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**THE IMPACT OF MOBILE-ASSISTED LANGUAGE LEARNING
IN ENHANCING STUDENTS' VOCABULARY LEARNING
The Case of Second-Year LMD Students of English at Mohamed
Kheider University of Biskra**

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Dedication

I dedicate this work to my father “may Allah welcome him in his vast paradise” who brought me up with all love, confidence, and support. Without him I may have not reached this level.

To all the members of my small family; to everyone whom I consider as family.

May ALLAH bless you all

Declaration

I, Amina SAYAD, do hereby solemnly declare that the work presented in this dissertation is my own, and has not been submitted in before for any university for a degree.

This work was carried out and completed at Mohamed Kheider University of Biskra, Algeria.

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Abstract

The mastery of the communicative competency is a powerful aspect of succeeding in the language learning. However, the majority of EFL learners seem to have some difficulties in acquiring vocabulary. That is, they have a lack of vocabulary background; they misspell words and mispronounce them. Therefore, this study aims at investigating the effects of Mobile Assisted Language Learning (MALL) approach on enhancing the competencies of EFL learners in vocabulary. Moreover, it seeks to examine this technique in enhancing students' performance. The hypotheses of the present study suggest MALL as a successful learning tool to improve vocabulary to a high extent. The study aimed at investigating the vocabulary competency of a sample of Second Year LMD students. Therefore, a mixed-methods approach was adopted in this study. Two data gathering tools were used in order to elicit both learners' and teachers' perception of vocabulary importance and reactions about applying the suggested instruction. These tools included a students' questionnaire and a teachers' interview. After the analysis and interpretation of the data, the findings revealed that MALL instruction can help learners to improve their vocabulary competency. Also, the findings assert that the teachers and the learners do not highly use mobile devices inside the classroom; however, they both showed their encouragement and agreement of applying the MALL instruction in classrooms. Consequently, it can be noticed that the main hypothesis of the study has been confirmed.

Key words: Mobile Assisted Language Learning (MALL), vocabulary, communicative competency.

List of Abbreviations and Acronyms

ASD: Autism Spectrum Disorder

CALL: Computer Assisted Language Learning

EFL: English as Foreign Language

ESL: English as Second Language

ESP: English for Specific Purposes

GPS: Global Positioning System

ICT: Information and Communication Technology

ILLP: International Leadership Learning Programme

IM: Instant Messaging

ITU: International Telecommunication Union

L2: Second Language

LMD: License-Master-Doctorate

MALL: Mobile Assisted Language Learning

m-Learning: Mobile Learning

MMS: Multimedia Messaging Service

MOOCs: Massive Open Online Courses

MP3: Moving Picture Expert Group-Audio Layer 3

MPEG: Moving Picture Experts Group

PDA: Personal Digital Assistant

PC: Personal Computer

SLA: Second Language Acquisition

SMS: Short Message Service

UNESCO: United Nations Educational, Scientific and Cultural Organisation

VBL: Video-Based Learning

VLE: Virtual Learning Environment

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ملخص

General Introduction

Introduction

The era in which we live is the era of technology. We are witnessing a new explosion wave of communication technologies and devices such as: mobile phones, PDAs, PCs, MP3/MP4, smart phones...etc. In addition to this list, we have the Internet, text messaging, chatting and other ways of communicating which are all part of this technological wave that makes people communicate easily all around the world. Furthermore, the effect of these devices in the way we communicate, write, read or even speak raises the idea of using such tools in learning languages.

Hence, the English language now is the language of globalization and the first language of communication between people from different countries and cultures. We can notice that it is highly adopted in the Internet and the social media. The Algerian government as a part of the international community has given the English language a special status to be taught in schools as a foreign language. Therefore, teachers and academic institutions are trying to teach the language and to enhance the learners' communicative competency as well as their motivation and autonomy.

Nowadays, using technology in learning English as a foreign language (EFL) is very necessary to all language learners. As it adds some enjoyment and fun to the learner's environment, it can also improve learners' skills and autonomy and enhance their motivation.

1. Statement of the Problem

Vocabulary learning is an essential part in foreign language learning; it is a fact that a learner with rich vocabulary background is a lifetime writer, speaker and reader. With the belief that learners also should be autonomous, i.e. take the responsibility for their learning; a critical need rises to focus on these two facts in the process of learning and teaching a foreign language. One observed problem is that the majority of EFL learners (second year students at Mohamed Kheider University of Biskra) give less attention to developing their vocabulary as compared to the other

language aspects, and they only rely on what is provided by teachers in lectures, handouts...etc, without making extra efforts to develop their abilities. Thus, the present study suggests the use of MALL (Mobile-Assisted Language Learning) as a strategy to develop learner's vocabulary and their autonomy.

2. Significance of the Study

This study is significant as it tries to show the role of using mobile devices in learning English language vocabularies i.e. reaching the communicative competence. This study also attempts to call the use of MALL to improve vocabulary acquisition and to facilitate the role of teachers in making learners acquire the vocabulary knowledge in a motivated way; it also makes learners more motivated and autonomous while using these tools. Finally, as the approach of MALL needs more research in Algeria, this study may motivate other researchers to carry on further studies on the same subject.

3. Aims of the Study

General Aim: the purpose of this study was to determine whether using Mobile Assisted Language Learning (MALL) is effective in developing learner's vocabulary learning in EFL classes or not.

Specific Aims: * Changing traditional methods used by EFL teachers into modern ones to increase the learning process.

* Finding new ways (technological aids) to develop learner's vocabulary.

* Shedding light on how learning via MALL can be useful for EFL learners, and promoting their motivation about learning vocabulary.

4. Research Questions

This research sought to answer the following research questions:

- What are the suitable devices of MALL that can be utilized in EFL classrooms?
- To what extent can MALL develop learner's vocabulary?

- What are the major characteristics of a learner with rich background of vocabulary?

5. Research Hypotheses

Based on the above research questions, we propose the following research hypotheses:

- We suggest mobile phones and tablets to be the suitable devices of MALL that could be used in EFL classrooms.
- MALL can develop both learner's vocabulary and to take their level into a higher degrees.
- A learner with rich background of vocabulary is almost a good writer, reader and speaker.

6. Limitations of the Study

It was difficult to get data easily from all the learners because of the strike; therefore, we could not gather data through classroom observation. Also, distributing the questionnaire was difficult for the same reason; so we made an online questionnaire and shared it through a Facebook group. Moreover, the main limitation was time and lack of access to sources. In addition, this research was restricted to examine one aspect of the language which is vocabulary, and it is not concerned with other aspects of the language or other types of competences.

7. Research Methodology

7.1 Research Method

In order to confirm the hypotheses of the present study and to obtain information from the subjects (teachers/students), we used a mixed-methods approach because we attempted to examine the effects of the MALL program in improving vocabulary learning from different angles.

7.2 Sample of the Study

We decided to choose 2nd year LMD students of English at Mohamed Kheider University because vocabulary plays an important role in their advanced level and it relates to the majority of their courses such as: Written Expression, Oral Expression, and because they are more used to the use of mobiles and Internet software. From the total population of students, 41 students have been employed as our sample. Moreover, a number of five (05) teachers from the English Language

Division were chosen in order to give their feedback and opinions on the subject of: the impact of mobile assisted language learning (MALL) in enhancing vocabulary learning.

7.3 Data Gathering Tools

Two data gathering tools were chosen to collect data about the subject of the present study. A questionnaire has been handed to the sample of the study (2nd Year LMD Students) to collect their opinions, attitudes, and reactions about the topic. Moreover, an interview has been conducted with some teachers of English (of different modules) to gather their feedback and opinions about the use of MALL. Their answers have been recorded, analyzed and interpreted.

8. Structure of the Dissertation

There are three chapters in this study. Chapter one provides the definition of vocabulary, its importance, kinds of vocabulary, aspects of knowing a word, and teaching and learning vocabulary. Chapter two is devoted to the historical background of the MALL, its definitions, tools, devices and its advantages and disadvantages. Chapter three is dedicated to the research methodology which explains in detail the population and the sample of the study, the data gathering methods and the analysis and interpretation of both the students' questionnaire and the teachers' interview.

CHAPTER ONE: VOCABUARY LEARNING: REVIEWING FUNDAMENTALES

Introduction

The Vocabulary aspect of language received less attention than other elements of language during the first decades of the 20th century. Grammar was often the favored and the essential element to be taught. However, research in the field of vocabulary acquisition arose when the importance of vocabulary learning was recognized (Lightbown & Spada, 2006, p.96). It is now one of the challenging tasks and an essential part of teaching and learning a language. A good knowledge of words helps students in perceiving/receiving the input and producing the output of any language, whether it is first, second, or a foreign language. Because of the importance of vocabulary learning in enhancing learners' mastery of the language as well as the communicative competence, educators shed the light on the topic and how to learn it and teach it in different ways through effective methods. Further, the traditional methods and approaches of teaching and learning seem insufficient to handle the main purpose of learning vocabulary which is making language users, EFL learners in particular, learn and use their words correctly when they practice the language.

1.1 Importance of Vocabulary

Vocabulary plays an important role in developing students' abilities. Besides its contribution to communicative abilities, it also helps in developing several language skills and elements. It is regarded as a critical tool since a limited knowledge of vocabulary impedes successful communication. Underscoring the importance of vocabulary, Schmitt (2000) emphasized that "lexical knowledge is central to communicative competence and to the acquisition of a second language" (p. xi). Wilkins (1972) describes clearly the importance of vocabulary for

communication; “without grammar very little can be conveyed, without vocabulary nothing can be conveyed” (cited in Schmitt, 2010, p. 3).

Nation (2001) further explained the complementary relationship between vocabulary knowledge and language, i.e. vocabulary knowledge enables language use, and conversely, language use leads to an increase of vocabulary knowledge.

The importance of vocabulary is to be inside and outside the walls of classrooms. Outside classrooms, people use the language to socialize and communicate all the time. In classrooms, learners have to learn a sufficient amount of vocabulary to succeed in their process of learning. Rodriguez and Sadoski (2000) figured out that vocabulary acquisition is essential for successful second language (L2) and foreign language use and plays an important role in speaking and writing complete texts. Either in English as a second language (ESL) or English as a foreign language (EFL), learning vocabulary has a vital role in all language skills (i.e. listening, reading, speaking, and writing) (Nation, 2011 cited in Alqahtani, 2015 p. 22). Furthermore, Rivers & Nunan (1991) claimed that without an extensive vocabulary, we will be unable to use the linguistic competence (structures and functions) we may have learned for comprehensible communication (ibid).

Due to the lack of vocabulary background, EFL readers may face problems in understanding what they are reading. Usually, they refer to dictionaries to search for some concepts or words' meanings to solve the problem. Krashen in Lewis (1993) mentioned that “when students travel, they don't carry grammar books, they carry dictionaries” (p. iii). Many researchers argued that vocabulary learning is one of the most important parts in foreign language. As mentioned before, Wilkins explained that with grammar we can produce little, but without vocabulary we cannot produce anything. This explains the need for learning vocabulary and its great role in EFL. In the same vein, other scholars such as Krashen (1989) (as cited in Rodriguez & Sadoski, 2000), stated

many reasons to pay more attention to vocabulary, “First, a large vocabulary is of course essential for mastery of a language. Second language acquirers know this; they carry dictionaries with them, not grammar books, and regularly report that the lack of vocabulary is a major problem” (p. 386).

On the other hand, the vocabulary might be a cause of difficulty for learners. Meara (1980) noted that it is a considerable source of problems (p. 01). Another possible reason is that vocabulary does not have rules which the learners may follow to acquire and develop their knowledge unlike syntax and phonology (Alqahtani, 2015, p. 23). In other words, it is not clear in vocabulary learning what rules to apply or which vocabulary items should be learned first (Ibid). Oxford (1990) also claims that vocabulary is “by far the most sizeable and unmanageable component in the learning of any language, whether a foreign or one’s mother tongue, because of tens of thousands of different meanings” (p. 29). Despite these difficulties which learners may face in acquiring vocabulary which they have to completely deal with them.

1.2 Vocabulary Definition

Vocabulary is a tempting component that has an important role in EFL teaching and learning. It is considered as a crucial part in developing English language skills. The ultimate purpose of learning vocabulary is the communicative accuracy and fluency. According to Richards & Renadya (2002) “vocabulary learning is the core component of language proficiency and provides much of the basis for how well learners speak, listen, read, and write” (p. 255).

Despite the importance of vocabulary in learning a language, several definitions have been provided by various educators. According to Zimmerman in Coady & Huckin (1997) vocabulary is central to language learning and is of critical importance to the typical language learning (p. 05). Vocabulary can be defined as “words we must know to communicate effectively; words in speaking

(expressive vocabulary) and words in listening (receptive vocabulary)” (Neuman & Dwyer, 2009 p.385). Besides, Richards & Schmidt (2010) defined it by saying “a set of LEXEMES, including single words, compound words, and idioms” (p.629). Additionally, vocabulary refers to “a list or set of words for a particular language or a list or set of words that individual speakers of language might use” (Hatch & Brown, 1995, p. 1). This means that vocabulary is words used by one as a communication means. Moreover, Diamond & Gutlohn (2006) stated that vocabulary is the knowledge of words and word meanings. Furthermore, Ur (1991) stated that:

Vocabulary can be defined roughly, as the words we teach in the foreign language. However, a new item of vocabulary may be more than just a single word: for example, post office, and mother-in- low, which are made up of two or three words but express a single idea. A useful convention is to cover all such cases by talking about vocabulary ‘items’ rather than ‘words’.

(p. 60)

According to Fineochiaro (1989, cited in Wulandari, 2017, p. 24), words become meaningful only when studied and considered in context.

1.3 Kinds of Vocabulary

Some experts divided vocabulary into two types: active and passive vocabulary. Harmer (1991) distinguished between the two types of vocabulary. The first type of vocabulary refers to the one that the students have been taught and that they are expected to be able to use. The second one refers to the words that the students will recognize when they meet them, but they will not be able to use them. Hatch & Brown (1995) referred to the two kinds as: receptive vocabulary and productive vocabulary.

1.3.1 Receptive Vocabulary or Passive Vocabulary: Redman & Gairns (1986) defined it as “Receptive vocabulary is the language items which can only be recognized and comprehended in the context of reading and listening material” (p. 64). Accordingly, Nation (2001) defined receptive vocabulary use as that of “perceiving the form of a word while listening or reading and retrieving its meaning” (p. 38).

1.3.2 Productive Vocabulary or Active Vocabulary: Alqahtani (2015) explained it by saying “productive vocabulary is the words that the learners understand and can pronounce correctly and use constructively in speaking and writing” (p. 25). It involves what is needed for receptive vocabulary in addition to the ability to speak or write at the appropriate time. Therefore, productive vocabulary can be seen as an active process, because the learners can produce the words to express their thoughts to others (Webb, 2005).

To end up, the idea of dividing vocabulary into two types had been criticized. Redman & Gairns (1986) commented that polarizing vocabulary into productive and receptive categories, in this way, may seem rather artificial, and indeed the decisions to be made will not be that clear-cut. Nonetheless, it seems useful to bear the distinction in mind.

1.4 Aspects of Knowing a Word

One of the main concerns in learning a vocabulary of language is how to help students deal and understand authentic academic texts, spoken or written, which by their nature require a an advanced level of proficiency to be understood. In fact, learners with a good vocabulary stock can deal with the situation when they are exposed to texts or words that are crucial in understanding in terms of meaning. It could be argued that there is what is more important for comprehension than knowing what the words mean. As Vermeer (1992) put it, “knowing words is the key to understanding and

being understood” (p. 147). The first scholar to enumerate the aspects of knowing a word was

Richards:

	Aspects of knowing a word
1	The native speaker of a language continues to expand his vocabulary in adulthood, whereas there is comparatively little development of syntax in adult life.
2	Knowing a word means knowing the degree of probability of encountering that word in speech or print. For many words we also know the sort of words most likely to be found associated with the word.
3	Knowing a word implies knowing the limitations imposed on the use of the word according to variations of function and situation.
4	Knowing a word means knowing the syntactic behavior associated with the word
5	Knowing a word entails knowledge of the underlying form of a word and the derivation that can be made from it.
6	Knowing a word entails knowledge of the network of associations between that word and other words in the language.
7	Knowing a word means knowing the semantic value of a word.
8	Knowing a word means knowing many of the different meanings associated with a word.

Table 1.1: Aspects of Knowing a Word (Richards, 1976 p.82 cited in Carril, 2009 p. 16)

As mentioned above, the comprehension of words is more important than knowing what a lexical item means. Knowing a word seems to be a skill that should be learned to deal with authentic texts with new lexical items. Richards explained different points that should be considered in knowing a word such as knowing the words’ different meanings, knowing the route of a word and the derivations that can be made from it, knowing the semantic value of a word and other points. According to Nation (2001), to know any word, three interrelated aspects are required, and each aspect of them encompasses both a receptive and productive dimension. In addition, one significant

dimension of vocabulary knowledge is the ability to distinguish between receptive and productive vocabulary.

Aspects of knowing a word			
Form	Spoken	R	What does the word sound like?
		P	How is the word pronounced?
	Written	R	What does the word look like?
		P	How is the word written and spelled?
	Word parts	R	What parts are recognizable in this word?
		P	What word parts are needed to express the meaning?
	Forms and meanings	R	What meaning does this word form signal?
		P	What word form can be used to express this meaning?
Meaning	Concepts and referents	R	What is included in the concept?
		P	What item can the concept refer to?
	Associations	R	What other words does this make us think of?
		P	What other words could we use instead of this one?
	Grammatical functions	R	In what patterns does the word occur?
		P	In what patterns must we use this word?
Use	Collocations	R	What words or types of words occur with this one?
		P	What words or types of words must we use with this one?
	Constraints on use (register, frequency...)	R	Where, when and how often would we expect to meet this word?
		P	Where, when and how we expect to use this word
Note: in columns, R= receptive knowledge, P= productive knowledge			

Table 1.2: What is Involved in Knowing a Word (Nation, 2001 p. 27)

1.4.1 Word Form

Word form, or orthographical knowledge, is one of the key components to vocabulary knowledge in particular, and language learning in general. According to Nation (2001), knowing one word form involves knowing spoken form, written form, and word parts.

1.4.1.1 Spoken Form

Firstly, spoken form, which means the pronunciation of the word, is the ability to know what the word sounds like in a continuous speech as a receptive dimension, as well as the ability to pronounce words clearly in a connected speech which is considered as a productive one. Various phonological factors such as stress, pitch, volume, length of the syllabus, as well as features of the syllabus may interfere in the acquisition of new vocabulary items (Schmitt, 2000). For example, EFL learners should recognize that the letter “O” can be pronounced in different ways such as “post” /pəʊst/, “box” /bɒks/, “cool” /ku:l/, and “mother” /mʌðə(ɹ)/.

1.4.1.2 Written Form

Secondly, the written form of a word, which is the spelling form of the word. When acquiring new items, EFL learners are supposed to know what the word looks like; which is the receptive knowledge, and how the word is written and spelled; which is the productive one. Therefore, EFL learners should be able not only to pronounce words, but also to write them correctly. For instance, learners may know how to pronounce the word “xenophobia”; however, they may fail to provide its correct spelling; one may replace the letter “x” with the sound /z/ (Nation, 2001).

1.4.1.3 Word Parts

Finally, word parts, such as prefixes, roots, suffixes, and word family, are some parts that may constitute a particular vocabulary item. Thus, EFL learners should be aware of these parts that can build words and that are also needed to convey the meaning; i.e. these parts can make different changes in words’ meanings by adding or omitting a specific part. Knowing the word family also helps learners understand meaning of the members of family. For instance, if learners know the meaning of the suffix “able”, they may derive the meaning of the words of the same root such as “unable”, “disable”, and so on. Therefore, the aspects of word form are interrelated and important for word recognition.

1.4.2 Word Meaning

Acquiring the form of vocabulary items is important, but not sufficient; its meaning also plays a crucial role in recognizing it and this point should also be recognized. The word meaning aspect underlies three sub-aspects: form and meaning, concepts and referents, and associations.

1.4.2.1 Form and Meaning

First, it is generally known that learners relate words forms with their meanings. Schmitt (2010) stated that while facing a new vocabulary item, learners usually tend to connect the meaning of the word with its orthography. They seek to answer the two main questions: “What meaning does this word form signal? And what word form can be used to express this meaning?” (p. 17). The former question represents the receptive dimension. While, the latter question represents the productive dimension. For example, if learners are aware of the past tense structure and that the past tense signals events in the past, they would be able to grasp the meaning.

1.4.2.2 Concepts and Referents

In addition, meaning consists of a relationship between a word and its referent. The latter represents the person, thing, action, condition, or case whether in real or in imaginary world. For instance, the word giraffe refers to the spotted animal with a very long neck in Africa (Schmitt, 2000). For this reason, learners have to know what is included in this concept, as a receptive knowledge, and what items the concept can refer to, as a productive knowledge. Moreover, advanced learners can be asked to refine their word knowledge learning to grasp nuances of meaning among words, such as in the example provided below:

	Because unexpected	Because difficult to believe	So as to cause confusion	So as to leave one helpless to act or think
Surprise	✓			
Astonish		✓		
Amaze			✓	
Astound				✓
Flabbergast				✓

Table 1.3: Semantic Feature Analysis (Rudzka et al., 1981 p.65)

1.4.2.3 Word Associations

Finally, knowing a word involves knowing word associations. Schmitt (2000) claimed that words do not exist in isolation, and that they are related to each other in various ways. Word associations, therefore, are the mental relationships that relate a word with another. In other words, when a word is provided to a learner, some other related words come to mind.

1.4.3 Word Use

Knowing the form and the meaning of a word is not sufficient to acquire new vocabulary items. Nation (2001) noted that word use is one aspect of word knowledge that consists of knowing the grammatical functions, the collocation, and the different constraints of word use.

1.4.3.1 Grammatical Functions

The grammar function of a word seems an important area to be considered for many scholars. Learners need to cover the grammar of any new acquired item because “the grammar language is the description of the ways in which words can change their forms and can be combined into sentences in that language” (Pinker, 1999). The grammatical function of a word includes word classes such as verbs, nouns, adjectives and the various classes, as well as the grammatical patterns in which a word typically occur. Besides, as a receptive knowledge, learners should know the

grammatical patterns in which the word may occur, and as a productive knowledge, they should know the patterns in which the word may be used.

1.4.3.2 Collocations

Word knowledge is to know the words that usually collocate with it. According to Schmitt (2000), collocation is “the tendency of two or more words to co-occur in discourse” (p. 76). So, the main characteristic of collocation is the co-occurrence of two –or – three item groups in a discourse. In the same vein, the co-occurrence of vocabulary items cannot be arbitrary; some words may be combined together, while others cannot. For instance, Jeremy Harmer (2001) commented that it is appropriate to say “fast asleep”, and this is an acceptable collocation, but “fast awake” is not. In fact, there are two types of collocations to know: grammatical/syntactic collocations and semantic/lexical collocations (Schmitt, 2000). The former refers to the combination of a dominant word, typically a verb, noun, or adjective, and a preposition, such as: think of. The latter, on the other hand, consists of combining two “equal words such as noun + verb (ball bounces), verb + noun (spend money), and adjective + noun (cheerful expression)” (Schmitt, 2000, p. 77). As far as the receptive and productive dimensions are concerned, EFL learners are supposed to know words or types of words that may occur with an item; this is the receptive knowledge, and what words or types of words that may be combined with an item, this the productive knowledge.

1.5 Vocabulary Teaching

Although vocabulary learning importance has been recognized by many scholars, still, according to Milton (2009), vocabulary learning and vocabulary teaching receive less attention than they deserve (p. 1). He mentioned that one reason is the persistent belief among learners and teachers that a learner can learn a new language and manage to use it to a great extent even though

their vocabulary is very limited. Another belief, he mentioned, is that vocabulary is learnt implicitly, making it superfluous in teaching.

Takač, (2008) explained the above idea by saying that the teaching practices in the past suggest that the status of formal vocabulary teaching has always been influenced by current trends in linguistic and psycholinguistic research. He said that the naturalistic approach to language teaching, for example, favored implicit vocabulary learning. The emphasis was on guessing the meaning from context and using monolingual dictionaries; whereas, defining and translating lexical items were to be avoided. But, with time educators such as Sökmen (1997) figured out that implicit incidental learning seems to be a slow and inefficient process which does not necessarily imply long term retention (cited in Takač, 2008). It has become apparent that vocabulary acquisition cannot rely on implicit incidental learning, but needs to be controlled. The advocates of this view have begun to insist on more intensive, explicit vocabulary teaching from the very beginning of any language learning syllabus (Judd, 1978). Explicit vocabulary teaching would ensure that lexical development in the target language follows a systematic and logical path, thus avoiding uncontrolled accumulation of sporadic lexical items (Takač, 2008 p.18). However, the contribution and effect of explicit vocabulary teaching on vocabulary seems to be under dispute since learners do not learn everything they have been taught. Takač (2008) also highlighted that the contemporary approach to vocabulary teaching recognizes the importance of both implicit and explicit teaching, taking into account the results of scientific research, with the aim to increase the efficiency of teaching and learning of target language vocabulary.

Recent research indicated that teaching vocabulary may be problematic because many teachers are not confident about the best practice in vocabulary teaching; and at times do not know where to begin to form an instructional emphasis on words learning (Berene & Blachowicz, 2008). Alike, Thornbury (2002) declared that teaching words is a crucial aspect in learning a language as

languages are based on words. Similarly, “Vocabulary is all about words. When we use language we use words all the time, thousands of them. If we know a language well, we know how to write its words and how to say its words” (McCarthy, O’Keeffe & Walsh, 2010 p.1). In other words, it seems impossible to learn a language without learning its words since communication tasks are based on words.

Teaching vocabulary is one of the most discussed parts of teaching English as a foreign language lately. Alqahtani (2015) assured that when the learning and teaching of vocabulary takes place, problems will appear to teachers, and they have problem on how to teach students in order to gain satisfying results (p. 24). Teachers are asked to find out the appropriate techniques to be implemented to students. A good teacher should vary techniques to teach vocabulary; he/she should master the way that words will be understood by learners, and makes them interested, motivated, and autonomous in learning the vocabulary of the target language inside and outside the classrooms. For this end, Nation outlined these principles:

Principals	Does
Content and sequencing	<ul style="list-style-type: none"> • Use frequency and range of occurrence as ways of deciding that vocabulary to learn and the order in which to learn it. • Give adequate training in essential vocabulary learning strategies. • Give attention to each vocabulary item according to the learning burden of that item. • Provide opportunities to learn the various aspects of what is involved in knowing a word. • Avoid interference by presenting vocabulary in normal use rather than groupings synonyms, opposites, free associated or lexical items. • Deal with high frequency vocabulary by focusing on the words themselves, and deal with low frequency vocabulary by focusing on the control strategies.
Format and presentation	<ul style="list-style-type: none"> • Make sure that high frequency target vocabulary occurs in all the four strands of meaning-focused input, language focused learning, meaning focused output and fluency development. • Provide opportunity for spaced, repeated, generative retrieval of words to ensure cumulative growth. • Use depth-of-processing activities
Monitoring and assessment	<ul style="list-style-type: none"> • Test learners to see what vocabulary they need to focus on. • Use monitoring and assessment to keep learners motivated. • Encourage and help learners to reflect on their learning.

Table 1.4: Principles of Vocabulary Learning (Nation, 2001 p.385)

In vocabulary teaching, teachers can apply a host of strategies and activities. Which teaching strategy a teacher will employ depends on the time available, the content (i.e. the component of knowledge learners are to acquire), as well as its value for the learner (i.e. which learning strategy he or she can learn or apply) (Takač, 2008, p.19). In general, Seal (1991) classified vocabulary teaching strategies as planned and unplanned activities in classrooms (cited in Shen, 2003, p. 190). “Unplanned teaching strategy refers to the occasions when words may be learned incidentally and accidentally in class when students request particular meanings of the word, or when the teacher become aware of any relevant words to which attention needs to be drawn” (ibid). For this strategy, Seal suggests The three C’s, a three-step procedure where the teacher (1) conveys the meaning, (2) checks meaning by, for example, asking questions and (3) consolidates the meaning in learners’

memory by, for example, relating it to the context or personal experience (cited in Tokar & Fainman, 2018 p.443). On the other hand, planned strategy is defined as “Planned vocabulary teaching refers to deliberate, explicit, clearly defined and directed vocabulary teaching” (Takač, 2008, p.19). In other words, this strategy is about teachers to present new lexical items in a previously planned way. Such teaching presupposes dedicating a certain amount of time to dealing with vocabulary, involving ‘exploration’ of the different aspects of lexical knowledge, as well as inducing learners to actively process lexical items (Nation, 2001). A review of the literature (Nation, 2001; Thornbury, 2002) has yielded a comprehensive list of teaching strategies that fall into two major categories: (1) presentation of meaning and form of new lexical items and (2) review and consolidation (recycling and practicing) of presented lexical items.

1.6 Techniques in Teaching Vocabulary

Recent researches have aimed to investigate what techniques are used by teachers of English in presenting new vocabulary in terms of form and meaning. There are several techniques concerning the teaching of vocabulary. Techniques employed by teachers depend on some factors such as the context, time availability, and its value for the learners (Takač, 2008). Brewster, Ellis & Girard (1992 p.26) stated some techniques of teaching vocabulary (cited in Wulandari, 2017, p. 42). They are as follows:

1.6.1 Using Objects

Using this technique includes the use of real objects, visual aids, and demonstration. They can function to help learners in remembering vocabulary better, because their memory for objects and pictures is very reliable and visual techniques can act as cues for remembering words (Takač, 2008 p. 26). In addition, Gairns & Redman (1986) stated that *real objects technique* is appropriately employed for beginners or young learners and when presenting concrete vocabulary.

Objects can be used when the lexical items consist of concrete nouns. Introducing a new word by showing the real object often helps learners to memorize the word through visualization. It seems to be very helpful way for learning new items in vocabulary to learners.

1.6.2 Drawing

Brewster, Ellis & Girard (1992) explained this technique by saying that objects can either be drawn on the blackboard or on flash cards. The latter can be used again and again in different contexts if they are made with cards and covered in plastic. They can help young learners easily understand and realize the main points that they have learned in the classrooms (p. 27 cited in Wulandari, 2017).

1.6.3 Using Illustrations and Pictures

Pictures connect students' prior knowledge to a new story, and in the process, help them learn new words. There are plenty of vocabularies that can be introduced by using illustrations or pictures. They are excellent means of making the meaning of unknown words clear. They should be used as often as possible. The list of pictures includes: posters, flashcards, wall charts, magazine pictures, board drawings, stick figures and photographs. Pictures for vocabulary teaching come from many sources.

1.6.4 Contrast

Some words are easily explained to learners by contrasting them with their opposite, for instance, the word "good" contrasted with the word "bad". But, some words are not. It is almost impossible to contrast the words whose opposite is the gradable one. When the word "white" is contrasted with the word "black", there is an "in between" word "grey".

1.6.5 Enumeration

An enumeration is a collection of items that is a complete, ordered listing of all of the items in that collection. It can be used to present meaning. In other words, this technique helps in understanding when any word is difficult to explain visually. One can say “clothes” and explain this by enumerating or listing various items. Teacher may list a number of clothes (e.g. a dress, a skirt, trousers ...etc) and then the meaning of the word "clothes" will become clear. The same is true of ‘vegetable’ or “furniture”, for example (Harmer 1991, p.2).

1.6.6 Eliciting

This technique is more motivating and memorable by simply giving pupils a list of words to learn (Alqahtani, 2015). Accordingly, Samita, Jufri & Triarina (2013) confirmed that one of the important techniques employed by teachers to make students engaged in the tasks is elicitation technique. They added that by applying this technique teachers are no more the center position in the classroom, because the students are encouraged to actively take part in the lesson by interacting with the teacher (p.19).

1.6.7 Translation

Even though translation does not create a need or motivation of the learners to think about word meaning (Cameron, 2001 p.206), in some situations translation could be effective for teachers, such as when dealing with incidental vocabulary (Thornbury, 2002), checking students’ comprehension, and pointing out similarities or differences between first and second language, when these are likely to cause errors (Takač, 2008). There are always some words that need to be translated; and this technique may save a lot of time.

1.7. Types of Vocabulary Learning

Besides the techniques of teaching vocabulary, there are also some types of learning vocabulary teachers can take into account. According to Nezhad et al., (2015), generally there are four learning types can be distinguished; namely, incidental, intentional, implicit, and explicit.

1.7.1 Explicit Vocabulary Learning

The explicit vocabulary learning is broadly defined as the deliberate attention to learn a new vocabulary item. Schmitt (2000) commented that despite the fact that explicit learning of vocabulary is time-consuming and too laborious for learners to learn an adequate size of lexicon, it gives the greatest chance acquiring vocabulary. While Qing Ma (2009) defended it; when he said that it is clear, categorical and observable over a short period unlike the implicit learning (p. 103).

1.7.2 Implicit vocabulary learning

Implicit vocabulary learning refers to the unconscious process of acquiring of vocabulary. According to Ellis' (1994) terminology (as cited in Nezhad et al., 2015 p. 21) and Dekeyser (2003, p.314), implicit learning is typically defined as acquisition of knowledge by a process which take place naturally, simply and without conscious operation. He added that implicit learning is more likely to be associated with concrete rules while explicit learning is more suitable for abstract rules. Moreover, implicit learning is associated with learning vocabulary in context, for instance, when learning words while reading or listening without paying special attention to them. But it can also take place out of context. For example, when learners repeatedly review a vocabulary list then it becomes automatically learned. Therefore, reading seems to be the best method for implicit vocabulary learning.

1.7.3 Incidental Vocabulary Learning

Incidental vocabulary learning is associated with more natural language learning. It is generally defined as the by-product of any activity not explicitly geared to vocabulary acquisition (Nezhad et al., 2015). It is widely believed that most vocabulary, in both first and second language, is acquired incidentally .e. as by-product of such receptive activities as reading and listening while the focus is not vocabulary learning but some other purposes (Cho & Krashen, 1994). Accordingly, in the field of SLA, incidental learning is viewed as the process of acquiring vocabulary and grammar through meaning focused communicative activities, such as reading and listening (Hulstijn, 2003 p.349). Many scholars claimed that vocabulary is learnt from context. Nagy, Herman & Anderson (1985) believed that children learn most words through reading and that they do so incidentally. Also Krashen's input hypothesis (1989) postulates that vocabulary can be acquired by reading as long as the input is comprehensible to the learner. Once this type of learning can occur in using the language for communicative purposes, and so it gives a double benefit for time expended. Thus, it is slower, more natural, and more gradual (Shmitt, 2000).

1.7.4 Intentional Vocabulary Learning

Intentional vocabulary learning refers to activities that assist vocabulary development predominantly while learners need to pay attention to the words they want to learn. Hulstijn (2006) claimed that "Intentional learning refers to the learning mode in which participants are informed, prior to their engagement in a learning task, that they will be tested afterward on their retention of a particular type of information" (cited in Alemi & Tayebi, 2011). In other words, intentional vocabulary learning is defined as any activity geared at committing lexical information to memory (Hulstijn , 2001cited in Derakhshan & Khodabakhshzadeh, 2011).

Conclusion

Vocabulary learning is the key component to master any language. Therefore, EFL learners should be aware of the key notions of vocabulary learning in order to enhance their vocabulary knowledge. First, they have to be aware of the importance of vocabulary knowledge and its contribution to language mastery. Moreover, learners should know that knowing a word entails not having only a mastery over one aspect of the word, but also other various aspects; the word form, word meaning, and word use. Then, learners can acquire vocabulary through different strategies and methods, whether through traditional means or through modern ones. To sum up, understanding key notions of vocabulary and how vocabulary is acquired can help learners adopt the effective strategy that suits their needs and styles to master their target language. The next chapter will specifically tend to tackle a teaching instruction which is the Mobile Assisted Language Learning (MALL) and its great impacts in improving EFL learners vocabulary.

CHAPTER TWO: MOBILE ASSISTED LANGUAGE LEARNING (MALL) IN ENHANCING VOCABULARY LEARNING

Introduction

Teaching styles have changed significantly over the years. Teachers in the past relayed on traditional methods to teach; “EFL teachers used to depend on traditional ways in teaching the language such as: course books, chalkboard...etc” (Kloper, 2008 as cited in Çakir, 2016 P.170). In the world that technology devices are rapidly growing and changing our ways to learn, communicate and live, a shift from using these traditional ways is recommended. Mobile learning has become one of the current fields that may contribute to develop the learning process and because mobile devices nowadays play a great role in people’s daily life aspects, it is more interesting to investigate how they can be effectively used to support many types of learning.

Mobile assisted language learning (MALL) is a subarea in the growing field of mobile learning; it deals with the use of mobile technology in the process of learning. Though a young field, some 575 works relating to MALL have been published over the past two decades (Burston, 2013 p.157), and it can be considered as the next generation of e-learning.

In this chapter, we will provide an overview on the MALL subfield which deals with an introduction to the term mobile assisted language learning (MALL) and its origins, its basic definitions, its devices, applications, kinds, merits and demerits.

2.1 Technology and Education

As mentioned above, technological devices become an important part of people’s life. Çakir (2016) said that students are using technology mostly in their everyday life and they find it quite valuable, easy and motivating in learning a foreign language (p.171). The positive effect that technology provides into learner’s motivation, acquirement and attitude to a subject to be learnt makes technology a tempting components of education.

Sharples, Taylor, & Vavoula (2005) pointed out that an important convergence is occurring between the new personal and mobile technologies and the new conceptions of lifelong learning.

New Learning	New Technology
Personalised	Personal
Learner centred	User centred
Situated	Mobile
Collaborative	Networked
Ubiquitous	Ubiquitous
Lifelong	Durable

Table2.1: Convergence between Learning and Technology (Sharples, Vavoula & Taylor, 2005)

Learning is being re-conceived as a personalized activity since a learner-centred approach is “where the learner is allowed more choice, afforded greater control over his or her learning experience, and the learning experience is more active, as opposed to being a passive experience” (O’Neill & Tim McMahon, 2005 as cited in Bayat & Naicker, 2016 p.892), so too are new digital technologies offering personalized services such as music, play-lists and digital calendars, etc. It is also regarded as a situated and collaborative activity (Brown, Collins, & Duguid, 1989 cited in Sharples, Taylor & Valouva, 2005) so that people wherever they are, individually or collectively, they have problems to solve or knowledge to share, so mobile networked technology enables people to communicate regardless of their location.

Computer technology, like learning, is ubiquitous: computers are embedded in devices such as photocopiers and televisions that perform human-oriented functions (including basic instruction and user guidance) rather than acting as general-purpose computing devices (Sharples, Taylor &

Valouva, 2005). They are also becoming more durable since personal software packages and storage formats (such as PDF) evolve through successive versions, with a large measure of backward compatibility. There are now opportunities for learners to move from one learning episode to another, being able to take their preserved and organized digital records of their learning over a lifetime (Banks, 2004 p.6).

Furthermore, one can say that the use of various technological tools such as computers, social networks, mobile technologies improve both teacher's instructional process and facilitate learner's educational process. Also, the fact that nowadays students are very skilful in using technological tools and devices in their lives for various purposes, for example they are using web tools in order to communicate, interact and socialize with others and by doing this, they are already improving their speaking, listening, reading and writing skills. According to Woodil (2011), there are five realities that we have to face with respect to this new generation:

- They are video gamers, and this gives them different expectations about how to learn, work and pursue careers.
- They are technologically literate, but this does not necessarily make them media literate.
- They are content creators, and this shapes their notions about privacy and property.
- They are product and people rankers, and this informs their notions of propriety.
- They are multitaskers often living in a state of “continuous partial attention” and this means that the boundary between work and leisure is quite permeable. (Adapted from Rainie, 2006 as cited in Woodil, 2011p.14).

Technological devices have become so widespread that they change the way teachers teach and learners learn. Mobile devices such as iPods, mobile phones, Personal Digital Assistants PDAs, tablet PCs have been widely used in learning contexts (chinnery, 2006). However, the turning point

is the advent of the Internet; which has brought a number of changes in the daily life. While, the foremost sources in the past was the printed books or encyclopaedias. Today, all manner of information can be retrieved from a single medium, namely the Internet; which can be considered as a major source that is provided by technology (Yeşilel, Yaman & Şenel, 2015 p.1).

From the perspective of teachers, technology gives the teachers autonomy to develop their own curriculum and ‘tailor instructions to sustain a positive interaction to increase learner’s interest and motivation’ (Yunus et al., 2013).

According to Pavlik (2015), innovation technologies have led to an unavoidable transformation in education in four areas: (1) transformation of methods of teaching and learning by offering new strategies and techniques to improve education; (2) reshaping of the content of what is taught and learned by affecting the way teachers teach and the way learners learn; (3) transformation of educational institutions, structures and costs. The so-called has brought change to the educational settings. It is now possible to replace teachers by these innovation technologies. Besides that, learning became universal so learners can easily obtain information and share it regardless of constrains of time, age, duration and place; (4) redefining of the relationships between and among students, teachers and educational institutions (p.114). In the traditional classrooms, there is a merely interaction between learners and teachers but parallel to the growth of technologies; learning and teaching shifted to an interactional and a social-based approach (Yeşilel and Yaman & Şenel, 2015 p.1).

2.2 Mobile Learning

Mobile learning, or m-learning, has recently emerged as a new type of learning model which allows students to learn anywhere and at anytime, as it is defined by many scholars. Kukulska-

Hulme (2005) defined it by saying “it is certainly concerned with learner mobility, in the sense that learners should be able to engage in educational activities without the constraints of having to do so in a tightly delimited physical location” (p.1). Others have defined mobile learning as taking place when the learner is not in a fixed location and when he “takes advantage of the learning opportunities offered by mobile technologies” (O’Malley et al., 2005, p. 6 cited in J.Herrington, A. Herrington, J.Mantei, W.Olney & B.Ferry, 2009 P.17). “Research on m-learning initially focused on the mobility of the technology, but recently has moved from this interpretation to know that it is the mobility of the learner and the learning that is important” (Sharples, Taylor, & Vavoula, 2007) (ibid).

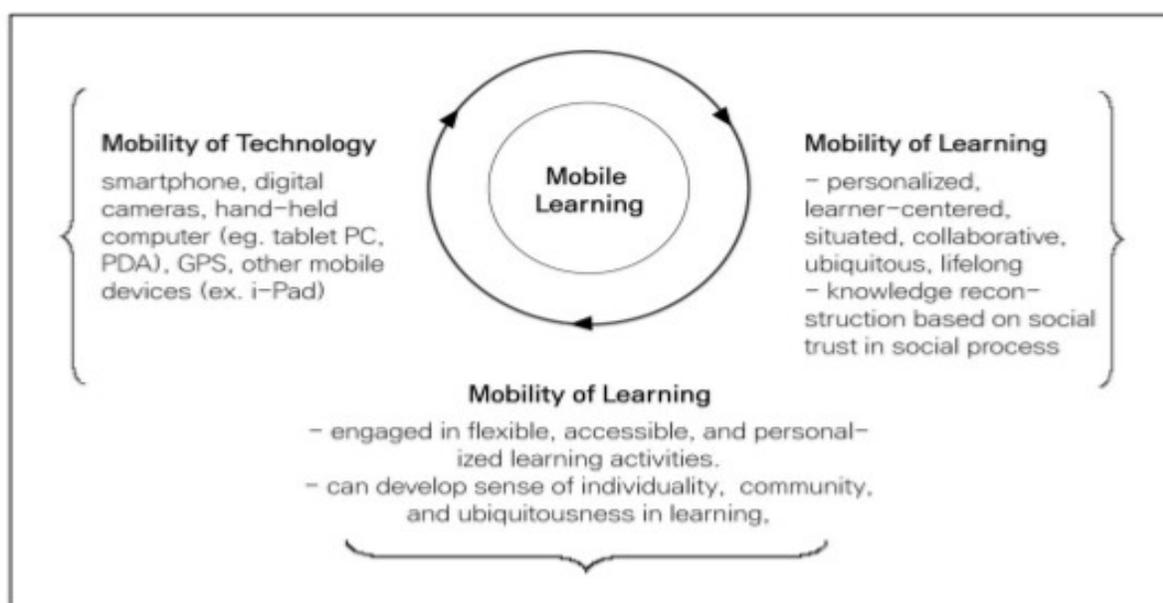


Figure2.1: The Concept of Mobile Learning in Three Areas (Heyoung & Yeonhee, 2012 p.34)

What is new in m-learning comes via the possibilities offered by portables –lightweight devices– that are small enough to be handled. Typical examples are mobile phones (also called cell phones or hand phones), smart phones, palmtops and handled computers (Personal Digital Assistants or PDAs); tablet PCs, laptop computers and personal media players can also fall within the scope.

These devices can be carried around and used for many activities such as communication, collaboration, and recently for both teaching and learning.

It is seen that a significant adoption of these technologies in further and higher education, in schools and communities; they have an impact on teaching and learning; formal and informal learning. Patten, Arnedillo, Sánchez and Tangney (2006) argued that “the benefits of mobile learning can be gained, through collaborative, contextual, constructionist and constructivist learning environments” (p. 307).

2.3 Examples of Mobile Learning

Technological aids are applied to many fields such as GPS navigation, wireless monitoring system as well as learning various materials as learning language skills. Miangah & Nezarat (2012) in their article mentioned that mobile learning can take place inside and outside the classroom. Particularly, mobile phones appropriate software seem to be effective in collaborative work among small groups to learn one of the language aspects; it provides the learners with the opportunity to a close interaction, conversation and decision-making among the members of the group due to specific learning activities designed on mobile phones. This type of interaction among learners can be strongly achieved when some technological devices are involved in the process of learning (p.311).

Mobile learning technology is more useful in doing activities outside the classrooms. Such activities enable students to direct connection with the real world experiments. Moreover, it effects the student’s motivation as well as autonomy, so they become more excited and independent when they come to learn their target language (ibid). Some of these activities (m-learning examples) are following:

2.3.1 SMS- based learning: SMS- based learning is a new educational adopted method in recent years. Moura & Carvalho (2010) defined it by saying “SMS is a technology that allows mobile

phones to send and receive short text messages” (p.282), and he added that via SMS technology we can deliver several learning activities to students easily and immediately. It is a part of m-learning

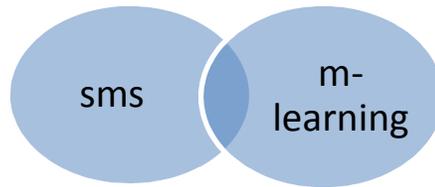


Figure2.2: SMS as a part from m-learning (adapted from Lominé & Buckingham cited in Moura & Carvalho, 2010 p.283).

2.3.2 GAME-based learning: it is a trend that has been implemented in many settings including workplaces, education, and social media. Trybus (2015) described it by saying “It refers to the borrowing of certain gaming principles and applying them to real-life settings to engage users” (as cited in Pho & Dinscore, 2015). Game-based learning’s motivational psychology allows students to be engaged in a playful and dynamic way while learning.

2.3.3 Video- based learning (VBL): is one of the latest methods used for learning. Video lectures have been growing in popularity and their use is increasing both inside and outside classrooms (Giannakos, 2013 cited in Albo, Hernandez-Leo, Barcelo & Sanabria-Russo, 2015 p.51). Despite VBL has a long history as a tool in educational classes, Yousef, Chatti and Schroeder (2014) declared that it also increased as a new form of online education, most prominently in the case of Massive Open Online Courses (MOOCs) (ibid).

These examples of m-learning can be used to teach second language skills such as vocabulary, pronunciation, grammar, listening, reading comprehension and spelling.

2.4 History of Mobile-Assisted Language Learning (MALL)

In the last three decades, the concept of extending the education beyond the traditional classroom has brought a considerable attention to Computer Assisted Language Learning (CALL). Researchers focused on the field and its impact on learning and teaching the language. Levy (1997) defined CALL as "the search for and study of applications of the computer in language teaching and learning" (as cited in Benchaabane, 2017). Even though CALL has had a huge success in the language learning area, there are certain capabilities such as interactive learning, speaking activity and so on which have not yet been mined for future generations. Also in the rapid changing world, there has been an ultimate need for more passive technology (Sood, 2010 p.6). All these reasons have led to the evolution of new field that provides better grounding for language learning named MALL.

When, in 1973, the mobile devices were invented for the first time, no one ever thought some day they would become an important part of routine life. As soon as, these innovative aides became an important part of modern life; hence the need for making them involved in language learning arose. Since the term mobile-assisted language learning (MALL) was first coined by Chinnery 2006, the use of mobile devices to support language learning has increased exponentially (Heyong & Yeonhee, 2012 p.34).

In the beginnings, mobile assisted language learning (MALL) has been perceived as a specific field within mobile learning (m-learning) and a subset of computer-assisted language learning (CALL). But lately, some scholars had different thing to say; Kukulska-Hulme and Shield (2008) noted that MALL differs from CALL "in its use of personal, portable devices that enable new ways of learning, emphasizing continuity or spontaneity of access and interaction across different contexts of use" (p. 273). As well as, Laurillard (2007) pointed out that "a typical m-learning activity could build in more opportunities for digitally- facilitated site-specific activities, and for ownership and control over what the learners do" (as cited in Kukulska-Hulme, 2008 p.273). So, a

rapid transformation of CALL into MALL has been adopted, also has brought huge transformation in foreign language learners attitude towards language learning (Kukulska-Hulme, 2009 cited in Çakir, 2016). One of the first projects using mobile phones in language learning was developed by the Stanford University learning lab in a Spanish learning program in 2001 (Brown, 2001 cited in Chinnery, 2006 p.10).

Mobile assisted language learning (MALL), in broad terms, ‘is the integration of mobile devices into language learning process’ (Bezircilioğlu, 2016 p.9). MALL is not easy to be defined in one way, since it has been one of the most sophisticated fields, which is growing at an accelerating rate. Another factor which should be taken into consideration is that in today’s world language learning cannot be restricted to the walls of the classroom with limited hours. Actually, that must be the situation if the aim is to promote learner autonomy in classes. Mobile assisted language learning has been defined by Valarmathi (2011) as:

Mobile assisted language learning (MALL) describes an approach to language learning that is assisted or enhanced language learning using mobile devices such as Cell (mobile) phones (including the iPhone or iPad.), MP3 or MP4 players (e.g. iPods) and Personal Digital Assistants (PDAs) (e.g. Palm Pilot Blackberry, etc). With MALL, students are able to access language learning materials and to communicate with their teachers and peers at anytime, anywhere (p.2)

Also, Turc (2017) viewed it as “learning across physical and virtual context which enabled and supported by highly portable devices (both handled and wearable) as well as communication and social network technologies”.

Kukulka-Hulme & Shield (2008) generally stated that MALL can be any type of language learning using portable devices. The mostly used ones are: PDAs, phones, smart-phones, pads, pods and other handled devices which are used for voice calling, making short messages, video chat, listening to audio MP3, MP4, Mpeg, web surfing, shopping, electronic dictionaries, etc. Trifanova et al. (2004:3) defined the mobile devices as “...any devices that are small, autonomous and unobtrusive enough to accompany us in every moment” (ibid).

2.5 Mobile Devices

Despite economic conditions in the first few years of the 21st century and slowdowns in the computer and communication industries, new mobile and wireless technologies have never stopped involving and have paved the way for an intelligent pervasive mobile environment.

According to a UNESCO report (2003), mobile devices include any portable, connected technology, such as basic mobile phones, smartphones, e-readers, netbooks, tablets, iPads and computers (Dias, 2017 p.340). Marc (2001) pointed out that today students have not just changed incrementally when compared to those of the past; they are the first generation to grow up with electric devices of new technology. He added that they use a huge number of technological aides and tool almost from their birth, and they are essential part in their lives. He further said mobile learning is no more a want; it is a need.

However, students are generally positive in using mobile devices for learning; which is essential for 21th century education (Wylie). These devices enable students to control their individual learning, and allow them to switch learning context from formal to informal or from personal to social, they also keep learners engaged, attentive and motivated and allow interactive. Hussein & Cronjé (2010) confirmed the idea that mobile devices are revolutionary because they break the boundaries of the structural status of classrooms and lectures and enable formal and informal

learning. These devices do not have to be used at particular places because of their small size, portability and opportunity, as their most important features.

For more say, Teachers also benefit from the use of these devices. Dias (2017) counted several benefits for teachers when using these technological aides as follows:

- They can create interactive presentations with stunning animation and effects, which include students’ observations and comments.
- They can give lessons; monitor progress and stay organized.
- They can spreadsheets and information no matter where they are.
- They also can directly give notes and feedbacks using these devices during interactive discussion...etc. (p.341).

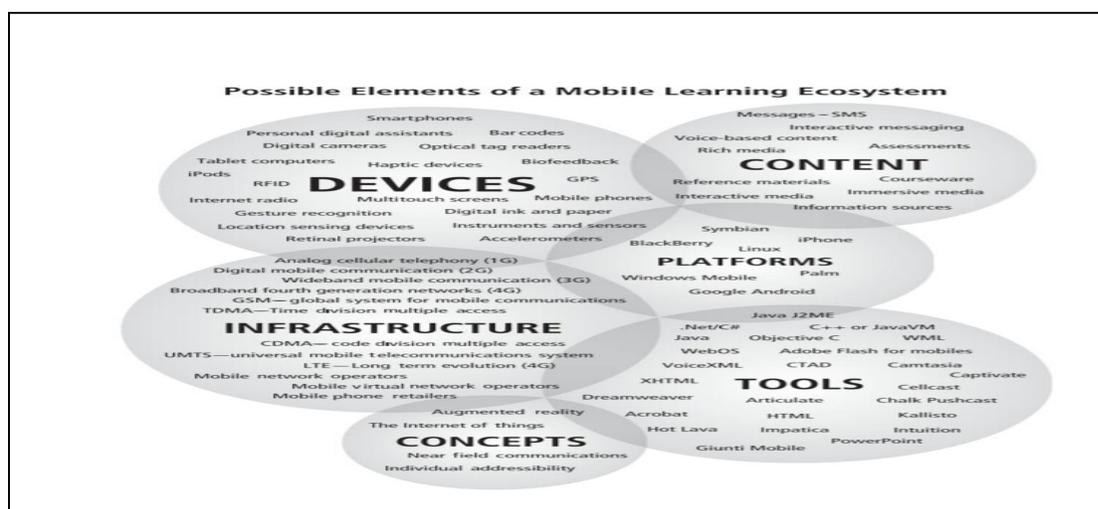


Figure.2.3: Possible Elements of a Mobile Learning Ecosystem (Woodill, 2011 p.34).

When it comes to mobile, the need of convergence is evident. According to Zheng & Ni (2006), Converged mobile devices seem to be a good opportunity of becoming popular, because ‘mobile’s scenario, size, weight, functions, wireless communication capability, and of course price are often

equally important to end users' (p.44). There are several mobile devices that can be listed to assist language learning such as follows:

2.5.1 Mobile Phones

According to a recent report by International Telecommunication Union (ITU, 2009), mobile phones, among the many types of mobile learning devices, are the most widely owned and used devices; with approximately 4.6 billion subscriptions all over the world; and the number is increasing at a enormous pace due to the development in the mobile phone technology and the expansion of the mobile market. Similarly, Saran & Seferoglu (2009) highlighted the idea that mobile phone (cell phones) are the most popular ones, and outnumber personal computers, and they have an important place particularly in young people's daily life (p.99).

Although, mobile phones were produced only to communicate at the beginning, Dewitt & Siraj (2011) assured that nowadays; they are used in the daily life for many purposes (as cited Bicen & Kocakoyun, 2013 p.757). First of all, even the simplest version of mobile phones provides SMS (Short Message Service) function for sending text messages, alarm clocks and planners to wake us up or to remind us by something. Additionally, most of them afford MMS (Multimedia Message Service) functions which Ghaderi & Keshavenable defined it in their research paper as the function that allows personalized multimedia messages containing content such as images, audio, text and video to be created and transferred. Moreover, these devices incorporate basic daily personal information management tools like address books and calendars which make people get rid of their traditional agendas and phonebooks (Trinder, 2005). More sophisticated mobile phones of nowadays include integrated software, cameras, Bluetooth connections, media players, mobile operating systems, wireless connection tools, and even navigation tools (GPS).

The popularity of mobile phones has inspired not only economic industries in the mobile market, but also many innovative scholars and educators in the last decades. There have been a number of studies looking into its use in language learning different aspects. For example, Kiernan & Aizawa (2004) carried out one of the first studies investigating the use of mobile phones in learning; they combined a MALL approach with task-based learning and drew attention to a number of potential advantages of mobile phone in language learning. Later on, several studies (Thornton & Houser, 2005; Lu, 2008 as cited in Basat et al., 2016; Kennedy & Levy, 2008) have particularly investigated on vocabulary learning opportunities through mobile phones' SMS and MMS functions. At the end of their researches, they concluded that mobile phones are more effective than traditional tools in learning vocabulary, and eventually students are more motivated while using them in learning tasks.

Kroski (2008) reported that “there are many different types, styles, and models of mobile phones available on the market today; They range from smart phones and PDAs to camera phones and multimedia phones to touchscreens, with much overlap between them” (p. 10). Mobile phones come in many varieties. Early versions looked like the ordinary phone handsets but phones are becoming smaller with each new generation.



Figure.2.4: Types and Functionality of Mobile Devices (Trinder, 2005 p. 8).

2.5.2 Personal Digital Assistants (PDAs)

Personal digital assistants (PDAs), sometimes known as palmtop computers. The term PDA was first used by Apple Computer CEO John Sculley in 1992 in reference to Apple Newton (Woodil, 2011 p.36). Initially, they were regarded as a small hand-held computers used for few multiple functions. But, with time PDAs developed and several definitions were attributed to them. “They are mobile devices with multimedia, personal organization software, and office productivity functionality in a very small package” (ibid). Also, Trinder (2005) defined them by saying “a computer-based handled device that incorporates personal organizer tools”. Modern PDAs, for example, enable users to compose music, to create videos, also to be used as a GPS navigator and so on; Trinder (2005) specified their use when he said that they were originally designed to act as electronic equivalents of diaries and personal organizers.

Due to their advanced technological functions, PDAs are among the mobile devices that have been most used for educational purposes (Trinder, 2005; Clough et al., 2007; Song & Fox, 2008). A study was conducted by the lately named Song & Fox (2008), focused on PDAs devices for incidental vocabulary learning. This study suggests that undergraduate level students can use the PDAs in various ways to improve their vocabulary. In the same year Jacob and Isaac (2008) declared that PDA supports interactive and group learning. Since text and data entry is possible through the screen, stands as a favorite choice since it integrates communication tools in it. Nevertheless, when compared to mobile phones, they are owned and used by fewer people (Chinnery, 2006). Most of these capabilities are now built into various versions of smart phones, which are quickly replacing the PDAs in the marketplace

2.5.3 Smart phone

Smartphone is a device which is no longer a strange thing to majority of people since it has gradually entered people everyday life. The first smart phone came out 20 years ago in COMDEX fair in Las Vegas (Anh, 2016 p.2). Woodil, (2011) pointed out that as mobile phones became smaller, they also took on more features and functions. Many phones developed personal organizing features such as those found in many personal digital assistants (PDA). Gradually, a new type of phone known as a Smartphone took shape (p.36). Anh (2016) declared that they are mobile phones with computers abilities and internet search. The only difference could be size and its mobility. Too similar, Jacob & Isaac (2008) cleared that Smartphone integrates telephone features, along with camera, PDA and MP3 player; it also supports access to Internet. Users can download audio or video lectures, flash movies, edit text documents, send IM and use the phone for storing data. They added that it supports interactive learning as it enables global collaboration.

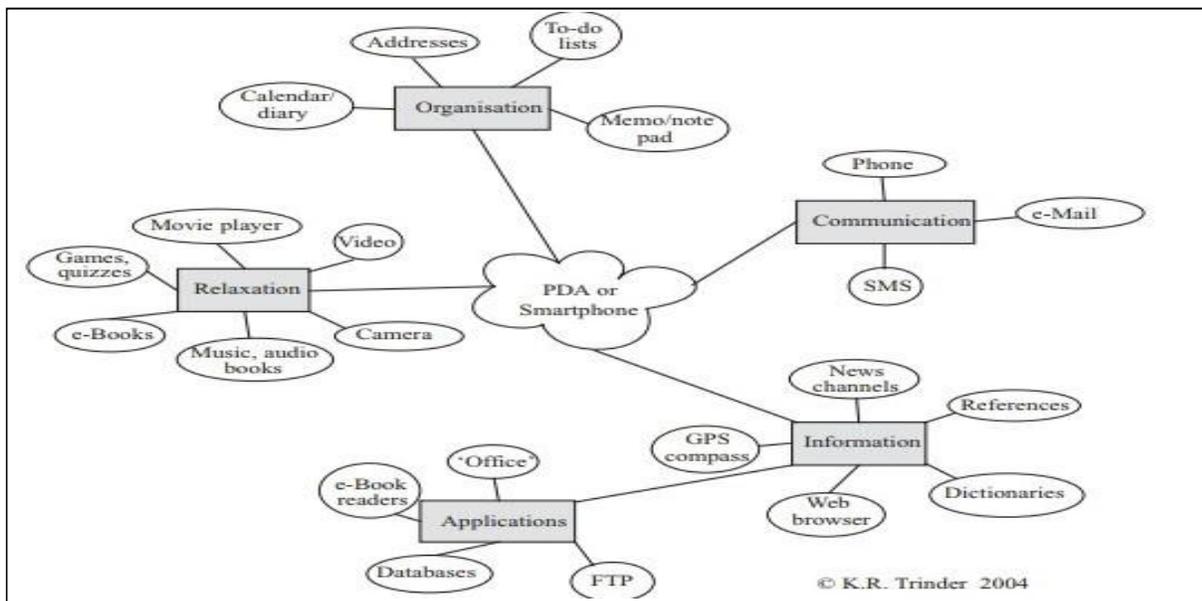


Figure.2.5: Main Types of PDA Use (Trinder, 2005, p.23).

2.5.4 Tablet PCs

In the beginning of the 1970, a new invented technological aide has appeared called Tablet PCs (Pen Tablet); and never stopped developing since that time. In 2010, many tablet computers were introduced into market including the Apple iPod with many functions (Walker, 2011). Woodil (2011) described this invention by saying “Tablet computers are special laptop computers shaped like slates which use an electronic stylus or a digital pen to input information into a touch screen” (p. 37). Some tablet computers are basically laptop computers with a screen that swivels so that it is on the outside of the computer when it is closed. Others have more limited functionality and are used mostly as “e-book readers”.

As any other technological device, tablet PCs also attracted scholars’ attention. For example, Hourcade & Bullock-Rest (2012) presented in their research an experiences conducting activities with multitouch tablet applications designed to promote collaboration, coordination, creativity, compromising one’s interests with the interest of others, and emotion understanding in children with ASD in mutitouch tablets. The results were so far encouraging and inspiring to use tablets in such activities. A year after, Hourcade et al., (2013) assured that Information and Communications Technology (ICT) is more accessible with Tablets anymore. Interacting with computers is easier with tablets due to their portability and touch screen feature (as cited in Yeni, 2015 p.19).

Among the fields Tablets PCs were involved; teaching and learning also took a place. Cicevic, Mitrovic & Nestic (2016) counted innumerable benefits for educators and learners while using mobile technologies effectively. For example, Tablet PCs help deliver an engaging learning experience with rich, multimedia digital content. Teachers also can deliver curriculum through PPT presentation, Word docs, and spreadsheets and mark up digital class work and homework. A particular advantage lies in saving time and money, instructors can use digital forms, convert digital notes to text without having to retype, and reduce paper, supply, and copying costs, and above all,

making them ecologically sustainable devices. Because tablet combine computing power with portability.

2.5.5 MP3 players

In recent years, the popularity of portable digital audio players, such as MP3 players, MPEG Audio Layer 3 or MP3, has been substantially increased and may now considered as one of the most common leisure devices. Jacob and Isaac (2008) defined it as “MP3 is a digital audio player which plays music and audio files, but no interactivity is offered. This could be used by students to listen to podcasts and audio lectures, they are light and compact, they have good audio quality output and lasting battery life but they offer no interactivity”.

These devices offered some listening functions, ubiquity and technological convergence which raised the possibility that young people will tolerate. Hence, researchers immediately conducted some surveys on how these media players could be implemented in different educational contexts. Among them; Hansen (2006) noted that mobile MP3 audio players are surfacing-tech teaching tools in institutions of higher learning, it is a method of compressing audio files by a factor of about 10, so that a 40-MB track on a compact disc would become a 4-MB MP3 file. Else, Theodora & Tomayess (2014) highlighted that lecturers are using two different methods in giving feedbacks: the traditional MS Word application and the MP3. It was noted that these approaches become essential in the learning sector, especially in a higher education. Particular software, Audacity, is required to record an MP3 audio feedback which allows students to review and listen to their lectures feedback using any device (Siwinki, 2008) (ibid).

2.6 MALL Tools

The mobile revolution is a fact. More and more schools are moving toward mobile learning in classrooms to take the advantages of this new electronic wave. The widespread mobile devices offered some tools available on Internet that can be used to contribute in learning process.

Particularly, EFL learners may use them to improve their language accuracy and fluency. They might be exploited for different purposes such as enhancing language skills, vocabulary acquisition, collaborative learning and promoting learner's autonomy. Some of these tools can be stated as follows:

2.6.1 Blogging: only a decade ago, 23 blogs existed on the internet (Blood, 2000). Today, the number is far more than 100 million and counting (Technorati.com, 2008). Using blogs has emerged as a language learning tool, and accordingly, this technique has come to constitute an important place within the context EFL. "A blog is an electronic journal where readers post their thoughts and opinions on a regular basis" (Lewis, 2009 cited in Çakir, 2016 p.177). Researchers aim to investigate on how EFL teachers and learners as well effectively incorporate blogs into language learning activities. For example, Akçay & Arslan (2010); Averianova (2012); Azizinezhad & Hashemi (2011) and Holder (2006) investigated on the impact of using blogs to enhance both reading and writing skills and they have proved that it is an effective learning tool. Also the fact that by posting and writing on personal blogs; students can really feel a sense of ownership, hence they improve autonomy by raising awareness of what they are learning is highly supported by some scholars like (yang et al., 2005; Lowe & William, 2004; Zhang, 2009; Kavaliauskiene, Anusiene & Mazeikiene, 2006 and Chen, 2011). Besides these benefits, Du & Wagner (2005) confirmed that blogs also contribute to enhance vocabulary. Similarly, Fellner & Apple (2006) examined the use of weblogs on enhancing writing fluency and improving lexical complexity of Japanese learners. By the end of their research, students were able to triple the number of lexical words to 350 % increase of words.

2.6.2 Podcast: as the advent of computers; and later the Internet paved the way of delivering learning, and as many people are continuously connected to hand-held devices. Learners have to take the advantage of them. Apart from the obvious benefits of these devices, iPods allowed the

creation of a new medium: the so-called podcast. The term was first used in 2004 and in 2005 was declared word of the year by the New Oxford American Dictionary (Jham, Duras, Strassler & Sensi, 2007). Çakir (2016) reported that Podcast can be defined as “the combination of two words iPod and broadcast, which includes audio or video files that are broadcast via the Internet. They can be either downloaded or listened to on a computer or mobile device as a personalized tool.” (p.178). Parallel to other MALL tools, podcast has been a topic of interest to scholars; they examined its contribution in different educational areas. One major area attempted to be vocabulary learning enhancement. Podcast seems to be a workable tool in making students learning vocabulary and make the learning process more attractive and motivated (Farshi & Mohamadi, 2013; Lowman, 2014; Mashhadi, Hayati & Jallifar, 2016).

2.6.3 Games: one of the common entertainment tools are games. And one of the difficult parts of learning the target language for English language learners is the acquisition of vocabulary. Miller (2008) highlighted in his book different definitions of the word game by some scholars. For example, Gredler (1996, 2004) defined games as “competitive exercises” in which “the objective is to win and players must apply subject matter or other relevant knowledge in an effort to advance in the exercise and win.” while Heinich (1999) referred to games as “activities” in which “participants follow prescribed rules that differ from those of real life as they strive to attain a challenging goal.” Riahipour & Saba (2012) mentioned that traditional activities such as memorization of long vocabulary lists, derivation, repetitions of words, translation and so on are boring for students (p. 1259). Thus, a shift from these traditional methods is required. “If language learning can be tied to popular forms of gaming in a way that does not inhibit its enjoyment, that’s a winning situation both for students and educators” (Godwin-Jones, 2014 cited in Cakir, 2016). Supporting, Gozcu & Caganaga (2016) assured the importance of using games in EFL classes in different areas. Recently, online games have become more popular among a great amount of

foreign language learners and teachers, which naturally deserves to be exploited in ELT settings . Specifically, online games create an interactive and a motivating context where learners can easily acquire vocabulary (Ashraf, Motlagh & Salami, 2014; Yip & Kwan, 2006; Sorensen & Meyer, 2007).

2.7 MALL Advantages and Disadvantages

Mobile technologies are rapidly attracting users, providing them with sophisticated features. The integration of such technologies into teaching and learning has been more gradual, as educators need to understand how they can be effectively used to support various kinds of learning and develop effective methods and materials for mobile assisted language learning (MALL).the main characteristic of mobile learning is the ability to learn everywhere anywhere as have been said before. The two main characteristics of mobile phones are: portability and connectivity. Portability which enable learners to move mobile phones and bring learning materials, whereas connectivity means that the device must be able to be connected and communicated with the learning website by means of wireless network of the device to access learning material including short message service and mobile e-mail to transfer information between instructors and learners (Miangah & Nezarat, 2012 p. 310). Additionally, Andrzejewska (2014) stated that there are, as well, other advantages provided by mobile phones such as: flexibility, low cost, small size, user-friendliness....etc. Klopfer et al. (2002) suggests the following classification of mobile phones:

- Portability: device is taken to different places due to small size and weight.
- Social interactivity: exchanging data and collaboration with other learners.
- Context sensitivity: the data on the mobile phone device can be gathered and responded uniquely to the current location and time.

- Connectivity: mobile devices can be connected to other device, data collection devices or a common network by creating a shared network.
- Individuality: activity platforms can be customized for individual learners. (cited in Andrzejewska , 2014 p.45)

More particular, Ally (2009) and Chinnery (2006) stated that advantages of MALL can be summarized as follows: 1) it provides interaction and communicative activities, fosters understanding of the socio-cultural aspects of the language and it provides comprehensible input and facilitates student production; 2) it provides sheltering strategies for language development and content-specific understanding (modeling, bridging to students' background experiences, contextualizing, metacognitive activities, etc.) and uses task-based strategies and offers authentic materials; 3) it provides communicative language practice, uses collaborative learning and supports cognitive abilities and critical thinking skills; 4) it facilitates focused practice for the development of reading, writing, listening, and speaking skills across the curriculum and disciplines, it uses multiple modalities to support different learning styles; 5) it is student-centered and, addresses specific needs of students; it meets affective needs of students: motivation, self-esteem, and autonomy. And it facilitates learning with various applications; 6) it allows learners to access learning materials and information from anywhere and at anytime and provides appropriate feedback and assessment of content knowledge and English skills.

Although learning service through mobile devices has some advantages, it has its own constraints. According to Klopfer et al. (2002) some of these disadvantages are:

- Small screen/keypad, reading difficulty on such screens, data storage and multimedia and graphics limitations and the cost of the Internet access on the mobile phone.

- Some mobile phones are not designed for educational purposes, thus teachers should be aware of this and should take to consideration what kind of tools learners have and set or adapt resources compatible to such tools.
- Dependence on networks that may not provide very high transmission capacity and may be subject to disturbances of many kinds. Teachers and instructors should make students acquainted with learning possibilities that mobile devices have to offer. It is the role of the teacher to gather information about students' computer and mobile literacy and adjust the learning process and types of applications to be used to students' abilities as well as their educational needs. (Cited in Andrzejewska , 2014 p.45)

2.8 MALL and Vocabulary Learning

Many researchers and practitioners had investigated on how mobile assisted language learning impact on vocabulary learning. Thornton and Houser (2005) sent short mini-lessons for learning vocabulary through e-mail to mobile phones of the students at university three times a day; they used new words on multiple contexts for the learners to infer the meaning. Results showed an improved range of scores on the post-test which were very encouraging (cited in Stockwell, 2010).

Zhang, Song & Burston (2011) reexamined the effectiveness of vocabulary learning via mobile phones. They studied on 78 students from two intact classes of sophomores at a Chinese university divided into two groups: SMS group and paper group. Then, they administrated student to a post test to evaluate their prior vocabulary knowledge. Next, they put students into two intervention conditions (both groups worked on same list of vocabulary in a self-regulated manner). Results

showed that students learn vocabulary more effectively short-term via mobile phones than paper material, but effectiveness can only be achieved through repeated exposure.

In the same vein, a paper of Ahmed, Sudweeks & Armarego (2015) reported on a case study of a group of six non-native English speaking migrant women's experiences learning English vocabulary in a mobile assisted language learning (MALL) environment at a small community centre on Western Australia. A socio-cultural approach to learn vocabulary was adopted in designing the MALL lessons that the women undertook. The women explored to a pre-test interview; then they attended couple MALL lessons; then they had a post-test interview. Results show an improvement in language learning in general and in vocabulary in particular. So, women response positively to the MALL lessons and confirmed the hypothesis of the study.

Furthermore, Davie, Msc and Hilber (2015), in a project at South Westphalia University of Applied Sciences, Germany, examined mobile-assisted language learning (MALL) and in particular the attitudes of undergraduate engineering students at this university towards the use of the Smartphone app Quizlet to learn English vocabulary. Initial data was gathered by a questionnaire from a convenience sample of 68 students. Results indicated that almost all participants had a Smartphone and they are interested in using it in language learning. Vocabulary Professional English: exams were then given to student in the Quizlet app. At the end of the semester, the scores of vocabulary were compared to the previous semesters and showed no significant difference on student's performance. However, interviews with the students revealed that students found that the use of mobile phones in the process of learning to be very efficient, convenient and enjoyable learning method.

Conclusion

This chapter was an attempt to review the basic notions related to Mobile Assisted Language Learning (MALL). Moreover, it tried to provide a historical background about MALL and its different definitions according to several scholars. Also, the chapter tackled the different devices and tools for the field. Furthermore, it highlighted the various benefits and challenges of MALL and how it can be applied in EFL classrooms. Finally, the chapter stressed the significance of MALL in vocabulary learning according to several researches and studies.

CHAPTER THREE: FIELD WORK AND DATA ANALYSIS

Introduction

The current study aims at exploring the impact of the Mobile-assisted Language Learning (MALL) method in improving EFL learners' vocabulary; the third chapter demonstrates the field work and the analysis of the collected data. First, it presents a theoretical background on the research methodology underlying the study. Also, it attempts to describe the rationale of each data collection method and the adopted strategy that are used to test the hypotheses under investigation. It includes the description of each data collection method, data analysis and the interpretation of the results in addition to the statistical procedures. Therefore, the chapter provides a careful discussion of the findings in order to answer the research questions, and to test the hypotheses which were suggested in the general introduction. Finally, the chapter ends up with the possible limitations, and the pedagogical implementations.

3.1 Rationale for the Research Approach

This study has adopted a mixed-methods approach because “this combination has great potential for future research as it can bring out the best of both approaches while neutralizing the shortcomings and biases inherent in each paradigm” (Dörnyei, 2003, p.130-131). First, a student’s questionnaire aims at gathering both numerical and descriptive data in order to answer the first two research questions which state “1- what are the suitable MALL devices that can be utilized in EFL classrooms?, 2- to what extent MALL can develop learner’s vocabulary?”, while a teachers’ interview employed to answer the last research question of this study which state “what are the characteristics of a student with a rich vocabulary background?”. As such, this study quantitatively and qualitatively describes the data collected by means of students’ questionnaires and teachers’ interviews.

3.2 The Students’ Questionnaire

The students’ questionnaire aimed to collect the necessary data to investigate the effect of Mobile-assisted Language Learning (MALL) in enhancing EFL learners’ vocabulary learning. Also, it attempts to discover the learners’ and the teachers’ attitudes towards the MALL.

3.2.1 Rational and Aim

The Students' questionnaire has been chosen as a data collection tool due to the fact that questionnaires "are extremely versatile and uniquely capable of gathering a large amount of information quickly in a form that is readily processable" (Dörnyei, 2003, p.1). Thus, this data collection method aims at investigating the extent to which EFL students at Biskra University use their MALL devices to learn English, particularly vocabulary. However, the main focus of the student’s questionnaire is on exploring the effectiveness of using mobile devices to increase students’ vocabulary learning.

3.2.2 The Population and Sample

This study was conducted with second year LMD students at Biskra University. Because students were on strike, distributing the questionnaire to them was difficult. Thus, we made an online questionnaire and shared it with Facebook group (UMKB 2nd year students) and we asked them to answer it. Forty-one (41) students answered the questionnaire. The selection of this sample was based on the fact that 2nd year LMD students do not have an official vocabulary course. Thus, it is expected that the participants would rely on other sources such as their digital devices to learn vocabulary.

3.2.3 Description of the Questionnaire

The questionnaire has been administrated to 2nd year LMD students in order to obtain their feedback about the effective use of MALL. The questionnaire shared on Facebook group took place a week before the Month of Fasting, and 41 students answered in two days only. It consists of thirteen (13) questions. The questions varied from close-ended to multiple choice, with few open-ended questions.

The students' questionnaire is divided into four parts (General Information, Regarding Mobile Devices and Internet Usages, Regarding English Language Learning, and Regarding Vocabulary Acquisition). The general information part tackled participants' personal profile, i.e. gender and language proficiency level. The second part which is concerned with the use of mobile devices and Internet aimed at investigating the main suitable mobile devices the participants use, and which benefits and challenges they think mobile devices may offer. Then, the third part which is devoted to English language learning focused on collecting information concerning Mobile-assisted Language Learning with regard to English learning in general. Finally, the fourth part which is the main core of the present study focused on exploring the extent to which the participants use their mobile devices to learn new vocabulary items, and how they perceive the usefulness of mobile technologies to learn vocabulary.

Part one (general information) contains two questions which sought to know the students' gender and their language proficiency level. Part two (regarding mobile devices and Internet usages) contains three questions which state the specification of mobile devices kinds, the activities the students often do in their mobile devices, and the advantages they think may be offered by learning via mobile devices. Then, part three (regarding English language learning) includes two questions concerning the time allotment to learn English via mobiles, and the English language aspects they intend to improve when using mobile activities. Finally, part four (regarding vocabulary learning) consists of six questions that investigate participants gaining of new lexical items while using mobiles, the type of activities to acquire lexis, a scale of agreement to see learner's attitudes towards acquiring words using mobiles, and if teachers use mobile devices in teaching.

3.2.4 Analysis and interpretation of the Results

The students were requested to answer the questionnaire by ticking in the right circle that corresponds to their best choice. The Google drive form (online questionnaire) helped us to show the statistical analysis of the quantitative data of the students' questionnaire, while the open-ended questions were descriptively discussed. The results were reported as follows.

3.2.4.1 Part One: General Information

Item 1. Specify your gender

	Female	Male	Total
Participants	30	11	41

Table 3.1: Student's gender



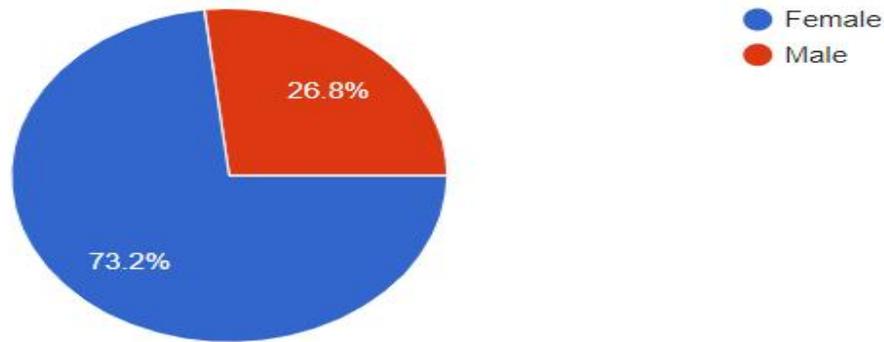


Figure 3.1 Students' gender

This question sought to know if gender affects the use of mobile devices. Table 3.1 and figure 3.1 show that out of 41 participants, 30 (73.2%) are females and 11 (26.8%) are males. The results are not surprising because foreign languages learning seems to be targeted more by females.

Item 2. Specify your level in English

Students' level	Good	Average	Less than average
Participants	23	18	0

Table 3.2: Students' level

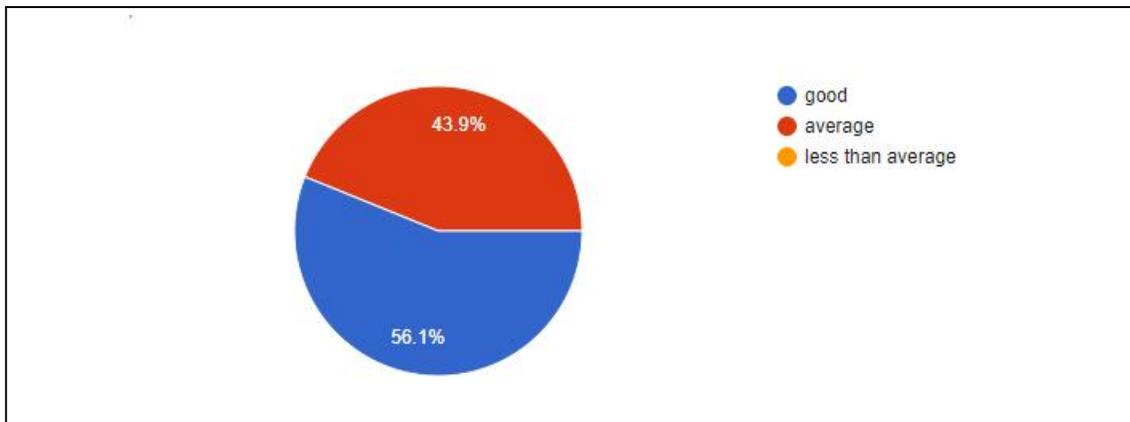


Figure 3.2: Students' Level

The chart demonstrates that (18) participants (43.9 %) evaluated their language proficiency level as average and the remaining participants (51.1%) evaluated their language proficiency as good. No one showed that their level is less than average.

3.2.4.2 Part Two: Regarding Mobile Devices and Internet Usages

Item 3. Which kind of mobile devices do you have? (You may choose more than one option)

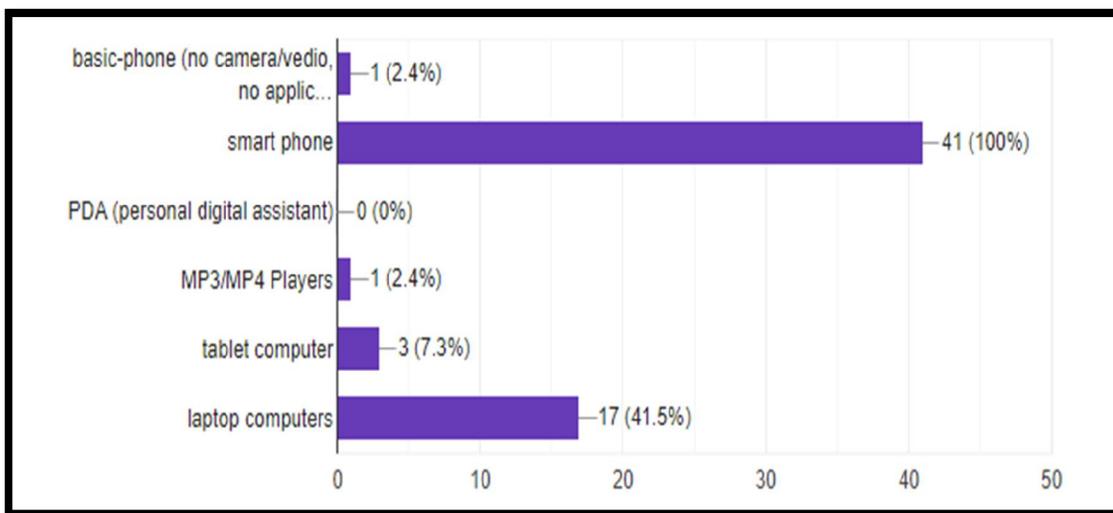


Figure3.3: Students’ ownership of mobile devices

Figure 3.3 indicates that students’ most owned devices. Among mobile devices are the smart phones with a percentage of (100%), the laptop computers come at the second place (41.5%), i.e. 17 students owned them, then the tablet computers (7.3%) which means only 3 students declared that they own it, then the least percentages refer to MP3/MP4 Players (2.4%) and basic phones (2.4%) respectively. Meanwhile, no one of the participants declared that he/she owned a PDA. The results reveal that mobile devices are widespread among students, as it is shown in figure 3.3, and that smart phones are the most widespread devices. Hence, students are familiar with mobile devices wherein each participant owns at least one kind of mobile devices which may due to the low cost of some mobile devices. This nominates smart phones and cell phones to be the most suitable mobile devices to be used in formal context as learning tools.

Item 4. What kind of activities do you often practice with your mobile device?

	Social networking	entertainment	English learning
Participants	30	9	1

Table 3.3 Students' activities they often use with mobiles

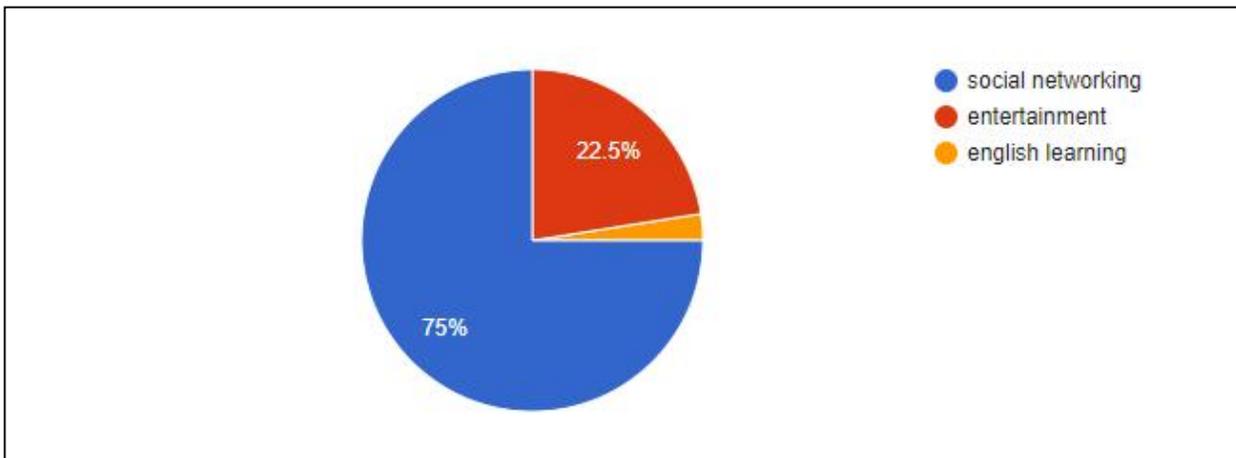


Figure3.4: Students' activities they often use with mobiles

Table3.3 and figure3.4 portrayed that most of the participants (30), i.e. (75%) often use their mobile devices for social networking purposes, while 9 participants (22.5 %) use them for entertainment. Only one student (2.5 %) uses his/her mobile for learning English, and one student did not answer the question. The results indicate that the majority of learners use their mobile phones just for social networking or entertainment. One may rely on the fact that learners may find it unimportant to learn English through mobile activities, or they just like to rely on teachers and handouts. Also, mobile devices are not used as fundamental tools when it come to learning and teaching contexts. However, they are used as assistant tools to help and facilitate learning and

teaching tasks. Thus, students are not aware of their benefits as a learning tool but they use them only to parallel the wave of Internet and its software.

Item 5. What advantages do you think learning via mobile device offers?

	Low coast	Practical use	Anytime, anywhere feature
Participants	1	16	23

Table 3.4: Benefits of learning English with mobile device

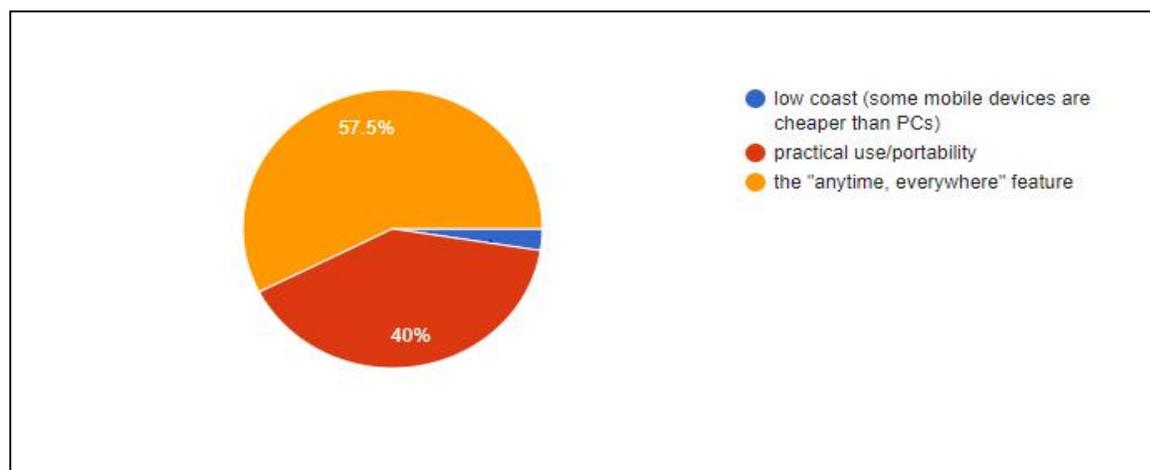


Figure 3.5: Benefits of learning English with mobile device

As it can be noticed from the previous chart above, with regard to the total number of the respondents (40) (one student did not answer this question), the majority (23 i.e. 57.5 %) placed “the anytime-anywhere feature” advantage as the highest one. Next, practical use/ portability has been rated as the second advantage; 16 students (40%) chose it as the advantage of mobile devices in their opinions, and the advantage of low coast has been chosen only by one participant (2.5 %) and comes as the last one in this order. This may shed light on the fact that students are more likely to learn informally i.e. learning in such limited settings such as academic institutions is no more wanted. Also, it can be noticed that the portability feature of these kinds of technological devices

has been chosen as a major advantage by students because they are easy to handle and to be carried wherever and whenever they want.

3.2.4.3 Part Three: Regarding English Language Learning

Item 6. How often do you use your mobile device to learn English?

	Always	often	rarely	Never
Participants	12	19	8	1

Table3.5: Frequency of using mobile devices by students to learn English

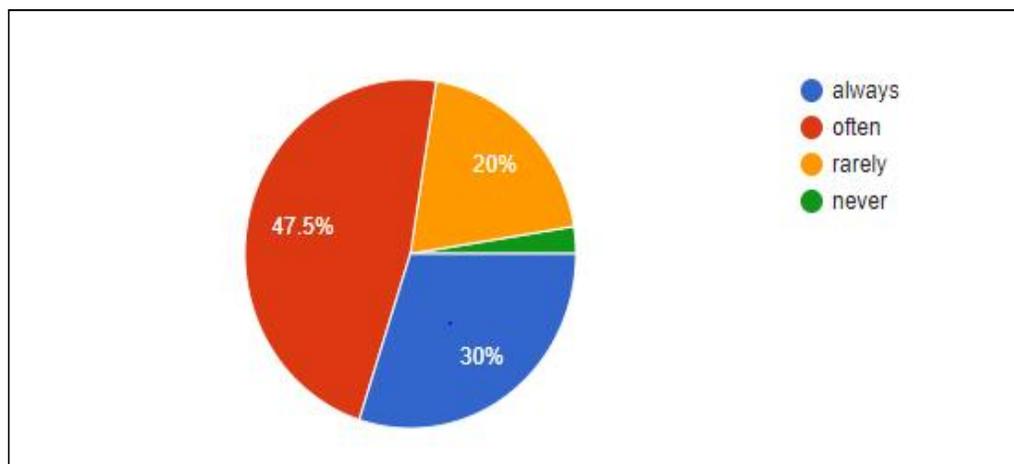


Figure 3.6: Frequency of using mobile devices by students to learn English

Out of 40 students (one student did not answer this question), 19 participants (47.5 %) declared that they often use their mobile devices to learn English; however, 12 of them (30 %) claimed that they always use their mobile devices to learn the English language. Also, 8 students showed that they rarely learn the language by using their mobiles. Finally, only one answered that he/she never uses the mobile to learn English. The results show that the majority of the participants use their mobile devices to learn English.

Item .7 Which aspects/skills of English language do you intend to improve when using mobile activities (you may tick more than one option)

	Listening	grammar	Vocabulary	pronunciation
Participants	27	12	20	20

Table3.6: Aspects students intend to improve when using mobile for learning English

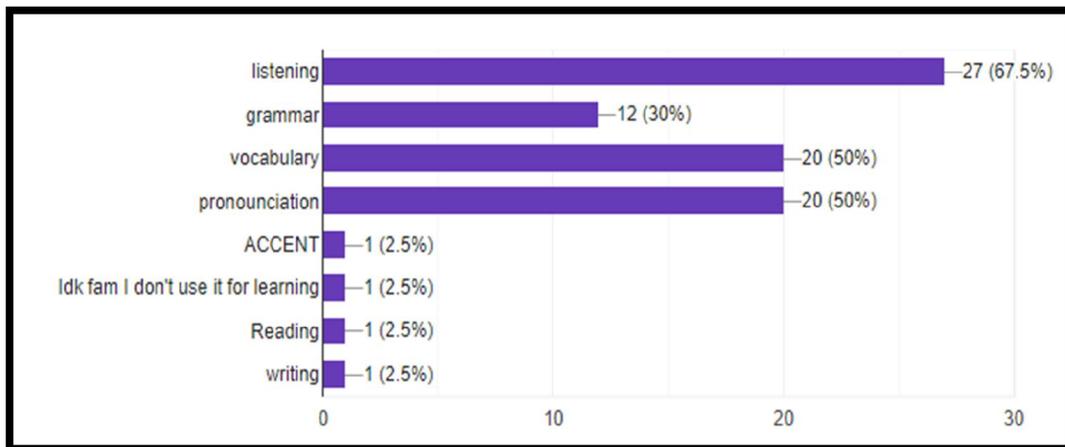


Figure 3.7: Aspects students intend to improve when using mobiles for learning English

Figure 3.7 reveals that there is a slight difference between the percentages between the aspects and skills that the participants intend to improve through mobiles. 27 from 40 participants (67.5%) claimed that they use MALL activities to improve their listening skill, 12 of them (30%) declared that their target aspect is grammar when they use mobiles for learning, 20 students (50%) chose vocabulary and the same percentage goes for pronunciation. The results indicate the positive reports of the participants, wherein students intend to improve different English language aspects and skills using their mobile devices. The Results show that the majority of participants intend to improve their vocabulary using mobile devices. Listening and pronunciation are also ranked as

skills to be improved. Whereas, grammar is much less interesting for the same population. Three participants added the three aspects of writing, reading, and accent (which normally refers to the pronunciation aspect). One other student commented “I do not know, I do not use mobile for learning”, and one student did not answer the question.

3.2.4.4 Part Four: With Regard to Vocabulary Acquisition

Item 8. Do you use your mobile device to acquire new vocabulary items?

	Yes	No
Participants	34	6

Table 3.7: Using mobile devices to learn vocabulary

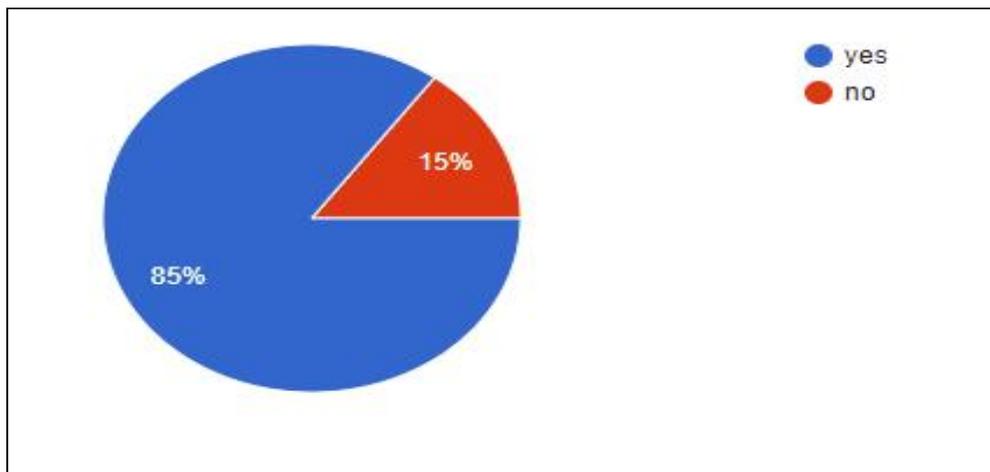


Figure3.8: Using mobile devices to learn vocabulary

Out of 40, 34 participants (85 %) reported their highly positive attitude towards MALL by stating that their fundamental use of mobile devices is to learn new vocabulary items; however, few of them (15 %) reported the opposite. This may support the idea that vocabulary is one major area that can be learned through MALL devices since the majority of students confirmed the use of such technological devices to acquire new lexical items.

Item. 9 What kind of activities do you practice to acquire new vocabulary items? (You may tick more than one option)

	Using mobile applications	Listening activities	Reading eBooks	Games	Text messaging
Participants	24	25	15	13	29

Table.3.8: Activities used by students for learning vocabulary

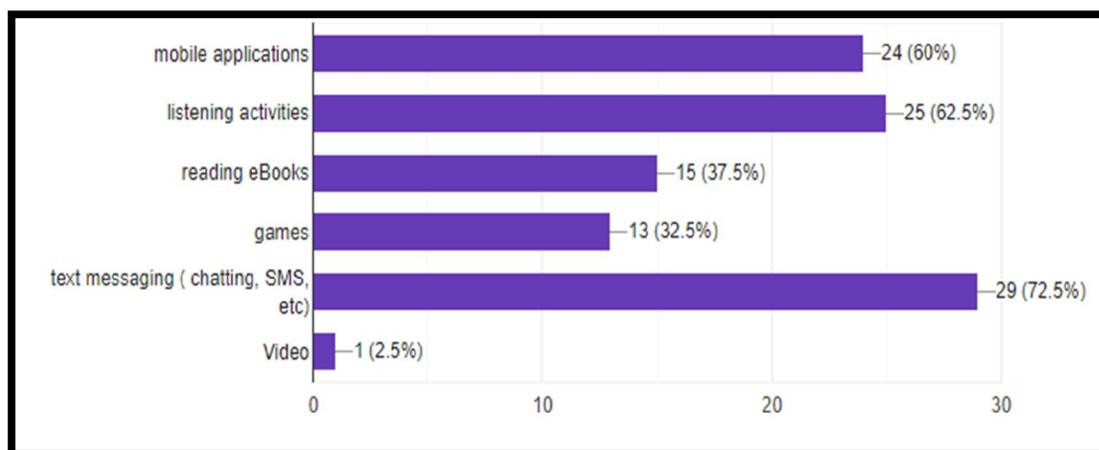


Figure3.9: Activities used by students for learning vocabulary

As it is illustrated by the graph above (3.9), 29 participants (72.5%) admitted their use of text messaging (chatting, SMS, etc) to improve their level in vocabulary (to learn new terms), 25 (62.5%) students practice listening activities, 24 participants (60 %) use mobile applications, 15 one (37.5%) prefer reading eBooks to learn new words, and the least percentage (32.5%), i.e. 13 students goes for games. The results reveal that the majority of the participants greatly use text messaging to enhance their vocabulary. The second place is for listening activities and the third one is for mobile applications; and the last places are for the reading of eBooks and games. These results show the

participants' great reliance on MALL devices (especially smart phones) to improve their vocabulary. One student (2.5%) added that he/she uses videos to enhance his/her vocabulary background.

Item 10. Please, select the scale of agreement from the statements below

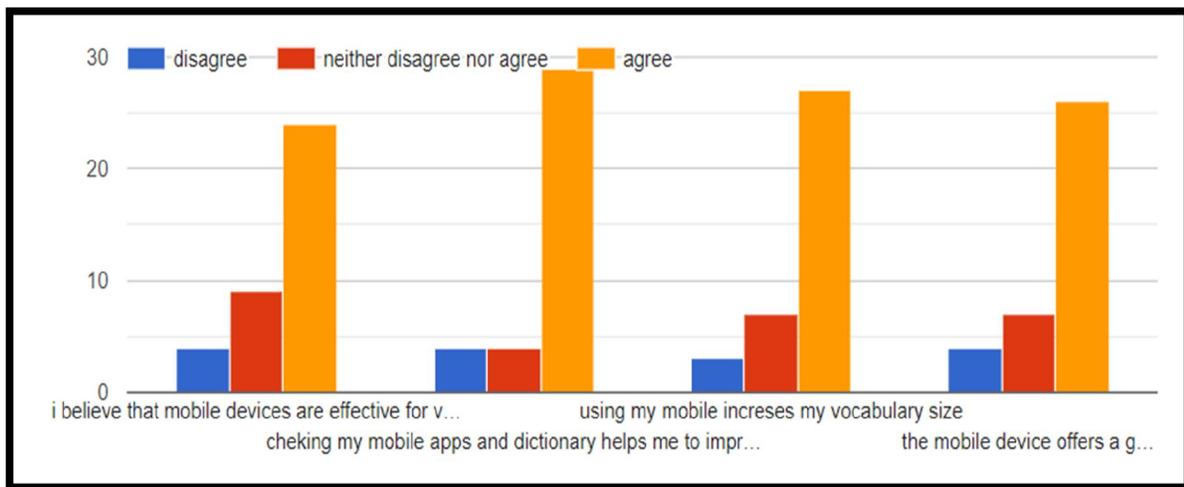


Figure 3.10: Students' opinions about the effectiveness of mobile devices for vocabulary learning

1. I believe that mobile devices are effective for vocabulary learning

	disagree	Neither disagree nor agree	Agree
participants	4	9	24

Table3.9: Students' opinions about the effectiveness of mobile devices for vocabulary learning

As table3.9 indicates, the highest number of participants (24) agreed that mobile devices are effective for vocabulary learning, and nine (9) participants showed that they neither agree nor disagree. Only few participants (4) disagreed that mobile devices are effective for vocabulary learning.

2. Checking my mobile apps and dictionary helps me to improve my spelling, grammar, and pronunciation.

	Disagree	Neither agree nor disagree	Disagree
participants	4	4	29

Table3.10: Students’ opinions about the effectiveness of checking the mobile apps and dictionary in improving spelling, grammar and pronunciation

Twenty nine (29) respondents agreed that mobile dictionaries and apps help in improving spelling, grammar, and pronunciation. Four (04) students attitude was neutral and the same number of students disagreed.

3. Using my mobile increases my vocabulary stock

	disagree	Neither agree nor disagree	agree
participants	3	7	27

Table3.11: Students’ opinions about the development of vocabulary stock through mobile devices

As table 3.11 shows, the highest number of participants agreed that mobile increases the vocabulary size. Others (7) were neutral, and the rest (3) disagreed.

4. The mobile device offers a good opportunity to learn vocabulary that traditional methods cannot offer

	disagree	Neither agree nor disagree	agree
Participants	4	7	26

Table3.12: Students’ about towards the opportunities offered by the mobile device

Table3.12 indicates that 26 students agreed that the mobile device offers a good opportunity to learn vocabulary that traditional methods cannot; while 7 of them were neutral and the others (4) disagreed.

Item .11 Does learning vocabulary through your mobile device help you in your courses (oral expression, written expression, ESP, etc)?

	Yes	I don't know
Participants	34	5

Table3.13: The assistance of learning vocabulary through mobile device in courses

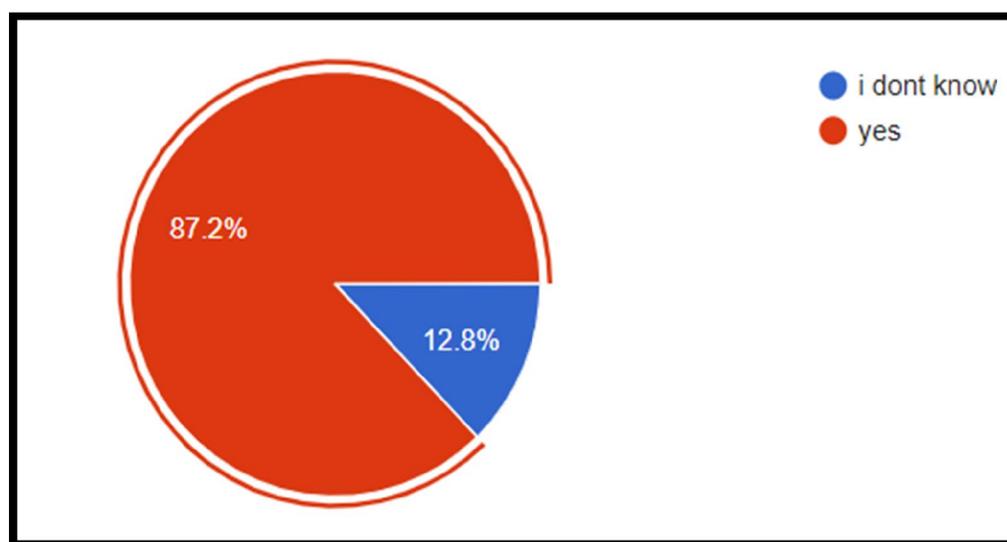


Figure 3.11: The assistance of learning vocabulary through mobile device in courses

Table 3.13 and figure 3.11 shows that the majority of students (87.2%) reported that learning vocabulary via mobile devices help them in their courses such as oral expression, written expression, ESP and so on. The results reveal the importance of learning vocabulary with MALL materials and the assistance they provide to the other courses.

Q.12 Do your teachers use their mobile devices as tools to teach vocabulary?

	Yes	No	Only sometimes
Participants	2	22	15

Table3.14: Students' opinions about teachers' use of mobile to teach vocabulary

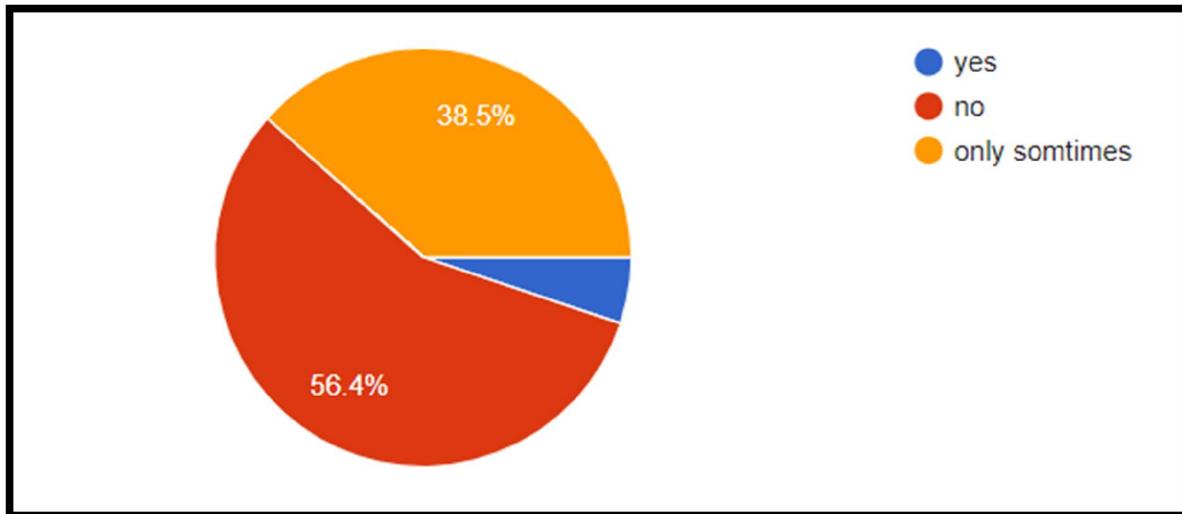


Figure3.12: Students' opinions about teachers' use of mobile devices to teach vocabulary

Out of 41 students, 39 answered. As it can be noticed in the table and figure above, 22 participants (56.4 %) said that their teachers do not use the mobile to teach vocabulary, 15 of them (38.5 %) claimed that their teachers use the mobile device to teach vocabulary only sometimes, and 2 participants (5.1 %) claimed the use of mobile devices by their teachers to teach vocabulary. One may relate this to teachers' unconsciousness about the utility of mobile technologies. Also, the fact that there is no ultimate course to teach vocabulary; so teachers do not have the time to teach it and to use MALL devices as tools to assist vocabulary learning.

- If no, do you like to see your teachers/instructors use mobile device in courses to teach vocabulary?

	Yes	No
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Participants	22	10
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Table3.15: Students’ opinions about the use of mobile devices to teach vocabulary

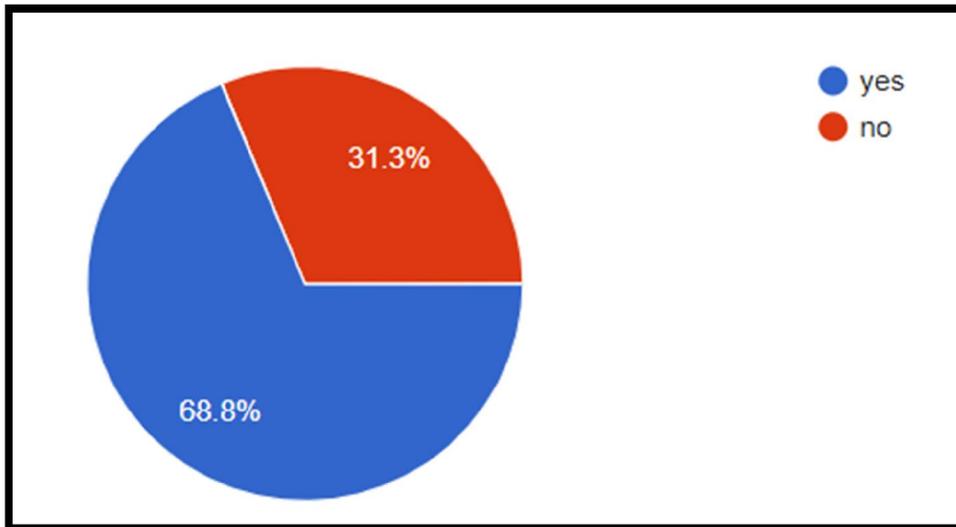


Figure3.13: Students’ about towards the use of mobile devices to teach vocabulary

Out of 32 participants, 22 participants (68.8%) confessed that they like to see their teachers using MALL activities in courses to teach vocabulary; however, 15 of them (31.3 %) expressed their refusal. The results show that the majority of participants like to see their teachers use MALL activities to teach vocabulary. This entails the students’ awareness of the positive effects of mobile devices as learning tools.

Item .13 If you do have any comments with regard to the study; please feel free to write them down

This open-ended question sought to gather student’s additional comments about the present study. The majority of the participants were defending the idea of Mobile-Assisted Language Learning (MALL) wherein positive feedbacks were received. Some students claimed that using mobile devices especially “smart phones” is quite beneficial to learn English. That is, they facilitate the learning and teaching tasks and break the boring routine. Therefore, One participant said that,

“I think we should include technology in our study more often”, another one said “advanced technology facilitates study and helps us a lot”. One participant also commented “I think that the mobile phone is a good way to learn any language by using some applications or to make conversation with some people”. Another participant added “personally, I cannot imagine anything without my smart phone because it is very quick, workable and I use it anywhere at anytime”. Moreover one participant is quoted as saying “we should practice, practice make it perfect”. Thus, teachers should exploit the advantages of handled devices in teaching and learning tasks.

3.3 Teachers’ Interview

The purpose behind using the teachers’ interview is to collect teacher’s different attitudes towards MALL. Therefore, the interview aimed to explore the teachers and learners attitudes towards this new wave in classrooms.

3.3.1 The Sample

The interview was held with five (05) teachers who teach courses that have a relationship with vocabulary learning such as Written Expression, Oral Expression, Theme and Version, ESP, Mastery of the language, and so on. Also, the selection of the sample was based on the consideration that some teachers use advanced technology (mobile devices) in teaching.

3.3.2 Description of the Interview

The teachers’ interview was conducted to our sample in order to investigate the third research question “what are the characteristics of a student with a rich vocabulary background?”. The interview aimed also to discover if EFL teachers at Biskra University use their mobile devices as a teaching tool and as a support to improve their teaching process. Therefore, the interview intended

to explore teachers' attitudes and perceptions about the use of MALL devices in learning English; especially vocabulary.

The teachers' interview included seven (07) items. First, item one (Q1) aimed to know the overall numbers of courses that teachers teach. Second, item two (02) and item three (03) investigated whether teachers use technological materials in the classroom and if they allow their students to use their mobile devices, and teachers were asked to explain why. Then, item four (04) sought to investigate to what extent vocabulary is important in EFL learning. After that, item five (05) aimed to get teachers' attitudes about major characteristics of students with rich vocabulary; item six (06) investigated if teachers use any specific mobile activities in their courses. Finally, item seven (07) was devoted to teachers' opinion about the importance of Mobile-assisted Language Learning (MALL) in teaching and learning English, namely in teaching vocabulary. The teachers' identity in this interview is intentionally kept anonymous for avoiding any ethical issues; therefore, we have referred to each interviewee with a letter, such as "A", "B", "C", "D", and "E" as it is reported in the discussion below.

3.3.3 Analysis and Interpretation of the Results

Item1: Which modules/courses do you teach?

The question intends to know the different courses the teachers are teaching.

Interviewee A: teaches oral expression and social sciences.

Interviewee B: teaches theme and version.

Interviewee C: teaches oral expression and ESP.

Interviewee D: teaches grammar.

Interviewee E: teaches culture of the language and communication for master one.

As it can be seen, all the interviewees teach courses that are in a way or another related to vocabulary aspect such as: Oral Expression, ESP, etc.

Item 2: Have you used, or do you use technology in the classroom? If yes, please provide us with examples of the technological materials you work(ed) with.

The question aims at exploring whether EFL teachers are aware of the use of technology in teaching inside the classrooms, and the kind of technological materials they use.

Interviewee A: “yes, I do”. He/she said “I have already used media ICT’s”.

Interviewee B: “of course, I use some technological means”. The teacher mentioned some examples such as “computers and cell phones”.

Interviewee C: “yes, I think I do”. He/she added “I use data show and computers”.

Interviewee D: “somehow”. The teacher mentioned some examples, “I used short recorded speeches in PC”

Interviewee E: said just “no”.

Except one teacher, four teachers confirmed their use of the technology inside the classroom by stating many examples of the technological materials they use. The results indicate that the majority of teachers are familiar with the use of technology in their teaching process inside the classroom, especially mobile devices.

Item 3: Do you allow your students to use their mobile devices inside the classroom? Why?

This question was asked to know if EFL teachers tolerate the use of mobile devices in their courses inside the classrooms or; and to explain why they accept or refuse using such materials.

Interviewee A: “yes, I do”. He/she added “I give them the chance to for example use their dictionaries, sometimes we need to check something from Wikipedia or even movies, songs or something like that”.

Interviewee B: “yes, sure. I allow them to use mobile devices because it facilitates their task especially when it comes to translation so they use their mobile phones’ dictionaries to check words’ meanings”.

Interviewee C: “yes, I allow students but only for educational purposes because I have to keep my eyes on my students so they cannot use it for any other purposes. And the reason why I allow them it is simply because they are so helpful”.

Interviewee D: “I do not allow my students to use their mobiles, they even do not have the right to open it; I use mobiles they do not”.

Interviewee E: “sometimes only for checking dictionary”.

Out of five teachers, four claimed that they “usually” permit their students to use their mobile devices inside the classrooms for academic purposes. It can be seen from the answers above that the majority of teachers support mobile devices as a complementary learning tool in a formal educational context.

Item 4: To what extent do you think vocabulary is important in EFL learning?

The teachers were asked to identify the degree of importance of the English language aspect of vocabulary in EFL learning.

Interviewee A: “of course, language is vocabulary”.

Interviewee B: “It is very important that learners are highly asked to work on this aspect to improve it”.

Interviewee C: “to the highest extent possible, because without vocabulary we cannot express ourselves”.

Interviewee D: “it obvious, without vocabulary, learners are not able to express themselves”.

Interviewee E: “of course it is important; vocabulary is one of the most fundamental aspects of the language”.

The teachers declared the significance of vocabulary as the basis of English learning, as the interviewee (A) said “language is vocabulary”. Teachers demonstrated its importance to the extent that without this aspect of the language, students are unable to communicate.

Item 5: In your opinion, what are the major characteristics of a learner with a rich vocabulary background?

This question aimed to know the teachers’ attitudes about the learners with a rich vocabulary background and how teachers evaluate them.

Interviewee A: answered by “he could understand better, write better, read better, and could be very much motivated”.

Interviewee B: “a good speaker and a good writer may be, if he/she had other skills”

Interviewee C: “I think fluency is one i.e. avoiding any breakdowns of communication or any pauses and I think it is one main criteria when we come to asses if this learner is high achiever or

low achiever; I think it has something related directly to vocabulary but this is not the only characteristic rich vocabulary background provide; there are another ones”.

Interviewee D: “the main characteristic is being fluent and to express whatever he/she wants”

Interviewee E: he/she said “fluency and accuracy”

The five teachers defended the idea that learners with rich vocabulary background are fluent, communicative, skilled, and more motivated. Some of them asserted that they are good speakers and writers. This indicates the crucial role of vocabulary in EFL learning and its impact on students’ characteristics and different skills.

Item 6: are there any specific mobile activities you use within your course?

The five teachers were asked to identify if there are any specific MALL activities they use in their courses.

Interviewee A: “just when we check something (on dictionaries or internet) we use the mobile”.

Interviewee B: “only when checking words meaning in dictionaries”

Interviewee C: “I do not think so, except for some cases, sometimes I give them pieces of writing on which they have to consider, we use the mobile to get ideas, to search for words meaning in online dictionaries”.

Interviewee D: “no”.

Interviewee E: “we use only dictionaries to check words meanings”.

As shown above, four teachers practice some mobile activities within their courses; however, the implementation is still so limited and is restricted only for “checking meanings” or “surfing on

the Internet to get ideas or definitions” as reported by interviewee (C); whereas, interviewee (D) does not implement MALL activities in his/her courses. One may relate the limited use or the no-use of MALL activities to the teacher’s unawareness of the positive performance that mobile device can lead to.

Item 7: In your opinion, how do you consider Mobile-assisted Language Learning (MALL) as an instruction tool/method to teach English as a foreign language in general and vocabulary in particular in the future?

In addition to the teachers’ attitudes about MALL that we collected, this question aims to investigate how EFL teachers consider the importance of MALL as a language learning method.

Interviewee A: “okay if it is appropriately used it will be very nice thing but if its badly done it won’t”.

Interviewee B: “it is a good method if it will to be well used in teaching English; I believe that MALL is very helpful to memories knowledge and very practical”

Interviewee C: “well this method is not highly applied, but still there some teachers applying it; myself included. I think it is very beneficial and it is crucial to some courses such as “Oral Expression, ESP, Theme and version, etc” and I think it is very important and should be more applied”.

Interviewee D: “no, I do not support it and even I am strongly against such way of teaching because students cannot focus on what teachers are saying and deal with his mobile; it is impossible especially with the level they have”.

Interviewee E: “sure, I am with. Mobile phones nowadays are facilitator tools, easy to handle, and even a good way to gain time and efforts and its one of the 21century skill so it is important to get use this approach”.

The majority of the interviewees share the same idea; mobile technology is very important in teaching and learning English as a foreign language. Interviewee (E) highlighted that mobile devices are easy to handle and help in gaining time and efforts which is a positive advantage that have to be exploited. Interviewee (A) added another important point which is that this approach (MALL) should be applied appropriately, which guides both learners and teachers to use carefully the mobile device in formal settings (educational purposes) to have good results.

3.4 Discussion of the Results

To review, the objective of the current study was to investigate the effectiveness of Mobile-assisted Language Learning (MALL) approach in improving EFL second year LMD learners' vocabulary learning. Hence, it aimed to help learners to improve their vocabulary stock. Furthermore, the study is highly support the adoption of technology mainly mobile devices as a new wave in teaching practices to improve learner's vocabulary learning.

The study has presented interesting results on the effectiveness of MALL, as a language learning instruction, in enhancing EFL 2nd year students' vocabulary learning at Biskra University. The findings of this study which have been drawn from the analysis of two data gathering tools were positive in many aspects. The study showed that EFL students at Biskra University use their mobile devices to a high extent as learning tools to learn their target language (English), especially their vocabulary learning. The study also revealed interesting insights into the use of mobile devices from the teacher's side in classrooms.

First, the findings revealed that mobile devices ownership is widely spread among EFL students, especially smart phones and every student has at least one kind of mobile devices. This proves the availability and popularity of such technological aids to be exploited in classrooms. These findings

are shared among many researches. For example, Sarwar & Soomro (2013) reported findings that indicate a huge adoption of mobile phones especially smart-phones.

Along the same vein, students evaluated mobile devices in terms of utility. Anytime-anywhere and portability features were identified as the main interesting features of mobile devices. These findings are consistent with the findings found in literature. For example, Darmi & Albion (2014); Kamalian and Sayadian (2014) claimed that “the significance of mobile learning lies in the fact that learning is delivered to a person, at a specific time and in a specific place while using electronic devices” (p. 101).

Second, the results indicated that EFL students at Biskra University often use their mobile devices for academic purposes; that is, to learn English. Not surprisingly, 2nd year LMD students also showed they spend most of their time on social networking such as social media and entertainment activities such as games and songs; that is to say, they do not learn English as an explicit mobile activity. Similarly, Petit & Kukulska-Hulme (2007) found that 96% of her sample used their mobile phones for social interaction, 19% of them used it for entertainment, and 17% for their own learning. One can realize that EFL students learn English via mobile devices more spontaneously more than in regular way. These findings broadly match three main MALL approaches; (1) informal and lifelong learning; (2) communicative approach; and (3) constructivism. To elucidate, informal and lifelong learning and communicative approaches appear in the use of social networking (as the majority of students do), while constructivism appears in learning through the handled games. These findings are consistent with the classification of MALL approaches reviewed by Keskin and Metcalf (2011). Clough (2005) in his study, relates the reason that students use MALL activities informally to the fact that learners are much motivated to learn informally, he added “they are given the freedom to determine their goals and tasks” (cited in Ann et al., 2006). For this reason, EFL students prefer MALL activities.

Third, the findings in this study revealed that listening, vocabulary and pronunciation are at top three skills/aspects the students intend to improve through MALL activities. Similarly, a study by Khabiri & Khatibi (2013) which was conducted on EFL Iranian learners showed almost the same results. In addition, the study showed that EFL students depend mostly on text messaging such as SMS, social media messaging, or other messaging means to enhance their vocabulary knowledge. Games and listening activities are also MALL activities that learners highly use to develop their vocabulary learning. These results are consistent with researches conducted so far with regard to MALL and vocabulary learning. For instance, Khabiri and Khatibi (2013) found that text messages are used by EFL Iranian learners to deliver items at spaced intervals which increase the learner's retention, or to report their daily activities. Researches on game-based learning revealed that this kind of MALL activities help students acquire new lexical items in a motivating way. Along this vein, Beatty (2013) claimed that mobile games are attractive mediums to deliver learning activities that motivate learners.

Fourthly, MALL was perceived as an effective language learning method that develops EFL students' vocabulary learning at Biskra University. Results showed the positive attitude of the students towards the effectiveness of mobile devices as vocabulary learning tools. EFL students agreed that MALL vocabulary activities such as text messaging, listening activities, mobile applications, etc) increased and improved their vocabulary stock. Accordingly, many previous studies were conducted to attain the effectiveness of MALL activities in enhancing students' vocabulary learning such as Kim (2011) which confirmed that MALL, namely SMS has a positive effect on learning vocabularies and that the opportunities offered by MALL cannot be offered by traditional methods. Moreover, Akdemir & Başoğlu (2010) compared undergraduate students' vocabulary through using mobile phones and traditional learning technique (flashcards). The study

assured that using mobile phones as a vocabulary learning tool is more effective than the traditional one.

Finally, the teachers' interview analysis provided us with positive comments and feedbacks toward the use of Mobile Assisted Language Learning (MALL) to teach English, specifically vocabulary. It was found that EFL teachers at Biskra University were aware of the mobile technology use and they perceived its importance in enhancing the students' skills, especially their vocabulary learning. On one hand, results showed that EFL teachers allow their students to use their mobile devices inside the classroom for educational purposes, especially; for developing their vocabulary stock. This is similar to what Thomas, O'Bannon and Bolton (2013) found in their study that teachers support the use of mobile devices in classrooms and to be used in school-related work.

Results also shaded the light on word searching, surfing on internet, mobile dictionaries as the main MALL activities teachers use for assisting their learners' activities. Therefore, the study showed that MALL vocabulary activities helped the students in their courses, mainly in Oral Expression, Written Expression, and ESP and so on. Moreover, EFL teachers reacted positive to the vocabulary importance and showed that learners with a rich vocabulary background are more skilled when it comes to speaking, writing and motivation. Therefore, they encourage the use of MALL to enhance the vocabulary competency that reflect other skills. On the other hand, one can notice that MALL activities adopted by teachers are still limited; that is, teachers exploit some MALL advantages and neglect others. This can be due to the fact that teachers are less informed about the unlimited functions and opportunities offered by MALL. This is consistent with Kukulska-Hulme (2013) study findings; that teachers are rarely aware of the different mobile devices functions that can be exploited in teaching and learning process. Although, this does not

mean that teachers are completely unaware of the different MALL merits because teachers may know them but do not use them because of different reasons.

To conclude this discussion, findings of the present study indicated the widespread ownership of mobile devices among both teachers and EFL students; especially mobile phones (smartphones) and PCs that's to be exploited in classrooms. In addition, MALL was found to be effective in enhancing EFL students' language skills, especially their vocabulary learning to a high extent that should be included in both learning and teaching processes. Moreover, the findings showed that learners with rich vocabulary background are good writers, speakers, and highly motivated. This confirms the hypotheses and provides answers to the research questions stated earlier in the general introduction.

Conclusion

This chapter has presented the analysis of the data gathered at different stages of the research with regard to the theoretical and practical aspects. The collected data was by means of students' questionnaire and teachers' interview. First, the results of the student's questionnaire were carefully analyzed and represented both statistically and descriptively in tables, charts and figures in order to show how statistics match with one another. Second, the results obtained from the teacher's interview were descriptively analyzed and interpreted so as to provide a general idea about the data. Third, the chapter ends up with an in-depth discussion of the study findings, taking into consideration the study limitations, in order to test the research hypotheses and answer the research questions. The results were compared with what was found in the literature. Finally, the study revealed some pedagogical implementations in order to invest well in this new educational technology. To conclude, the chapter provides answers to the research questions of this study, as well as confirms the research hypotheses; in that mobile phones (smart phones) seem to be the suitable MALL devices that have to be included in the learning process, both EFL teachers and

learners confirmed the effectiveness of MALL instruction to enhance the vocabulary size to a higher extent and they support it, and they numerated some characteristics for EFL learners with a rich vocabulary background such as: fluency, accuracy, writing skill, speaking skill, and motivation.

General Conclusion

The current dissertation has explored the effects of Mobile Assisted Language Learning (MALL) as a new approach in improving EFL learners' vocabulary learning. Accordingly, the dissertation aimed at investigating whether EFL teachers and learners use MALL activities as a supporting tool for their teaching and learning English in general, and vocabulary learning in particular. Additionally, this work sought to examine the status of vocabulary in the academic institutions. For these reasons, the present study investigated the effectiveness of MALL in vocabulary as an instruction to be implemented in our department.

First of all, it is essential to review the related literature which was presented in the first two chapters. The first chapter provided an analysis about the vocabulary component; stating its definitions, its importance, its kinds, its teaching techniques and learning kinds. Meanwhile, the second chapter dealt with the Mobile-assisted Language Learning (MALL) as an emerging language learning approach that supports the use of mobile devices as educational tools. The chapter contains the basic concepts and definitions according to many scholars, historical background, tools, benefits and challenges. The chapter then tackled, the various previous studies and researches that investigated the use of MALL in teaching and learning vocabulary.

Furthermore, in order to test the research hypotheses, the research overall method consisted of students' questionnaires and teachers' interviews. We collected relevant data on the subject to make appropriate inferences to future recommendations.

The students' questionnaire was submitted in order to gather further data about the use of MALL and to know students' attitude towards mobile devices. All students own at least one kind of mobile devices and they use them in learning English or vocabulary. The students showed that they benefit from the "anywhere, anytime" feature. Hence, students have shown positive attitudes towards the use of MALL activities as a support to learn English, namely vocabulary. Additionally, EFL teachers were interviewed to have their opinions about the implementation of MALL in EFL classrooms as a learning tool. Most of the teachers confirm that they allow students to use mobile devices in classrooms in a limited context. All of them reported their agreement about the vocabulary importance in learning English as it is a fundamental component of the language that should be taught and mastered. Also, their majority encouraged adopting MALL into classrooms to exploit its benefits and to make learners more motivated and autonomous. As a final point, the dissertation provided some pedagogical recommendations and remarks for the future.

Suggestions and Recommendations

The implementation of technological devices and Internet in educational processes has become a targeted field for many EFL teachers and learners to develop learners' different English skills and competencies. Therefore, mobile devices, including smart phones, cell phones, tablet PCs, and laptops, become an essential part in both teachers' and learners' lives. Thus, it is necessary to raise the attention of EFL practitioners and to make them aware of how to well exploit these devices. As such, the present study suggests the following recommendations:

- Mobile devices seem to be great tools for promoting learners autonomy when implemented inside classrooms.
- Teachers may exploit the widespread ownership of mobile devices to use their activities and apps to assist their courses.
- Teachers may encourage informal learning through MALL activities they give to students to make further research or practises.
- MALL may be a developing tool to master many language skills, such as: listening skill, writing, reading and linguistic competence through weblogs and sites that offer lectures.

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Appendices

Appendix A: Students' Questionnaire

Mohamed Kheider University of Biskra

Faculty of Letters and Languages

Department of Foreign Languages

English Division

Students' Questionnaire

Dear students,

You are kindly requested to answer the following questionnaire which aims at exploring “The Impact of the Mobile-assisted Language Learning (MALL) on Improving EFL Learners' Vocabulary Learning”. Please answer the questions carefully by ticking in the right box. Your feedback is valuable for planning future instructions, and it will provide a great help for us.

Thank you in advance for your collaboration.

Part One: General Information

Q1- Specify your gender

- a- Female b- Male

Q2- Specify your level in English

- a- Good b- Average c- Less than average

Part Two: Regarding Mobile Devices and Internet Usages

Q3- Which kind of mobile devices do you have? (You may choose more than one option)

- a- Basic-phone (no camera/video, no applications, etc.) b- Smart phone
c- PDA (Personal Digital Assistant) d- MP3/MP4 Players
e- Tablet Computer f- Laptop computers
g- Others:

Q4- What kind of activities do you often do with your mobile device?

- a- Social networking b- Entertainment c- English learning

Q5- What advantages do you think learning via mobile device offers?

- a- Low coast (some mobile devices are cheaper than PCs)
b- Practical use/ portability c- The “anytime, everywhere” feature

Part Three: Regarding English Language Learning

Q6- How often do you use your mobile device to learn English?

- a. Always c. Rarely
 b. Often d. Never

Q7- Which aspects of English Language you intend to improve when using mobile activities? (You may tick more than one option)

- a- Listening b- Grammar d- Vocabulary e- Pronunciation
 f- Others:

Part Four: With Regard to Vocabulary Acquisition

Q8- Do you use your mobile device to acquire new vocabulary items?

- a- Yes b- No

Q9- What kind of activities do you use to acquire new vocabulary items? (you may tick more than one option)

- a- Mobile applications d- Games
 b- Listening activities e- Text messaging (chatting, SMS, etc)
 c- Reading eBooks
 f- Others:

Q10- Please, select the scale of agreement from the statements below:

	disagree	Neither disagree nor agree	agree
I believe that mobile devices are effective for vocabulary learning			
Checking my mobile apps and dictionary helps me to improve my spelling, grammar, and pronunciation			
Using my mobile increases my vocabulary size			
The mobile device offers a good opportunity to learn vocabulary that traditional methods cannot offer			

Q11- Does learning vocabulary through your mobile device help you in your courses(written expression, oral expression, ESP...etc)?

a- Yes b- I do not know

Q12- Do your teachers use their mobile devices as tools to teach vocabulary?

a- Yes b- No c- only sometimes

If no, do you like to see teachers/instructors use mobile devices in courses to teach vocabulary?

a- Yes b- No c- not necessary

If no, explain why:

Q13- If you do have any comments with regard to the study, please feel free to write them down.

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Appendix B: Teachers' Interview

Mohamed Khider University of Biskra
Faculty of Letters and Languages
English Division
Teachers' Interview

Exploring the Effectiveness of Mobile-assisted Language Learning in Enhancing EFL Learners' Vocabulary Learning

Dear teachers,

This interview aims at exploring “The impact of **Mobile-assisted Language Learning** in Enhancing **EFL Learners' Vocabulary Learning**”. You are kindly asked to answer the questions. Your feedback is valuable for planning future instructions, and it will provide a great help of us.

Thank you in advance for your collaboration.

1. Which courses do you teach?

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2. Have you used, or do you use technology in the classroom? If yes, please provide us with examples of the technological materials you work(ed) with.

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3. Why do you allow your students to use their mobile devices inside the classroom?

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4. To what extent do you think vocabulary is important in EFL learning?

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5. In your view, what are the major characteristics of a learner with rich vocabulary background?

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6. Are there any specific mobile activities you use within your course?

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7. In your opinion, how is Mobile-assisted Language Learning (MALL) important as an instruction tool to teach English as a foreign language in general and vocabulary in particular in the future?

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المخلص

يبدو أن إتقان الكفاءة التواصلية نقطة قوية للنجاح في تعلم اللغة. وعلى ما يبدو، قد يواجه غالبية متعلمي اللغة الانجليزية كلغة أجنبية بعض الصعوبات في تعلم المفردات. على سبيل المثال، لديهم نقص في قاموس المفردات، أو يخطئون في تهجئتها أو نطقها. وفقا لذلك، يهدف هذا العمل إلى دراسة تأثير منهج (Mobile Assisted Language Learning MALL) في تعزيز كفاءات متعلمي اللغة الانجليزية في تعلم المفردات. علاوة على ذلك، تسعى الدراسة إلى فحص هذه الأدوات كأدوات داعمة تحسن في أداء الطلاب. تشير فرضيات الدراسة إلى أن هذه الأجهزة الالكترونية تعتبر أدوات تعليمية ناجحة لتحسين تعلم المفردات إلى درجة عالية. الإرشادات هدفت للتحقق من كفاءة المفردات لعينة الدراسة (طلاب سنة ثانية في الجامعة). لذلك، تم اعتماد منهج (MALL) في هذه الدراسة. تم استخدام أداتين لجمع البيانات من أجل إدراك كل من المتعلمين والمدرسين لأهمية المفردات وردود الفعل حول تطبيق التعليم المقترحة. تشمل هذه الأدوات استبيان الطلاب ومقابلة الأساتذة. بعد تحليل وتفسير البيانات، كشفت النتائج إن الأداة المقترحة يمكن إن تساعد المتعلمين على تحسين كفاءتهم في المفردات. تؤكد النتائج أيضا إن المتعلمين و المعلمين لا يستخدمون الأجهزة المحمولة بشكل كبير داخل الأقسام؛ و مع ذلك، اظهر كلاهما تشجيعاتهم لاستخدام الأجهزة المقترحة داخل الأقسام. و بالتالي، نلاحظ انه تم تأكيد الفرضية الرئيسية للدراسة.