخصوص. وبالفعل ، فقد أدت الفترة التي تلقى فيها المشاركون فالتجربة التعليمة إلى الحصول على متوسطات أعلى لمرحلة ما بعد الاختبار مقارنة بمتوسط درجات الاختبار السابق. وبالمثل ، تشير ردود المعلمين على الاستبيان إلى موافقتهم على ملائمة استخدام التطبيقات المتنقلة كأدوات داعمة لمساعدة طلاب اللغة الإنجليزية كلغة أجنبية على تحسين عملية اكتساب المفردات الخاصة بهم.