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Mohamed Kheider University of Biskra
Faculty of Letters and Languages
Department of Foreign Languages



Section of English

**Exploring the Impact of Mobile-Assisted Language
Learning on Developing
Learner's Lexical Competence
Case of Master One Students of English
at Biskra University**

Dissertation submitted in partial fulfillment of the requirements of the Master Degree in
Sciences of Language

Submitted by:

Narimane GACEM

Supervised by:

Dr. Saliha CHELLI

Board of Examiners:

Dr. Saliha CHELLI

Mrs. Iméne GUETTAL

Mr. Walid AOUNALI

University of Biskra

University of Biskra

University of Biskra

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Dedication

To my grandparents: Merzaka and Belgacem whose prayers are always with me.

To my wise father who encouraged me to finish this work.

To my beloved mother who gave me the power to accomplish this work.

Dear parents thank you for your encouragement, patience, and support.

To my precious brothers and sisters for their understanding and patience to finish my
work.

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Abstract

Learning English as a Foreign Language (EFL) is considered among the most challenging task among most of the Algerian students. Due to its complexity, they find it difficult to master all the aspects of the English language, mainly vocabulary knowledge. Many practitioners and researchers attempted to find new learning ways in order to minimize these difficulties. Thus, MALL emerges as a new learning approach that uses mobile devices in order to support the process of learning, particularly vocabulary learning. This research work attempts to explore the effect of MALL in enhancing master one students of English lexical competence (vocabulary learning) at Biskra University. It aims to show if this new learning approach can be successful and helpful on developing students' lexical knowledge. In order to confirm or reject the hypothesis that the implementation of such learning approach would bring positive results if compared with the traditional one, fifty students of master one of English from section one and five EFL teachers were selected randomly for the administration of two semi-structured questionnaires, one to fifty students and the other to five teachers to check out the effect of MALL on learning vocabulary. Summing up, both qualitative and quantitative findings obtained in this research reveal positive results concerning the effectiveness of MALL in enhancing EFL students' vocabulary learning. Both EFL teachers and students are concerned with using mobile devices as new educational tools in order to achieve better lexical knowledge.

List of Abbreviations

CALL: Computer-assisted Language Learning

CMC: Computer-mediated Communication

EFL: English as a Foreign Language

E-learning: Electronic Learning

FLL: Foreign Language Learners

GPRS: General Packet Radio Services

GPS: Global Positioning System

GSM: Global System for Mobile Communications

G3: Group 3 fax

MALL: Mobile-assisted Language Learning

M-learning: Mobile Learning

MMS: Multimedia Message Service

PC: Personal Computer

PDA: Personal Digital Assistant

SLA: Second Language Acquisition

SMS: Short Message Service

SNS: Social Networking Site

VCR: Video Cassette Recording

WAP: Wireless Application Protocol

WI-FI: Wireless Fidelity

WWW: World Wide Web

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General Introduction

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General Introduction

1. Statement of the Problem:

Nowadays, students are living in a world that witnesses fast movements, technological emergence, and constant changing knowing as the informant age. As far as education is concerned, these changes lead to the emergence of MALL as a sub-branch of CALL in teaching and learning English as a Foreign Language (EFL). This new learning approach based on the use of mobile devices in learning and teaching foreign languages. It is worth mentioning that mobile devices include all sorts of mobile technologies such as mobile phones (Smartphones), iPods, PDAs, MP3/ MP4 players, laptops, and tablet computers.

Remarkably, as mobile devices become vital parts in learners and teachers routines, the use of these devices is increasingly involved in the learning and teaching process. However, the implementation of this new educational wave in the Algerian schools is still relatively low. Thus, the focus of this study is more on the important role that MALL plays in learning vocabulary in the Algerian context, specifically at Biskra University.

In fact, those handheld devices are being used to assist vocabulary learning by replacing the traditional learning methods with the new learning methods that support the utilization of mobile devices. Therefore, EFL learners tend to maximize their mobile devices advantages in order to accomplish their learning objectives. Thus, it becomes necessary to explore the impact of MALL on developing learners' lexical competence, especially in the Algerian context.

2. Aim of the Study:

The present study aims at investigating the newly flourishing learning approach known as MALL. The main focus is to find out how EFL students of Biskra University update themselves to use mobile devices to assist their vocabulary learning and how they learn new lexical items using their mobile devices. It also attempts to discover how EFL teachers and EFL students use handheld devices in their daily learning practices. Another main aim of the conducted study is to raise teachers and learners interest of the benefits of this new wave of technology in the learning and teaching process, mainly vocabulary learning which represents the most challenging task that should be undertaken. It means that this study seeks to give a clear vision about MALL by providing a guiding line for future activities and educational practices to enhance vocabulary learning.

3. Research Questions:

Using MALL in learning vocabulary is very important, especially in foreign language learning process. The main aim of this research is to find out how EFL learners learn lexical items with their mobile devices and their attitudes towards learning vocabulary through mobile devices. In addition, it also tends to discover teachers' perception on the use of MALL in teaching and learning vocabulary items. Thus, the following research questions will be addressed in the study:

1. Do EFL learners' at Biskra University at the Department of Foreign Languages use their mobile devices as vocabulary learning tools?
2. How would the use of the MALL method in instruction affect learners lexical competence if compared to the Traditional instruction?
3. Do EFL learners at Biskra University have positive attitudes towards the use of the MALL in lexical learning?
4. How do EFL teachers at Biskra University perceive the use of mobile devices in teaching and learning vocabulary?

4. Research Hypotheses:

The emergence of MALL has provided learners wide learning opportunities to enhance their English level more particularly to improve their vocabulary knowledge. In line with the previously formulated questions, the following alternative hypothesis has been formulated:

1. EFL learners' at Biskra University will find the MALL effective in developing their lexical competence.

5. Research Methodology:

Methodology means the path or the guide of doing a research whereas methods refers to specific research tools, instruments or techniques that a researcher uses to gather and collect the required data to answer the research questions. Generally, the selection of particular research method depends on the research problem, the research questions, hypotheses, and the research objectives. The present study is descriptive in nature because

the researcher wanted to see to what extent the relationship between the MALL and the development of learners lexical competence exists.

5.1. Population and Sample:

Due to the large number of Master One students at Mohamed Kheider University, fifty students were chosen randomly from section one to be the sample that assisted us to gather the necessary data about the use of mobile devices in learning vocabulary. In addition, five teachers of English were selected randomly to explore their perceptions towards the use of MALL in teaching and learning lexical items.

5.2. Data Gathering Tools

In order to answer the research questions stated earlier and to test the above hypothesis, the required data was collected by two means. Two semi-structured questionnaires were used. One was administrated to fifty students and the other one to five teachers. Using a questionnaire as a tool for collecting data was very helpful for us due to its familiarity among respondents. The research means provided valuable data that will be analyzed and discussed.

6. The Structure of the Dissertation:

The current study starts with general introduction that contains statement of the problem, research questions, research hypotheses, aim of the study, and research methodology. In addition, it consists of three main chapters. The first and second chapters represent the literature review. In the first chapter reviews the literature related to Mobile-assisted Language Learning, from defining its main concepts, reviewing its related perspectives, presenting it devices types, and providing its related approaches to evaluating its use and implementation in teaching and learning process. In the second chapter, a literature review on lexical competence is provided. It begins with defining vocabulary, competence, and presenting the essential aspects related to lexical competence. Finally, the third chapter concerns the investigation of the impact of Mobile-assisted Language Learning on enhancing learners' vocabulary learning. The chapter starts with describing the research tools and presenting its aim. Next, the data collected is carefully analysed, interpreted, and discussed. Finally, the chapter ends with a conclusion, followed by some pedagogical implementations concluded from the study findings.

Chapter One

Mobile-assisted Language Learning

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Chapter One

Mobile-assisted Language Learning

Introduction

The emergence and rapid improvements of educational technologies, such as mobile learning also called m-learning, has reached a wide popularity among EFL teachers and learners. In fact, using mobile devices in teaching and learning, specifically foreign languages, has been one of the major focuses of language learning studies since it creates interaction and leads to autonomy that are the main significant concepts to the field of MALL. Ongoing changing and developments of mobile devices have attracted educators, scholars and EFL practitioners to benefit from these technologies in teaching and learning foreign languages. This chapter attempts to provide a definition of the key concepts related to the field of MALL and the different types of MALL devices. In addition, a brief history of mobile learning as well as the different theories and approaches to MALL are given. Moreover, an overall evaluation of mobile learning based on certain criteria is given. Finally, this chapter ends with a demonstration of the effective use of MALL in the teaching and learning process.

1.1. Key Concepts to Mobile-assisted Language Learning:

Mobile-assisted Language Learning is an approach which is considered an independent language learning one that uses varied mobile devices as teaching and learning tools.

1.1.1. Definition of Mobile Learning:

Mobile learning has recently witnessed an explosion growth across all sectors of education. The popularity of mobile devices has been changing learning, communicating, and lifestyles. Kukulska-Hulme et al. (2004) asserted that mobile technology can support quick feedback or reinforcement, immersed experiences, situated learning in an authentic context, and other learning situations. It means that this new educational wave offers more learning opportunities to learners who want to learn without any constraints that decelerated the learning process. Mobile learning is still ill-defined because of the difficulty in characterizing the unique nature of this new concept. Kukulska-Hulme and

Traxler claimed that many researchers agree upon the difficulty of providing an exact definition of what constitutes mobile learning (cited in Hockly, 2013). According to Winters, mobile learning has been defined from different perspectives based on particular experiences, uses, and backgrounds that seem to be all things to all people (cited in Sharples, 2006). Thus, many studies have been conducted in order to provide a definition to the concept “mobile learning” to help both teachers and learners for better understanding of this new wave of learning. Actually, many researchers have emphasized “mobility” of mobile learning (Kukulska-Hulme, 2007; 2009, Sharples, 2006 & Traxler, 2007) in order to provide a clear image about this new educational field. However, mobility needs to be understood in both terms of spatial movement and the ways in which such a movement may enable time-shifting and boundary-crossing (Kukulska-Hulme, 2009). El-Hussein and Cronje (2010) define it in three significant areas: mobility of technology, mobility of learning, and mobility of learners.

Firstly, mobility of technology includes smart phones, digital cameras, handheld computers (e.g. tablet PC, PDA), global positioning system (GPS) devices or other mobile devices that are furnished with wireless application protocol (WAP), or Wi-Fi. Such technologies deliver content and instruction through the Internet or satellites that can enable learners to learn anywhere, anytime (El-Hussein and Cronje, 2010). That is; those devices provide learners unlimited learning opportunities to access different materials. According to Trinder (2005), mobile technology enables users to perform many different kinds of social-interactive functions such as communication, organization, applications, information or entertainment. So, such functions like sending SMS, memos, e-books, references, music, movies, or games assist and facilitate the learning process since it gives learners the opportunity to access to the desirable information at anytime and anywhere.

Secondly, mobility of learning generates new modes of educational delivery: personalized, learner-centered, situated, collaborative, ubiquitous, and lifelong learning (Sharples, Taylor & Vavloula, 2005). The mobile allows learners to experience personal and unique learning situations since there is no limitation concerning age, time, or duration. It means that learners can easily connect with each other for their own purposes and interests in order to accomplish their learning objectives. Globeck (2006, 2009) stated that the way learners construct, organize and reconstruct knowledge is based mainly on social trust in the context of the social process. In other words, it encourages and motivates

learners to be active participants during the act of learning since it allows them to experience different learning situations within social interaction.

Finally, mobile learning enhances the mobility of individual learners. Learners usually take the advantage of their learning to facilitate productivity and effectiveness, allowing them to be more flexible, accessible, and to personalize their learning activities (Heyoung & Yeonhee, 2012). Indeed, most of the learners prefer to be independent and free especially in learning because they want to develop a sense of individuality, community, and ubiquitousness that make learning more enjoyable and effective.

Figure 1.1. Shows the concept of mobile learning in higher education summarized in the previous studies:

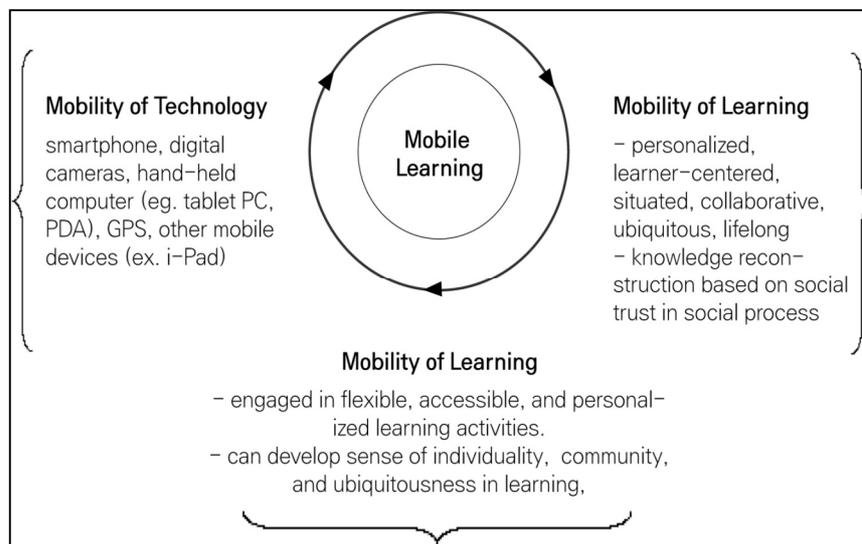


Figure 1.1: The Concept of Mobile Learning in Three Areas (Kim, H., & Kwon, Y, 2012).

Thus, figure 1.1. Shows the three significant areas in mobile learning that at some point provide a clear idea about the concept mobile learning in terms of mobility (e.g. technology mobility, learning mobility, and learner mobility). It means that there is no complete and unified definition to the concept mobile learning, but rather different perspectives related to its meaning. Traxler (2009) also claimed that mobile learning also called m-learning continued to gain identity and definition rather than lose them. Thus, multi-dimensional definitions have been provided to this concept. In the past, it has often been defined in terms of its use of mobile technologies. More recent definitions espouse it

to e-learning and informal learning, as well as the mobility of the learner. Hence, different perspectives on mobile learning have been emerged.

1.1.2. Current Perspectives on Mobile Learning:

Every new educational technology has tended to lead to new perspectives in teaching and learning, and language teaching and learning is among the fields which have undergone big changes as a result of rapid improvements in educational technology. With the emergence and rapid developments of mobile devices, the concept of “mobile learning” has gained a wide popularity across all over the world. It falls into four perspectives.

Mobile Learning as a Techno centric, this perspective dominates the literature. Mobile learning is viewed as learning using a mobile device, such as a PDA, mobile phone, iPod, PlayStation Portable and other mobile devices. Earlier, Traxler (2005) defined m-learning as “any educational provision where the sole or dominant technologies are hand held or palm top devices”. He therefore explicates that mobile learning is the provision of education and training on mobile devices. According to O’Malley et al. (2003), mobile learning is any sort of learning that takes place when the learner is not at a fixed, predetermined location, or learning happening when the learner exploits learning opportunities offered by mobile technologies. Commonly, as stated in the Global Encyclopedia of Information, m-learning refers to learning opportunities through the use of mobile solutions and handheld devices, such as smart phones and PDAs, which are connected to information networks. It demonstrates that this view focuses mainly on the use of technology in teaching by exploiting different mobile technologies in the teaching/learning process such as hand held devices. Thus, m-learning offers new ways of learning due to the various digital devices used.

The second perspective is mobile Learning as a descendent of e-learning which characterizes it as an extension of e-learning. These definitions are often all-inclusive and do not help in characterizing the unique nature of mobile learning. Most researchers and educators consider mobile learning as an immediate descendent of e-learning. Pikwart et al. (2003) believed that e-learning is learning assisted by electronic tools and media, following this, m-learning is e-learning that uses mobile technology and wireless transmission (cited in Eteokleous & Laouris, 2005). Hence, mobile learning has always led to e-learning. It should be understood as both “a continuation of ‘conventional’ e-learning and a reaction to this ‘conventional’ e-learning and to its perceived inadequacies and

limitations” (Traxler, 2007). Eteokleous and Laouris (2005) proposed a helpful comparison in order to illustrate the transition from e-learning to m-learning which contrasts the choice of terminology of the two learning environment types. Unlike e-learning which uses computers, bandwidth, and multimedia, m-learning uses mobile devices, GPRS, G3, Bluetooth, and other objects. Another contrast is that e-learning needs interaction while m-learning is intimate or spontaneous. Moreover, e-learning is considered more formal than m-learning since it is adapted by most of the educational institutions. E-learning has shifted from distance learning which was very difficult for learners to deal with to m-learning which follows situated learning that focuses on specific needs (i.e. learning within context), and so forth. In other words, mobile learning is a descendent process of e-learning.

The third view in mobile learning is the formal education one. Sharples (2006) stated that formal education is often characterized in two ways: first as face-to-face teaching when real interaction between a teacher and a learner or other learners is present, or as a stereotypical lecture which indicates an organized and well structured lecture. As a matter of fact, at some point, this perspective is not at all clear that is wholly correct due to a set of reasons. To illustrate more, Peters (1998) provides a good reason. He states that “more than 100 year distance correspondence have existed which directly lead to the questions that concerns the place of mobile learning in relation to all forms of “traditional” learning, not only the classroom” (cited in Sharples, 2006). It means that forms of distance education might provide a clear image about mobile learning in formal education.

The fourth one is the learner-centred view which indicates that conceptualizing mobile learning has a relation in reviewing the combined works of Sharples, Taylor, O’Malley and their colleagues. In their early research, the concept of mobile learning was strongly linked to the device (Sharples et al., 2002) and the potential for enabling lifelong learning (Sharples, 2000). However, “it soon became clear that rather than the device, the focus should be on the mobility of the learner” (Sharples, 2006). This led to considering mobile learning from the learner’s perspective, and to the definition that: “Any sort of learning that happens when the learner is not at a fixed, predetermined location, or learning that happens when the learner takes advantage of learning opportunities offered by mobile technologies” (O’Malley et al., 2003). In a recent work, Sharples, 2005 & Taylor et al., 2006 have explored the notion of learning in the mobile age in order to develop a theory of mobile learning that builds on Engeström’s “conceptualization of Activity Theory” and Laurillard’s (2002) “Conversational Framework” . Their work focuses on mobile learning

as a communication in context (cited in Sharples, 2006). In other words, learners use their mobile devices to learn to communicate effectively.

1.1.3. Definition of Mobile-assisted Language Learning:

The term mobile-assisted language learning (MALL) was first coined by Chinnery (2006). Due to the rapid growth of mobile technologies, Mobile-assisted Language Learning (MALL) has become increasingly common. In fact, MALL is not a fully independent field it has a relation to foreign language learning. In general, MALL has been considered as a “subset of both mobile learning and computer-assisted language learning” (Heyoung & Yeonhee, 2012). Figure 1.2 demonstrates Hubbard and Stockwell’s conception of cross-field relationships. It captures the interrelation between the three concepts; where the shaded area represents the overlap.

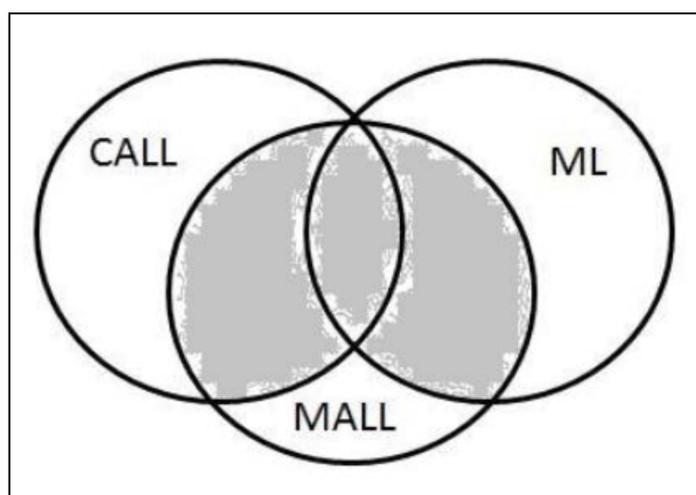


Figure 1.2: The relationship between CALL, MALL, and m-learning (Hubbard & Stockwell, 2013, p. 5).

Mobile-assisted Language Learning describes an approach to language learning that is assisted through the use of handheld devices. Kukulska-Hulme and Shield (2008) note that MALL differs from CALL “in its use of a variety of handheld technologies, often with internet connection, ranging from ultra-portable laptops and handhelds to smart phones, mobile phones, MP3 and MP4 players, digital voice recorders and cameras that enable new ways of learning, emphasizing continuity or spontaneity of access and interaction across

different contexts of use”. It indicates that The MALL has a wide range of benefits in the learning process. Kim and Kwon (2012) stated some advantages to MALL. They said that “mobile technology provides various resources and tools for language learning that encourage learners to be more motivated, autonomous, situated (site-specific), and socially interactive as well as it enables students to more easily and more promptly access language learning materials and communicate with people at anytime and anywhere” (Kim and Kwon, 2012). It means that mobile learning makes the learning process more enjoyable and it encourages social interaction between teachers and learners and other learners. Besides, it gives EFL learners the opportunity to learn languages not only in a classroom but also outside a classroom; whenever they desire and wherever they are.

1.2. Types of MALL Devices and Current Uses:

Mobile learning is an extremely fast-moving field with numerous devices and applications that are in a process of rapid change and development. Trinder (2005) presents a broad list of mobile learning and mobile enhanced language learning devices ranging from simple single-purpose devices like audio-players, to multi-purpose high-technology devices such as mobile phones and personal digital assistants (PDAs). Trinder’s list of mobile tools (2005) includes “mobile phones, PDAs, Smartphone, GPS tools, laptop computers, MP3 or MP4 players, video tapes, multimedia players, e-game tools, e-organisers, e-books, CDs and DVDs as mobile learning devices”. Figure 1.2 shows some types of mobile devices.



Figure 1.3: Illustration of some mobile devices :

(<http://www.eportfolios.ac.uk/mobile>)

The figure above showed some mobile devices types used in the educational process mainly in learning and teaching foreign languages. Nowadays, it can be observed that handheld devices are used for educational purposes and many of them have already proved to be effective tools of language learning.

1.2.1. Mobile Phones:

According to a recent report by the International Telecommunication Union (ITU, 2009), mobile phones are the most widely owned and used devices, with approximately 4.6 billion subscriptions all over the world. Moreover, this number has been increasing over time due to the developments in the mobile phone technology and the wide expansion of the mobile market. The popularity of mobile phones had several reasons. Collins (2005) stated that even the simplest mobile phones provide an SMS (Short Message Service) function for sending text messages as well as most of those devices also have MMS (Multimedia Message Service) functions which enable the user to transmit messages that integrate coloured visuals, sounds and text. In addition, “mobile phones incorporate basic daily personal information management tools like address books and calendars which let people get rid of their phonebooks and agendas” (Trinder, 2005). This means that more sophisticated mobile phones of the modern technology include integrated software, cameras, Bluetooth connections, media players, wireless connection tools, and even navigation tools (GPS) which make them no different from a fully equipped computer.

1.2.2. Personal Digital Assistants (PDAs):

Personal Digital Assistant (PDA) is a small hand-held computer used for downloading and storing information such as documents, databases and calendar entries (Beatty, 2003). Nowadays, these devices are also used as GPS navigators through direct connection to the Internet via GSM operators. Due to their advanced technological features, such as multimedia interfaces, integrated operating systems, media players, and larger screens, PDAs are among the mobile devices that have been most used for educational purposes (Clough et al. 2007; Corlett et al., 2005; Song & Fox, 2008; Trinder, Magill & Roy, 2005). Nevertheless, when compared to mobile phones, they are owned and used by relatively few people (Cavus & Ibrahim, 2009; Chinnery, 2006). It means that not all of the learners are able to afford such devices due to their expensive cost. Although PDAs has some advantages like portability and some operating system features, learners faces some problems in using those devices such as short battery life, no internet access outside.

6.2.1. Podcasts and Media Players :

The Oxford Advanced Learners Dictionary (2003) provides a definition of the word “podcasts” as a series of digital media files that are released and downloaded through an Internet connection. The word podcast is usually explained as a combination of iPod, a famous media-player, and broadcast (Evans, 2008). Podcasts were first introduced at the beginning of the 2000s and Duke University was the first institution to realize the educational potential of these magic boxes (Belanger, 2005). In 2005, Duke University distributed free 20GB Apple® iPod devices to all of its freshmen students and enabled them to download course content to support their learning. Since then, there have been many studies (Bongey et al., 2006 & Abdous et al., 2009) exploring the use and the effectiveness of podcasting in supporting academic achievement and language learning. It means that these new tools are being used in education and language learning in particular, and it can be improved by adding images, movies, and hyperlinks to their contents.

1.3. Development of Educational Technology:

Usually, language learning and teaching involves the use of particular types of technology. According to Pownell and Bailey (2001), handheld computers are at the forefront of the fourth wave in the evolution of educational technology. Gutiérrez-Colón Plana (2010) has stated that there are four waves that have marked the move in educational methods and each one wave is characterized by the use of particular types of technological tools and by the emergence of specific language teaching and learning.

The first wave has started before the 1970’s, with the emergence of the audio Lingual method that use audiovisual recording devices such as real-to-real, Video Cassette Recordings (VCRs), and Personal Computers (PCs). The advent of the audio-lingual theory in the 1950’s sparked the use of authentic audio samples for educational purposes in language laboratories which became the new trend in the field (cited in Al-Qudaimi, 2013). Yet, language laboratories were replaced by drill-based computer-assisted instruction because of the influence of the behaviourist theory in the 1960s. this wave focuses on the use of authentic audio materials in learning and teaching foreign languages.

The second Wave started around the 1970’s, when the audio-lingual method was at its best, learners had to repeat monotonous pattern drills. Chinnery (2006) stated that within this wave desktop computers, also called personal computers (PC’s) started to appear. Indeed, the computer-mediated communication (CMC) in educational contexts has been

progressing as technologies continue to shrink in size (Chinnery, 2006). It is within this wave that CMC has appeared. In other words, this wave, lead to the emergence of new learning technology that uses computer-mediated communication as new educational tools that encouraged learners interaction in the learning context.

The emergence of the third wave was in the 1990's with the appearance of the internet and the World Wide Web (www). According to Sharples (2000), the arrival and popularity of the internet and the World Wild Web (www) in the 1990's gave rise to the next generation of e-learning (cited in Al-Qudaimi, 2013). The internet arrival also advanced CMC and CALL began to step out of the language lab into the world (Chinnery, 2006). That is to say that internet connection had bring vast learning opportunities that facilitated the task of learning.

In the fourth wave in 2000's, as technologies continue to shrink in size, palmtop computers and mobile phones began to spread. Nevertheless, mobile learning had to wait for almost a decade for other mobile devices to see the light. According to Gutiérrez-Colón Plana (2012), the birth of devices such as PDAs, iPods, and digital dictionaries gave rise to mobile learning, and consequently MALL. Hubbard & Stockwell (2013) claimed that over the past decade mobile learning has been developed as a sophisticated field within its own rights, with a proliferating number of articles and conferences, becoming a field that is quickly mature. Therefore, Gutiérrez-Colón Plana (2010) claimed that this emergence may probably be the birth of the fifth wave. In other words, this wave represented the appearance of the informant or the digital age that based on using mobile technologies in the educational field.

1.4. Approaches to Mobile-assisted Language Learning:

The use of technology for teaching and learning in and out of the classroom, including the teaching and learning of foreign languages, has grown significantly over the years. The continued evolution of mobile learning has resulted in changing approaches and theories of learning. An investigation of the MALL literature reveals that there are two main approaches that dominate the literature which are content-related and design-related studies (Grönlund and Viberg, 2012). However, the theories and approaches applied in MALL often originate from various theories of learning, including The Behaviorism, The Constructivist, The Situated Learning Theory, The Collaborative Learning Theory, and The Informal and Lifelong Learning Theory. In addition to the Communicative Approach

that is currently popular approach to EFL learning (Beatty, 2013). Thus, these learning theories appeared in order to provide to some extent a clear image about this new learning approach (MALL).

Content-based or content-related studies focus on the development of activity types and learning materials. “Studies in the area of design issues tend to refer to the “informal” nature of m-learning, while those that are related to content development usually focus on more formal contexts that are related to language learning courses rather than to independent language learning” (Kukulska-Hulme & Shield, 2007). It means that this type of study often employs mobile devices as tools for content delivering to learners. In addition, Petersen & Divitini (2004) claimed that “little or no emphasis is given to provide learning support where the learner is able to interact with other learners or parties that can support the learning process”. That is to say, these approaches rely on mobile devices to deliver content in order to assist teacher-learner communication rather than supporting learners to communicate.

Design-related studies focus on design issues and learners’ needs (Kukulska-Hulme and Shield, 2007). Studies in this area are related to developing learning materials and activities for mobile devices as well as text-based content. Those approaches tend to refer to the informal nature of m-learning. Kukulska-Hulme and Shield (2007) also added that design-related approaches differ from content-related ones in that their emphasis is less on a traditional educational paradigm, in which the teacher provides materials to learners. Therefore, design-related activities can support and enhance learners’ autonomy.

The Behaviorist Theory refers to the use of mobile devices to present learning materials, obtain responses from learners, and provide appropriate feedback. Naismith et al. (2004) stated that in the “behaviorist paradigm” learning is thought to be best facilitated through the reinforcement of an association between a particular stimulus and a response. Applying this to educational technology, m-learning provides the ideal opportunity to present learning content (stimulus), gather learners’ responses (response), and provide appropriate feedback (reinforcement) (Naismith et al., 2004). One of the significant learning applications that the behaviorist theory relies on is text messaging. Keskin & Metcalf (2011) provides other examples of the behaviorist learning theory with mobile technologies like MMS, Voice recorder software’s, drill and feedback, Mobile Response System such as clickers, and so many other materials used to facilitate learning through mobile devices. To illustrate, Figure 1.6 is an example of the application of behaviorism in

formal learning. The teacher uses the application Reminder 101 to text students for the updates concerning the courses.

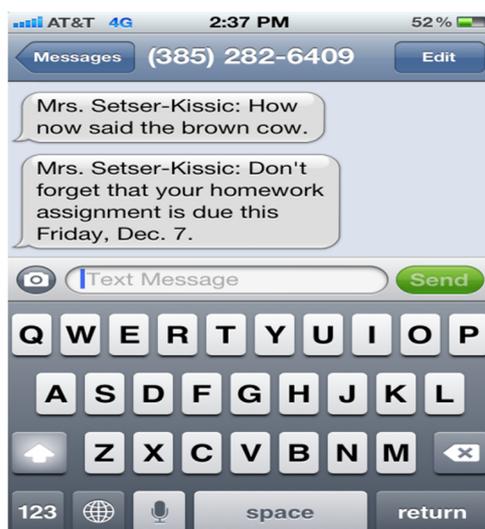


Figure 1.4: Teacher messages students using the application Reminder

(https://ischool.fcps.net/pluginfile.php/8288/mod_resource/content/4/

remind101a.PNG)

According to the constructivist theory, learning is an active process in which learners construct new ideas or concepts based on both their current and past knowledge (Naismith et al., 2004). Zhang (2010) stated that there are two branches of constructivism; social constructivism and cognitive constructivism. Teachers must give their learners an environment in which they transformed from passive recipients of information to active constructors of knowledge in order to participate in the learning process as well as the appropriate tools to work with that knowledge. Naismith et al. (2004) claimed that “thanks to mobile devices, learners now can be active constructors of knowledge by embedding them in a realistic context and offering access to supporting tools”. So, handheld devices encouraged learners to be more activated and engaged in the learning process. Keskin & Metcalf, (2011) proposed a number of constructivist activities using mobile technologies such as handheld games, interactive podcasting, emails, multimedia, and other constructivist activities. To illustrate more, these constructivist activities which based on the utilization of varied handheld devices provided aid to learners in order to construct their knowledge.

Another learning approach is Situated Learning. Lave et al (1991) stated that the situated learning theory is not merely the acquisition of knowledge by individuals, but

instead a process of social participation. In other words, the context of learning has a great influence on this process. Tomei (2008) claimed that situated learning theory is the combination between constructivist and social learning theories. Moreover, it requires knowledge to be presented in authentic contexts and learners to participate within a community of practice (Naismith et al., 2004). Teachers can fulfil both of these requirements by developing appropriate context-based teaching strategies with mobile technologies. Activities such as taking observational notes, taking pictures, recording students own reflections, listening to expert commentary, and many other situated learning activities can be facilitated through different mobile devices (Naismith et al., 2004). Therefore, learning with mobile devices combined both the construction of knowledge and the social interaction through the utilization of mobile devices.

Collaborative Learning is another approach of learning. Naismith et al. (2004) refers to its activities to those which promote learning through social interaction. Applied to mobile learning, learners are enabled to learn a language in collaboration with others by sharing files, data, and providing means of coordination without attempting to replace human-to-human interactions. Mobile devices can be used collaboratively in real time through different MALL applications. For instance, teachers send SMSs to their learners, and between learners themselves, sharing songs, data, and videos via Bluetooth, and speaking in group through Facebook. In other sense, mobile devices encouraged collaborative work that emphasis social interactions as learners, teachers, and other learners share their interests,

According to Naismith et al. (2004), informal and lifelong learning activities (i.e. learning approach) support learning outside a dedicated learning environment and formal curriculum. Thus, learning occurs not only inside the classroom but also outside of it. Research on informal and lifelong learning recognises that learning happens all of the time and is influenced both by our environment and the particular situations we are faced with. This kind of learning may be intentional, for example, through intensive, significant and deliberate learning ‘projects’ (Tough 1971), or it may be accidental stated, Naismith et al., (2004), by acquiring information through conversations, TV and newspapers, observing the world or even experiencing an accident or embarrassing situation. So, mobile technologies do not limit the learning area. Learning through these devices can be both formally or informally.

Mobile language learning applications may provide the opportunity to support the communicative approach. Beatty, (2013) claimed that the communicative approach is one of the current popular approaches to EFL as it encourages learners to interact with others, communicate, and negotiate language tasks. In a similar vein, Zhang (2010) asserts that the “communicative approach concentrates on autonomy of learners and authenticity of materials. The social media practically the ones that allows learners to share pictures and videos become stimuli for conversations and negotiations of meaning”. This means that mobile technologies provide this approach the ability to develop learners’ autonomy and brought authenticity to the learning process.

1.4. Evaluating Mobile-assisted Language Learning:

In order to use mobile learning for educational purposes there are a vast number of criteria that should be fulfilled. Mobile learning provides a wide range of affordance but it still faces some educational challenges. The following paraphrased list shows some of the educational challenges:

The first criteria in Mobile-assisted Language Learning are Values and Affordances. Mehdipour and Zerehkafi (2013) stated that various values and affordances are offered by mobile learning. They are paraphrased as follows: (a) **Portability:** unlike PCs, mobile technologies can be taken to different places, and at anytime because of their small size and light weight. Therefore, they are more practical and provide the opportunity to bring new technology into the classroom as well as outside the classroom. (b) **The anytime-anywhere Advantage:** mobile technologies provide learning at the time learners want to learn, and in the place they want (Kukulaska-Hulme, 2012). It means that these two advantages made learning easier and unlimited whether in space or time. To illustrate, this figure 1.5 below demonstrate examples of different possible settings in which learners may use their mobile devices to access to language learning materials and applications. It shows the possible times when mobile language learning happens, while Figure 1.6 shows the possible places where mobile language learning happens.

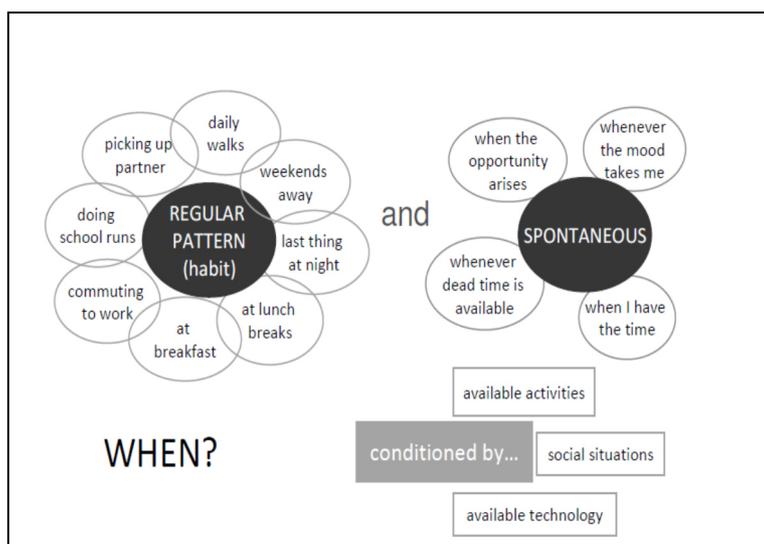


Figure 1.5: Times when mobile language learning can happen,

(Kukulska-Hulme, 2012, p. 7).



Figure 1.6: Places where mobile language learning can happen (Kukulska-

Hulme, 2012, p. 8).

These two figures provide a clear idea about when and where learning may happen for instance figure1.4 shows that it may happens in regular pattern like at the breakfast table when a person can use his or her mobile device to check his final touch of his homework. Learning might also happens spontaneously whenever people want to. (c) Ubiquity or Everywhere, handheld device are readily available. They allow students to gather, access, and process information outside and inside the classroom. (d) Coast, mobile devices are

typically less expensive than PCs and laptops, which make them affordable for language learners. (e) Collaboration, Social Interaction and Engagement, mobile learning has the power to promote and foster collaboration and communication, which are deemed important for twenty-first generation. For instance, several learners at different locations may perform the same activity. They can share files, multimedia, apps, and so many learning materials it facilitates learner interaction with teachers, administration, and amongst peers. MALL also enhances learners' engagement because it fits different learning styles and enables learners to partake in learning activities. (f) Motivation, the widespread ownership of different mobile devices and the experience of using new devices increase learners' motivation for learning. (i) Assistive Technologies, the different innovative technologies can be integrated in special educational needs in order to assist learners with learning disabilities. Hence, teachers should vary mobile learning activities depending on the learner inability and its degree in order to achieve better learning results. In other words, these mobile advantages stated by Mehdipour and Zerehkafi, (2013) provided learners and teachers a clear vision about the importance of implementing mobile activities in learning and teaching, mainly foreign language learning and teaching.

Despite mobile-assisted language learning benefits, it also creates challenges which may differ from one device to another. Mehdipour and Zerehkafi (2013) discussed m-learning barriers from different angles that are summarized as follows: (a) Technical Barriers, m-learning creates a number of technical challenges like battery life of mobile devices and connectivity. Learners have to limit their online connection times and sometimes they may not have internet at all. In addition, screen size, key size, and limited audiovisual quality may cause visual problems to learners while performing activities delivered in small chunks. (b) Educational Barriers, m-learning still faces some educational and social challenges that decelerate its integration within teaching and learning process. First, funding and affordability s are one of the major obstacles that face learners in using mobile devices for learning. For example, not all learners are able to pay money for some educational applications. While few learners may pay, others are not able to take in charge the high costs. In addition, developing the appropriate theory for m-learning activities may be a challenge for practitioners. Another challenge that may be ignored is that m-learning can be risk of distraction for learners. Though, with the rapid growth in innovative technologies, companies try to improve the mobile devices features to suit the various fields. So, as mobile devices brought significant advantages to the educational field, it also

brought remarkable challenges that to some extent decrease the task of learning and teaching.

1.5. The Use of Technology in Education:

Some important criteria should be taken into consideration in order not to hinder the teaching and learning process in implementing technology within the educational framework. It is very significant to know if this new educational technology wave is a replacement of traditional learning or it only acts as a support.

1.5.1. A Model for the Effective Use of Technology in Teaching:

MALL seems to be the 21st Century educational movement that fits the classroom environment and satisfies the learners' needs. Teachers should respect some criteria in order to use this technology effectively. Due to that reason many researchers have proposed models of the effective use of technology in teaching. Among many researchers Gutiérrez-Colón Plana (2012) has reviewed Bates and Poole's model (2003), in which they defined eight criteria a teacher should consider when using technology in education. These criteria are paraphrased as follows: (a) Costs, in which teachers should use the technologies that are available for all learners in terms of the affordance because not all the learners will be able to use expensive technologies. (b) The Appropriateness of Technology for Learners, teachers need to responsibly and thoughtfully select the appropriate mobile device that fits the objective of the lesson and that is simple for learners such as portable that are easy to use. It is worth noting that these two criteria required technological awareness and information about these new devices in order to shape learners needs and objectives.

In addition, (c) Ease of Use and Reliability, both teachers and learners should be able to use the technology which is practical, simple and reliable in order to work appropriately and effectively in the classroom. (d) Teaching and Learning Approaches, Gutiérrez-Colón Plana (2012) claimed that teaching "is not drilling". Meaning when integrating technologies within lectures, teachers should develop and use a rational approach and use a variety of teaching methods that stimulates learners' 21st Century skills such as critical thinking as well as assesses the lessons' objectives. (e) Interactivity, nowadays, language courses need to be two-ways in order to achieve better communication goal. Usually, EFL

teachers neglect the communicative aspect that language learning requires when they use technology. That is the reason why learner faces difficulties while trying to use the language out of the device context. That is to say, both learners and teachers should be familiar with such devices in order to make effective interaction and communication during the learning task.

Moreover, (f) Organizational Issues, when teachers use any kind of technology, they should be aware of the different organizational constraints that may face them. For instance, time constraints, unclear identification of technology benefits and many other constraints that should be considered before. (g) Novelty, Gutiérrez-Colón Plana (2012) argued that most of the learners prefer new mobile technologies. That is, mobile devices motivate learners to learn. (h) Speed, another significant criterion is how quickly mobile platforms and learning materials can be developed. In other meaning, these three mentioned criteria provided learners and teachers wider picture about the significant of using mobile devices as educational tools.

Although, mobile-assisted language learning is viewed as an effective add to the teaching and learning process, the implementation of this within teaching is not as simple as it may seem because it requires the efforts of all EFL practitioners.

Conclusion:

Mobile learning is a new educational field that addresses the use of various mobile devices in teaching and learning. However, it still is an ill-defined concept because of the different perspectives related to this field. Mobile-assisted Language Learning implies the use of hand held devices in language learning that appears due to the widespread ownership of mobile technologies which enable EFL language learners to learn the language effectively in many situations whether formally or informally. Although mobile devices offer a variety of advantages that EFL learners in particular can exploited, there are still some challenges. Therefore, EFL practitioners investigated the possibility of replacing traditional learning by mobile learning. Still, m-learning can only support, complete, and assist traditional learning rather than replacing it.

Chapter Two

Lexical Competence

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Chapter Two

Lexical Competence

Introduction:

Vocabulary knowledge and use (i.e. Lexical knowledge and competence) are significant for students' language proficiency and academic achievement. Lexical knowledge and competence is considered as one of the most challenging tasks in learning a foreign language. Hence, many studies have been conducted to understand the nature of vocabulary knowledge and its use as well as its effects and/or relationships with other language skills. In this chapter, a definition of lexis, competence, and the different types of competence are provided. In addition, the two dimensions of knowledge (i.e. Inferential and Referential Competence) are also presented. Moreover, lexical competence dimensions, development, and depth are given in addition to the different types of vocabulary, the role of memory while learning new items, and the varied vocabulary learning strategies that assist learners to be more competent in learning foreign languages. The chapter ends up with the discussion of the support provided by the new mobile technologies on the acquisition of lexical items.

2.1. Definition of Vocabulary (Lexis):

Every language has a set of words that differentiate it from other languages. Vocabulary, Lexis or lexical item refers to the semantics of the language. Jackson (1998) claimed that vocabulary appears as the headword in a dictionary entry. It relates to knowledge of words as well as word meanings and thus, forms the basic building blocks of language learning experience. Lexical knowledge is the cornerstone of language proficiency since it is the key element that enables learners to respond to the four language skills effectively. According to the American Heritage dictionary "vocabulary is the sum of words used by, understood by, or at the command of a particular person or group" (Pikulski & Templeton, 2004). Hence, it refers to the lexical knowledge owned by learners which enables them to receive and convey messages in order to succeed in their communications. Albert Lado (1974) also claimed that "a word is a combination of sounds acting as a stimulus to bring into attention the experience to which it has become attached

by use” (cited in Aichaoui, 2005, p. 17). So, vocabulary or Lexis is the sum of words that people use in order to communicate effectively among each other.

However, Aichaoui (2005) claimed that it is better to use vocabulary items rather than words because vocabulary is not always a single word such as a head-phone, a chair-man, and a mother-in-law are vocabulary items that are composed of two or three words. Vocabulary or lexical items that contain more than one word are sometimes called “‘chunks’, ‘lexical bundles’, or ‘clusters’” (cited in McCarthy, 2007). Thus, it is more accurate to say vocabulary or lexical items. To sum up, knowing a word completely requires knowing the key aspects of the word, namely its pronunciation, spelling, derivations and its range of meanings.

2.2. Definition of Competence:

For many decades, many linguists have disagreed on providing a unified definition to the term “competence”. They have used it in different contexts to refer to different types of knowledge. Thus, it was the most debatable topic in linguistics. However, the term competence was originally set out by the father of linguistics Noam Chomsky. In his book ‘Aspects of the Theory of Syntax’, he defines competence as:

Linguistic theory is primarily concerned with an ideal speaker-listener in completely homogeneous speech community who knows its language perfectly and is unaffected by such grammatically irrelevant conditions as memory limitations, distractions, shifts of attention and interest, and errors (random or characteristic) in applying his knowledge of the language in actual performance.

(Chomsky, 1965).

In other words, he made a comparison between the two concepts: competence and performance. He considered languages as rule-governed systems which are unaffected by social and situational variation (cited in Llrda, 2000). While he refers the concept competence to the speaker’s or hearer’s knowledge of languages, he refers the concept performance to the actual use of language in real situations. However, he did not present a clear distinction between knowledge and the ability to use this knowledge for communicative purposes.

Moreover, Campell and Wales (1970), as mentioned in their article *'The study of language acquisition'*, discussed the strong and the weak versions of Chomsky's definition of the term competence. According to them, "the ability to use the language appropriately in a given situation requires the knowledge of the language". However, this hot debate continued to rise until 1980s since neither of the explanations was able to cover and cope with the complete meaning of the term competence exactly.

2.3. Types of Competence:

The development of the different types of competence is related to the teachers' who provides language learners the opportunities to learn and use the language in a variety of contexts. Among the varied competence types, this chapter will focus on studying lexical competence and its relation to educational technology.

2.3.1. Lexical Competence:

Lexical competence is the ability to use words in appropriate and effective ways in verbal interaction (Velasco, 2007). It is naturally to suppose that it is a part of communicative competence depending on Dick's assumption (1997) who claims that the psychological correlate of a natural language is the notion of communicative competence as introduced by Hymes (1972). According to him communicative competence comprises "not only the ability to construct and interpret linguistic expressions, but also the ability to use these expressions in appropriate and effective ways according to the conventions of verbal interaction prevailing in a linguistic community". Recently, the linguistic theory has unfortunately tended "to concentrate on the meticulous analysis of lexical meaning in order to account for the structural properties of lexical items, while ignoring significant aspects of the use and behavior of lexemes in linguistic utterances" (Velasco, 2007). It means that this theory is mainly focused on the precise analysis of lexical meaning and neglects the other aspects of lexemes. Therefore, this strategy has several reasons behind it:

From a purely grammar-designing perspective, the basic semantic and syntactic properties of lexical items which are deemed important to use them in linguistic expressions are the demands of all linguistic model from lexicon (ibid, 2007). It implies that all linguistic models concentrate on the meaning and structure of the lexicon. Thus, from the point of view of the grammar system, many semantic features of a lexical item are simply irrelevant in the generation of a linguistic expression. Jackendoff (1997) observes

that since the computational system is only sensitive to their syntactic features, the words in (1a) are syntactically identical as the words in (1b), (1c) and (1d):

- (1) a. dog, cat, armadillo
- b. walk, swim, fly
- c. tall, beautiful, slippery
- d. on, in, near

Both of the words cat and dog denote an entity which is significantly different from each other. Hence, this difference is simply irrelevant to the syntactic component that only needs to know that both lexical items are nouns or that they pluralize regularly.

Macroni (1997) expressed the second reason as “Ever since Frege, it has seemed that communication and cultural inheritance requires uniformity of meanings: if ‘cat’ did not mean the same for me and you, we could not talk to each other about the same animals; we would forever be equivocating” (cited in Velasco, 2007). In other words, if we claim that linguistic community members generally succeed in the verbal communication act with each other, it necessarily follows that those members should process equivalent meanings for the lexical items of their language. Semantic theories considered individual competence as an irrelevant issue. According to the semantic theory of truth, meanings are the public entities and individual semantic competences are the particular grasps of those objective entities (Velasco, 2007). As a matter of fact, lexical knowledge is significantly different across speakers from that of grammatical knowledge. It means that some speakers may find the meaning associated to a given lexical item fragment or even incorrect for others. These three assumptions have implicitly guided most recent work on lexical semantics.

2.3.2. Inferential and Referential Abilities:

Macroni in his work on lexical competence (1997) believes that lexical competence comprises two distinct dimensions of knowledge. He assumed that to be able to use a word is in two ways: inferential and referential abilities. He refers to inferential knowledge as to be able to access to a system of associations between that word and different words and other etymological expressions. In more sense, it is to know that beers are animals, that in order to arrive somewhere one has to move and so forth. While he means by referential knowledge as the capacity to know how to outline words onto the present reality. It demonstrates the capability of both naming and application. According to Devitt and Sterelny (1999) naming refers to the capacity to choose the right word in light of a given item or condition while application means the capacity to choose the right object or

circumstances in light of a given word. Many people think that referential competence is not a linguistic ability, but a cognitive process through which speakers interact with their environment. However, Marconi (1997) provides a set of reasons to reject such an interpretation. He states that "the relevance of referential competence highly depends on the linguistic community which unconsciously agrees on what counts as knowing the meaning of a lexical item". It means that if a speaker cannot distinguish between a dog and cat, his linguistic community might conclude that he really does not know what the word means. However, the ability to apply the technical term "bandwidth" to the right referent only expert of the field have the ability to do so, even if the speakers belong to the same linguistic community. Referential competence maybe considered more prominent than inferential competence in many situations. For example, one hears the word "dog" the first thing that present in his or her mind is the mental image of this entity. Later on, one might consider it in details with the characterization of its meaning.

Despite all these reasons, the structure of referential knowledge has received very little attention in linguistic theory, certainly as a result of its characterization as non- linguistic perceptual knowledge and of the belief that it is unessential in the syntactic utilization of a lexical item. Thus, one should know the two knowledge dimensions in order to be able to use a word.

2.4. The Dimensions of Lexical Competence:

Vocabulary knowledge is a complex task in second and foreign language learning. Mera (1996) has proposed a global description of such knowledge. She proposed only two dimensions which are size and organization. By size she means the number of words that an individual seems to know and by organization she refers to how these words are related among them. While other applied linguists have suggested general characterizations with several separate traits as different aspects of word knowledge (cited in Chile, 2007). Among those applied linguists, Henrikson (1999) proposed a more specific definition of lexical competence. She suggested "the existence of three lexical dimensions, as well as the need for specifying each one of them and their relationships, and explained how important they are in the word learning and use processes" (cited in Chile, 2007). These three dimensions are deemed important to vocabulary knowledge.

The first dimension of lexical competence refers to the partial-precise knowledge which deals with breadth or size of vocabulary knowledge. According to Mera's (1996) definition it is a precise comprehension. It means that in order to know the meaning of a

word it requires the capacity to; for instance, translate it to the mother tongue language (L1), to find its appropriate definition, or to paraphrase it to the target language and so forth. Some researchers agreed that it is a matter of time for learners. Thus, for learners to go from a partial to a precise comprehension of vocabulary requires an amount of time, even though sometimes it is not necessary to know the exact meaning of a word as this can be inferred from the immediate context. In fact, partial-precise Knowledge is a long process in which learners' passes through a several stages (cited in Chile, 2007). That is to say, they gradually move from simple word recognition to a precise comprehension level.

Depth of Knowledge is the second dimension in lexical competence which refers to the quality of the learner's lexical competence Read (1993), or as Henriksen (1999) defined it, "the knowledge of a word's different sense relations to other words in the lexicon, e.g., paradigmatic (antonym, synonymy, hyponymy, gradation) and syntagmatic (collocational restrictions)". Since it is a complex task many types of knowledge include a full understanding or a rich meaning representation of a word. Rich meaning representation or knowledge of a word meaning requires three significant issues: "(a) extensional relations between concept and referent; (b) intentional relations to other words in the vocabulary (paradigmatic and syntagmatic relations); and (c) being aware of the syntactic and morphological limitations and characteristics of a word, together with levels of accessibility to this knowledge" (Cronbach, 1942).

Unfortunately, this characterization does not take into account some lexical aspects such as spelling, pronunciation, and collocation. According to Beheydt (1987), the process of semantization of a new word is complete when the learner has identified its morphological, syntactic, collocational characteristics, and its possible meanings. As a matter of fact, this process comprise of two stages: mapping process and network building. Henriksen (1999) stated that firstly in the mapping process "signifier and signified are connected and, as a result, extensional links are established by means of labeling". In more details it is by linking concept, sign and referent, and packaging (i.e. stands for grouping together different meanings for the same word). Secondly, network building or so-called organizational dimension (Meara 1996), creates intentional links and develop sense relations between lexical items.

The third dimension is the receptive – productive one that is divided into receptive and productive vocabulary. The former is defined as the ability to understand a lexical item and the latter as the ability to use it in production. As a matter of fact, knowing a word receptively does not imply knowing how to use it productively. Thus, the amount of

receptive vocabulary is bigger than the productive one. According to Nation (1990), productive knowledge contains and expands receptive knowledge. It means that both types of vocabulary are operating in continuous manner. However, Segler (2001) stated a set of significant assumptions regarding the division between the two types of vocabulary. The first assumption is overlapping phases when an individual go from receptive to productive vocabulary knowledge. Second, the relationship between these two types of knowledge is not static. Third, productive vocabulary entails more information related to denotations, connotations, derivations, register and syntactic constraints (Crow, 1986). Fourth, productive vocabulary usually follows receptive vocabulary. Finally, the size distance between the two types would decrease as the learning process develops, but receptive vocabulary would continue being larger.

According to Henriksen (1999), these three dimensions should be seen as a continuum not a separate by means of which learners goes through in the vocabulary learning process. Partial - Precise Knowledge and Depth of Knowledge dimensions considered as a knowledge continuum that is related to acquiring word meaning, and developing and understanding sense relations. The third one, Receptive – Productive is a control continuum which refers to usability. Therefore, the Depth of Knowledge of a word is important for an accurate understanding of a word (dimension 1), being also a relevant element for a word to become productive (dimension 3). In this way, an increase in the range of accessibility of a lexical item (dimension 3) is due to the quality of the semantization process (dimensions 1 and 2).

2.5. Depth of Lexical Competence:

Depth of vocabulary knowledge is considered as an essential factor for EFL learning. Borer (2004), on his proposal on depth of vocabulary knowledge, elicits the four dimensions of word knowledge proposed by Nation (1990). It includes both spoken and written form, position, function, and conception that represent the depth of knowledge of a word. Based on his four dimensions he investigated the following elements: (a) Form, in this dimension he studies both forms (spoken and written). In the spoken form, he focuses on pronunciation of the English word such as the stress. For instance, the stress in the word present is different. If the word takes the role of a verb, the stress will be on the second syllable but if it takes the role of an adjective, the stress will be on the first one. In the written form, he also studies spelling and morphology i.e., the word building like adding prefixes to the word to show opposite for instance, the opposite of the word legal is

“illegal” by adding the prefix “il” to the original word. (b) Position, which includes grammatical and collocation patterns. It means the order of words and the structure of sentences. For instance, in the English language, we place the subject at the beginning of the sentence followed by a verb or by a verb and object(s) as an example, Mary died (subject + verb) or Matt buy a car (verb + subject + object).

Benson and Ilson (1986) categorized English collocations into two classes: lexical and grammatical collocations. While the former are made up only of verbs, adjectives, nouns and adverbs in different possible combinations like walk, smile, innocent , and other lexical items, the latter contain words such as verbs, adjectives or nouns combined with a preposition or a grammatical structure such as “I believe in” . (c) Function, which refers to modes of discourse such as exposition, narration, description, and argument. For example, description discourse involves describing something in relation to the senses. It enables learners to develop a mental picture of what is being discussed like descriptive parts in an essay. (d) Conception, it refers to word meaning related to text context and synonym or antonymous relations. So, he attempted to present a clear vision about the importance of recognizing the four elements of lexical knowledge in order to guide EFL learners in their learning process.

To conclude, these four dimensions are deemed important for learners to understand EFL academic texts because it is necessary not only to know the meaning of a word, but also sets of word forms which share a common meaning. In other words, word families are very significant for EFL learning. Therefore, learners who follow this procedure are able to read and understand.

2.6. Kinds of Vocabulary:

Vocabulary knowledge represents the basis of every language and it has a crucial impact on the mastery of the different language aspects. It also involves the ability to distinguish between the receptive knowledge (also called passive) and the productive knowledge (also called active). Therefore, Harmer (1991) distinguishes between these two types of vocabulary. On the one hand, he refers to active vocabulary as the words which learners have been taught and to what they are relied upon to have the capacity to utilize. On the other hand, he refers to passive vocabulary as the words which the students will recognize in another occasion and probably will not be able to pronounce them. Moreover, Webb (2009) also provided a distinction between these two vocabulary types. First, he refers to receptive vocabulary as “the vocabulary that learners recognize when they see or

meet in reading text but do not use it in speaking and writing”. In other words, it refers to the words that learners recognize and understand when they are used in context but they cannot be produced (i.e. the ability to understand a word when it is heard or read). Second, he also defined active vocabulary as the “words that learners comprehend and can pronounce correctly and use it in speaking and writing tasks. It involves what is required for passive vocabulary besides to the ability to speak or write at the appropriate time. Thus, it can be addressed as an active process because learners can produce the words to express their thoughts to others”. It means that productive vocabulary knowledge refers to the ability to produce a word in order to speak or to write. In addition, Nezhad, Moghali, & Soori (2015) claimed that a child’s active vocabulary begins to increase when the child learns to speak or sign. So, words are known receptively first and it becomes available for productive use only after intentional or incidental learning. Meara (1990) sees the distinction between active and passive vocabulary as being the results of different types of association between words. While the former can be activated by other words, the latter consists of items which can only be activated by external stimuli (cited in Nation, 2001). Thus, both receptive and productive vocabulary knowledge play a role in word recognition.

To conclude, vocabulary learning process is regarded as a complex task. It represents one of the most challenging tasks that may face an EFL learner. Thus, they should know the aspects of word recognition. It is worth noting that EFL learners have a tendency to organize one aspect over another. Nevertheless, the aspects of word recognition are interrelated. Therefore, they should strive to balance form, meaning and use, in addition to being aware of the distinction between receptive or productive vocabulary knowledge.

2.7. Types of Vocabulary Learning:

Vocabulary represents the cornerstone of mastering a foreign language. It is deemed important to know the different vocabulary learning approaches which language learners can use. According to Nation (1990); Rubin and Thompson (1994); Richek et al. (1996) there are two general ways in which learners learn vocabulary: the direct vocabulary learning approach, and the indirect vocabulary learning approach. However, Nezhad et al. (2015) narrow this scope and suggested that vocabulary learning falls into four main types, explicit, implicit, incidental, and intentional.

Direct or Explicit vocabulary learning is defined as the conscious attention to learn new lexical items. Laufer and Hulstijn (2001) stated that “explicit vocabulary learning is concerned with conscious learning processes when language learners learn vocabulary

explicitly, either in context or in isolation, through direct instruction in both the meanings of individual words and word-learning strategies”. It means that direct learning can be associated with learning vocabulary in and out of context. In order to illustrate this, EFL Learners can learn vocabulary from lists of words, as it can appear in context. For example, they can learn new lexical items through reading texts and noting down the new word’s meaning which they have learned. Ellis (1994) also regarded explicit vocabulary learning as a more conscious process because the learner makes and tests a hypothesis in a search for structure. It denotes that learners systematically taught specific words and language structures. Therefore, it is very significant for learning the basic words and the important lexical items that is used and serves in most learning situations.

Implicit vocabulary learning refers to the unconscious, natural, and simple process of learning vocabulary. It also involves learning the meaning of new words indirectly when EFL learners hear or see the words used in varied contexts. For example, learners should have mutual conversation with each and share their different interest. Moreover, they can learn new words through extensive reading. It is generally associated with learning vocabulary in context. As an example, learners can learn different words through reading texts or listening to songs without paying any special attention. It means that learners does not pay any attention while learning, it comes naturally. However, it can also take place out of context. For instance, if learners repeatedly review a vocabulary list, their vocabulary knowledge and their meanings tends to become automatically learned. Therefore, it relies on reading to teach English vocabulary. To sum up, implicit vocabulary learning is systematically, automatic, and thus available for use.

Incidental vocabulary learning is defined as “the learning of vocabulary as the by-product of any activity not explicitly geared to vocabulary learning” (Hulstijn, 2001). It can occur when learners use language for the purpose of communication. Hunt and Beglar (1998) point out that many vocabularies are learned incidentally through extensive reading and listening. That is to say that extensive reading and listening may motivate learners and provide good learning opportunities to learn new lexical items. However, this process occurs gradually as Anderson (1985; cited in Richards and Renandya, 2002) claims. Furthermore, according to Nezhad et al. (2015), the notion of incidental learning is distinct from the notion of implicit learning. This notion stated that incidental learning is considered to occur when the object of learning is not the focus of attention i.e. natural learning. As a matter of fact, many studies on both first and second language believed that

vocabulary is acquired and learned incidentally. Here, the focus is not on vocabulary learning but on some other purposes through extensive reading and listening. Hence, it claimed to be a useful learning type for all language learners at different levels.

Intentional vocabulary learning, it refers to the conscious process in which learners need to pay attention to the words they want to learn. Its activities aim at developing vocabulary predominantly. Hulstijn (2001) stated that intentional vocabulary learning is defined as “any activity geared at committing lexical information to memory” (cited in Derakhshan & Khodabakhshzadeh, 2011). In other word, this type of learning requires awareness and attention to learn new lexical items. To conclude, Alemi and Tayebi (2011) respectively discussed the difference between implicit and explicit learning, and incidental and intentional learning. They claimed that the two dichotomies are not identical: (1) implicit competence is incidentally acquired, is stored implicitly and is used automatically, incidental learning differs from implicit learning in that it is a behaviorist notion “with the meaning of a new word being acquired totally unconsciously as a result of abstraction from repeated exposures in a range of activated contexts” (2) explicit learning involves awareness at the time of learning, whereas intentional learning occurs by deliberately attempting to commit new information to memory. (p. 83). Therefore, EFL learners should be aware of these learning types in order to achieve their learning objectives and needs.

2.8. The Role of Memory in Vocabulary Learning:

Memory plays a crucial role in learning a foreign language, especially in learning new lexical items. Lightbown and Spada (1999) stated that memory is one of factors which can be used to predict the performance of a student’s learning a foreign language (cited in Jumat, 2011). According to Oxford Dictionnary, memory refers to the process in which information is encoded, stored, and retrieved. Information processing and memory retrieval have three main stages: (1) encoding or registration stage is the phase of receiving, processing, and combining of received information. (2) Storage memory stage entails that learners maintain information over a period of time in which they create a permanent record of the encoded information. (3) Retrieval or recall stage means calling back the stored information in order to use it in a process or activity. In fact, many scholars prove that there is a strong relationship between memory and vocabulary learning. Researchers such as Schmitt (2000) discussed the relationship between memory and vocabulary learning. He claimed that memory is the best predictor of both eventual vocabulary and

grammar achievement. Hence, memory and vocabulary learning are two interrelated notions that work in parallel and have mutual issues.

Firstly, there two basic types of memory: short-term memory (also known as working memory) and long-term memory. The first one is used to store or hold both acoustic and visual information while it is being processes. The second retains information for use in anything but the immediate future. Schmitt (2000) adds a comparison between the two term memories. While Short-term memory is faster, adaptive, and has a small storage capacity long-term memory is relatively slow and has an almost unlimited storage capacity. As far as vocabulary learning is concerned Schmitt (2000) described the relationship between memory and vocabulary learning as the transformation of the lexical information from the short-term memory to the more permanent long-term memory.

It is a natural fact in learning that many learners may forget the newly acquired input. Schmitt (2000) asserts that most of learners forget the receptive words while the productive ones are less forgotten. According to him, both receptive and productive knowledge can be forgotten. Receptive knowledge does not attrite dramatically, and the affected lexis would be peripheral words such as low-frequency words. It means that learners who know more will lose about the same amount of vocabulary knowledge as those who learn less, claimed Schmitt (2000). As a matter of fact, after the end of the learning session many learners forgot the new learned information.

In order to facilitate the vocabulary learning process, researchers, teachers as well as learners should understand the nature of forgetting. Thus, to overcome forgetting, Schmitt (2000) suggested the principle of “expanding rehearsal” (p. 130). The expanded rehearsal suggests that learners review new material soon after the initial meeting and then at gradually increasing intervals. To conclude, memory plays a significant role in learning new lexical items. Hence, learners should be aware of the processes of memorising and forgetting the learned vocabulary so as to minimize the forgetting and maximize the remembering.

2.9. Vocabulary Learning Strategies:

Learning vocabulary is one of the main important challenges that face most of the learners during the process of learning a foreign language. It is considered as a crucial aspect of language use because insufficient vocabulary knowledge leads learners to difficulties in learning English as a foreign language. Most of EFL learners tend to

overcome these difficulties in order to achieve a better academic learning. Thus, they tend to depend on a variety of learning strategies which fit their learning needs. In addition, good EFL learners often use more than strategy in order to organize and shape their vocabulary learning. Vocabulary learning strategies do not require only memorisation, repetition, and taking notes on vocabulary, it also requires significant active manipulation of information such as imagery and inference. However, there are a set of different vocabulary learning strategies that vary from one learner to another. Schmitt (2000) divided and classified the different vocabulary strategies in order to organize them. Firstly, his list is divided into two main classes: (1) strategies used to discover a new word's meaning, and (2) strategies to consolidate a word once it has been learned. Secondly, each class encompasses groupings and sub-strategies used to learn vocabulary items. The groupings are determination strategies, social strategies, memory strategies, cognitive strategies, and metacognitive strategies. Therefore, these five main strategies should be identified in order to make the learning process easier and beneficial to EFL learners. They are paraphrased as follow:

Determination strategies (DET) refer to the strategies used by learners who rely on upon themselves with a specific end goal to find the new word's meaning through the guessing process (Schmit, 2000). That is, learners depend on themselves to find the word's meaning. For instance, learners may guess a new word's meaning through its context, guessing its meaning from its grammatical patterns, and depending on its external resources such as dictionaries and e-books. EFL learners can also obtain hints about the meaning of words from its root or affixes even though it is not always reliable.

A second way to discover a new word's meaning employs social strategies (SOC). Usually learners ask for help when they face a new word from their teachers or their classmates. As a matter of fact, these strategies are based on interaction with other people, learners benefit from others expertise to discover the target vocabulary meaning. For instance, teachers or classmates can give them translation, synonym, antonym, or brief explanation to the target word. Schmit (1997) stated that group work assist learners to discover a new word's meaning. It means that cooperative group learning have advantages in learning and discovering new words and their meanings. For example, Social interaction enhances the learners' motivation to be active participant in the task of learning.

Memory strategies (MEM), traditionally known as mnemonics, involves the mental ability to transfer information or vocabulary knowledge into a learner's long-term memory in an organized way so that it can be retrieved when it needed. Indeed, Schmitt (1997)

asserts that memory strategies requires relating the new learned word with some previously learned knowledge, using some form of imagery, or grouping. That is to say, learners can relate the new word which they learn recently to their existing knowledge such as previous personal experiences or familiar words or with mental images created by an individual's mind in order to make the retrieval of the word's meaning faster and easier. Mnemonics strategies are systematic procedures for enhancing memory, one of these strategies are keyword method and semantic maps which is based on finding ways to memorize the new learned words. To explain more, keyword method refers to learners' who attempt to find a link between the target word in English and the word in the mother tongue language or L1. As an example, the case of Crystal, she had learned the capital of Florida so well because the mnemonic strategy had carefully linked it to things she was already familiar to. Thus, it was easy to teach her to make an automatic connection between Florida and flower since Florida sounds like flower (the keyword).

Teacher: What's the keyword for Florida?

Crystal: Flower.

Teacher: good! And, what state is flower the keyword for?

Crystal: Florida.

Teacher: good.

Semantic maps strategy means that EFL learner tries to brainstorm words that are related to the target word. For example, one may link the word house with the following words: mother, father, pets, table, window, and chair.

Cognitive strategies (COG) play a major role in the acquisition of vocabulary since they represent useful tools to assist EFL Learners who have learning problems. In fact, those strategies refer to the mental functions that the human mind has and uses in order to learn new lexical items. However, memory strategies are different from cognitive strategies in many sides. According to Schmitt (2000) the main difference between the two strategies is that cognitive strategies do not focus on manipulating mental processes. Their main focus is on memorising through keeping vocabulary notebooks, repetitions, and other mechanical means to acquire vocabulary. To illustrate, teacher may use written and verbal repetition to teach new Lexis by repeatedly saying or writing the word over and over again.

Metacognitive strategies (MET) refer to a level of thinking which involves active control over the process of thinking that is used in learning situations. These strategies require planning the way to approach a learning task, monitoring comprehension, and evaluating the progress of a task. As a matter of fact, most of EFL learners tend to learn

lexical items in a more conscious, planned, evaluated, and monitored ways. It means that the learner is aware of the way vocabulary is been acquired by adopting the metacognitive strategies. An example of metacognitive strategies is when planning how to approach learning task using appropriate skills and strategies to solve a problem.

The following table (Table 2.2) summarises the classified vocabulary learning strategies with some examples of every strategy.

| Strategy group | Strategy |
|--|--|
| Strategies for the discovery of a new word's meaning | |
| DET | Analyse part of speech |
| DET | Analyse affixes and roots |
| DET | Check for L1 cognate |
| DET | Analyse any available pictures or gestures |
| DET | Guess meaning from textual context |
| DET | Use a dictionary (bilingual or monolingual) |
| SOC | Ask teacher for a synonym, paraphrase, or L1 translation of new word |
| SOC | Ask classmates for meaning |
| Strategies for the discovery of a new word's meaning | |
| DET | Analyse part of speech |
| DET | Analyse affixes and roots |
| DET | Check for L1 cognate |
| DET | Analyse any available pictures or gestures |
| DET | Guess meaning from textual context |
| DET | Use a dictionary (bilingual or monolingual) |
| SOC | Ask teacher for a synonym, paraphrase, or L1 translation of new word |
| SOC | Ask classmates for meaning |
| COG | Verbal repetition |

| | |
|-----|---|
| COG | Written repetition |
| COG | Word lists |
| COG | Put English labels on physical objects |
| COG | Keep a vocabulary notebook |
| MET | Use English-language media (songs, movies, newscasts, etc.) |
| MET | Use spaced word practice (expanding rehearsal) |
| MET | Test oneself with word tests |
| MET | Skip or pass new word |
| MET | Continue to study word over time |

Table 2.1: Examples of Vocabulary Learning Strategies, Schmitt, 1997 (cited in Schmitt, 2000, p. 134).

The table above provides a brief summary to vocabulary learning strategies as it is presented by Schmit (2000), in order to give both teachers and learners guidelines to select the appropriate strategies that fits their learning objectives and needs.

2.10. Mobile Technologies in Vocabulary Learning:

Due to the fast-moving growth of mobile devices, new perceptions to the field of vocabulary learning have appeared. The integration and use of mobile devices and its various activities in the learning task assist the process of learning and acquiring new vocabularies. Moreover, as vocabulary learning is an important issue to the field of applied linguistics and foreign language learning, many researchers has investigated this area in relation to mobile devices usage. Their main goal was to distinguish between the traditional methods which are used in teaching and learning vocabulary and the new methods that depend on mobile technologies. The studies that have been conducted on vocabulary learning were significantly different since the used tools and techniques are different. As an example, there were studies which emphasis the usage of text messaging to deliver vocabulary related activities (Houser & Thornton, 2004; Kamalian & Sayadian, 2014; Kennedy & Levy, 2008; and Kim, 2011). Others focused on the device itself (Hu 2013; and Stockwell, 2010). However, EFL learners' needs should be taking into consideration when using and integrating the various mobile vocabulary activities and tools in order to achieve desirable results. To illustrate this, some selected examples of

vocabulary activities and strategies that can be facilitated through different mobile devices are provided (text messaging, games, mobile applications, and websites).

Most of vocabulary learning researches depend on the implementation of text messaging as a powerful tool for learning especially Lexis. This strategy may include both explicit and incidental vocabulary learning activities. It means that it can be through deliberate messaging of lexical items. For example, teachers send SMSs to their students to tell them the deadline of their homework or ELL learners send e-mails to each other and share information which leads to learning new lexical items. Thus, Text messaging through social media is considered as effective and most popular tools to learn new words. It can take many different forms, such as wikis (Wikipedia), blogs, microblogs (Twitter), social networking (Facebook), video sharing (Youtube), photo sharing (Flickr), and shared bookmarking (Pearltrees).

Different studies have tried to develop EFL learners' lexical knowledge through different strategies. These studies revealed that whenever the learners' environment is enjoyable, learners learn more. Thus, both EFL learners and teachers attempt to make vocabulary learning an entertaining, funny, and motivating task through selected games. Because of the emergence of different educational games to learn vocabulary, EFL learners are able to learn new lexical items. These games include crossword puzzles, picture-word matches, word scrambles, and so many other vocabulary games. Therefore, games can be both a means of entertainment and education.

Mobile applications or apps also have a role in enhancing vocabulary learning. However, these apps are not available for all learners who have mobile devices. Due to the variation of mobile devices, learners' needs and strategies, these apps varied. They range from flashcards, notebooks, dictionaries, translators, to eBooks/audio books, and so on. Indeed, EFL learners always follow what serves their learning need that is why they usually download the application that suits their learning styles. For instance, EFL learners favor mobile dictionaries on hard copy dictionaries. These dictionaries provide not only definitions and synonyms, but also abbreviations, translations, the position of the stress, phrasal verbs, and so many other options. Another vocabulary learning tool is the notebook application; learners may use it to make a documentary of collected vocabulary. These applications can be downloaded through the access to the appropriate operating system (Androids, iOS, laptops, desktops).

Internet connection on mobile devices was the main obstacle that faces EFL learners and slows down the learning process. In order to solve this problem, 3G mobile devices were invented. Thus, EFL learners may benefit from the various websites which provide a wide range of vocabulary activities anytime and anywhere. Websites such as Learning English in a Week assist learners' to learn new English vocabularies. So, EFL learners may take advantage of numerous websites that may fit their needs, learning styles and enhance their vocabulary learning.

To conclude, mobile devices play a crucial role in the EFL learners' daily life. They facilitate the learning process through the implementation of the different vocabulary learning activities. Those devices also help bridging the gap between formal learning setting (classroom) and the informal learning one (outside world).

Conclusion:

Vocabulary learning is the key component to mastering any language especially foreign languages. Therefore, EFL learners should be more conscious and open minded about the key notions of vocabulary development in order to better enhance their vocabulary knowledge and achieve valid academic results. To sum up, understanding key notions of vocabulary and how vocabulary is acquired and learned can help EFL learners adopt the effective strategy that suits their needs, objectives and styles.

Chapter Three

Data Analysis and Interpretation of the Results

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Chapter Three

Data Analysis and Interpretation

Introduction:

This present study was conducted in an attempt to understand the Impact of mobile-assisted language learning approach on developing EFL learners' lexical competence at Mohammed Kheider University of Biskra. This implies investigating how both teachers and students use their mobile devices and evaluate their impact on teaching and learning lexical items. Therefore, the data for this study was collected by means of students' and teachers' questionnaires. First, this chapter starts by introducing the methodology as well as the tools used in this study. Second, it deals with the description, analysis, and interpretation of both students' and teachers' questionnaires. The findings are carefully discussed in order to answer the research questions, hence, to test the research hypothesis formulated in the introduction. Finally, the chapter ends up with the pedagogical implications shown for this study.

3.1. The Students' Questionnaire:

3.1.1. Aim of Students' Questionnaire:

This questionnaire aimed to collect the necessary data in order to explore the impact of MALL on Developing EFL learners' lexical competence and to survey students' attitudes towards its use.

3.1.2. Administration of the Questionnaire:

This questionnaire was administered to a sample of fifty (50) master one students at Mohammed Kheider University of Biskra. Fifty students of section one were chosen randomly from the two sections and they handed the questionnaire back after their session.

3.1.3. Description of the Questionnaire:

The choice of using the questionnaire to collect students' data is 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). The

main focus of this semi-structured questionnaire was to explore the impact of using mobile devices to develop learners' vocabulary knowledge (lexical competence).

It is composed of seventeen questions that are arranged in a logical order. They consist of closed ended, open ended, and multiple choice questions to get respondents comments. They are grouped into three sections that fit the variables of the study. Section one contains five questions that are related to mobile devices usage. In general, it investigates the extent to which EFL learners use their mobile devices and what advantages and challenges they think mobile learning brings. Section two contains six questions that focus on collecting information related to Mobile-assisted Language Learning with regard to learning English. Section three is the main core of this study. It aimed at exploring the extent to which EFL students at Biskra University use their mobile devices to learn new lexical items and how they perceive mobile technologies as tools to learn vocabulary.

3.1.4. Analysis of the Students' Questionnaire:

Excel statistical software is used in order to analyse the quantitative data of the students' questionnaire, while the open-ended questions are descriptively discussed.

3.1.4.1. Results of Students' Questionnaire:

Section One: Students' Perception towards Mobile Device Usage

Item One:

What kind of mobile devices do you have?

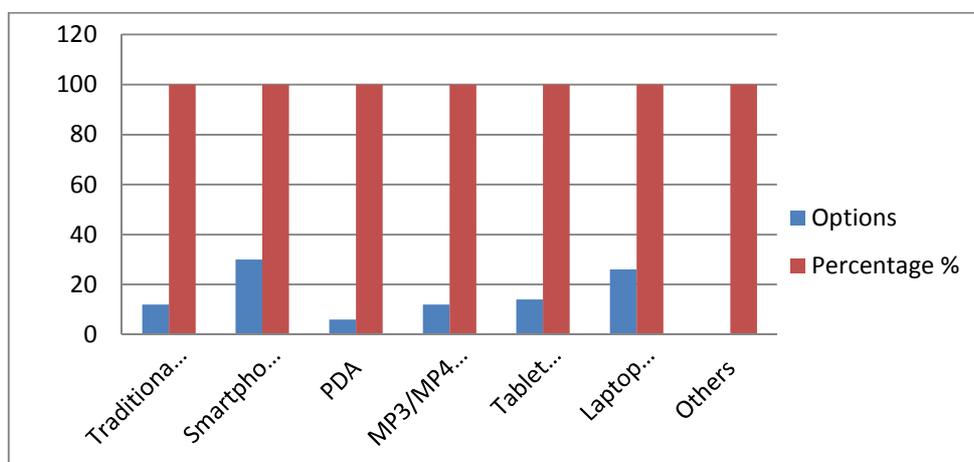


Figure 3.1: Students' Ownership of Mobile Devices.

The above results show that the widespread mobile device among the respondents is the Smartphone (30%) since it is the newly trend and the most commonly used device among learners. However, laptop computers (26%) come at the second place due to its necessity for learning, especially for storing heavy documents. In addition, tablet computer (24%) takes the third place, because it can allow learners to be comfortable while learning as well as it is easier to carry around. Moreover, the fourth place goes to MP3/MP4 (12%) which only few learners' use it as a tool for learning more than entertainment. After that, (12%) of the informants selected traditional phones since they are living in the digital age; they need to be up to date. The least percentages (6%) refer to PDA. Furthermore, the respondents did not state any other devices.

Item Two:

How often do you use your mobile device applications (per day)?

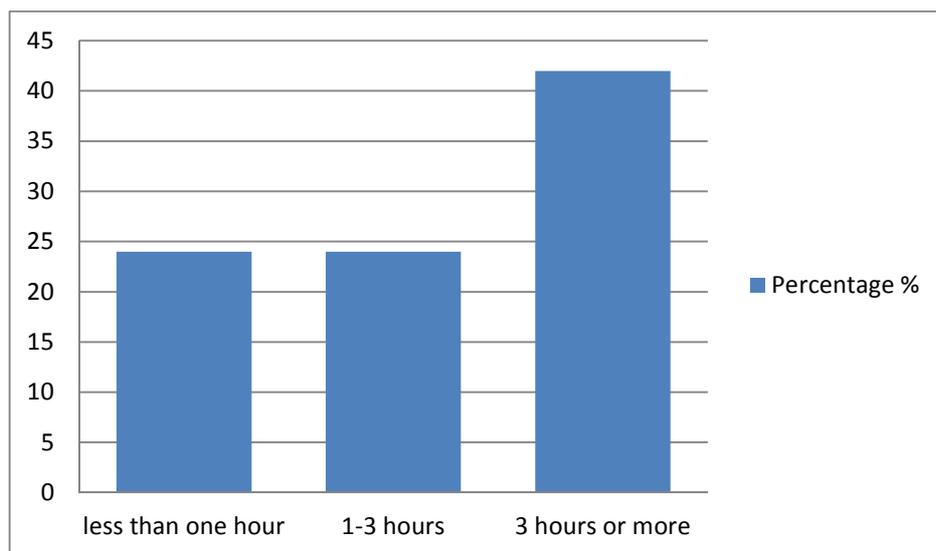


Figure 3.2: Frequency of Using Mobile Devices (per day).

From the above graph, we can deduce that the majority of respondents spend three to more hours per day on their mobile device applications. (42%) of the respondents spend more time using their mobile devices whether in learning or entertainment such as using online dictionaries or accessing to social media. In addition, (34%) of the informants claim that the time they spent is ranging from one to three hours while the rest of them (24%) state that they spent less than one hour on their mobile devices because they think that it is a waste of time and effort.

Item Three:

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

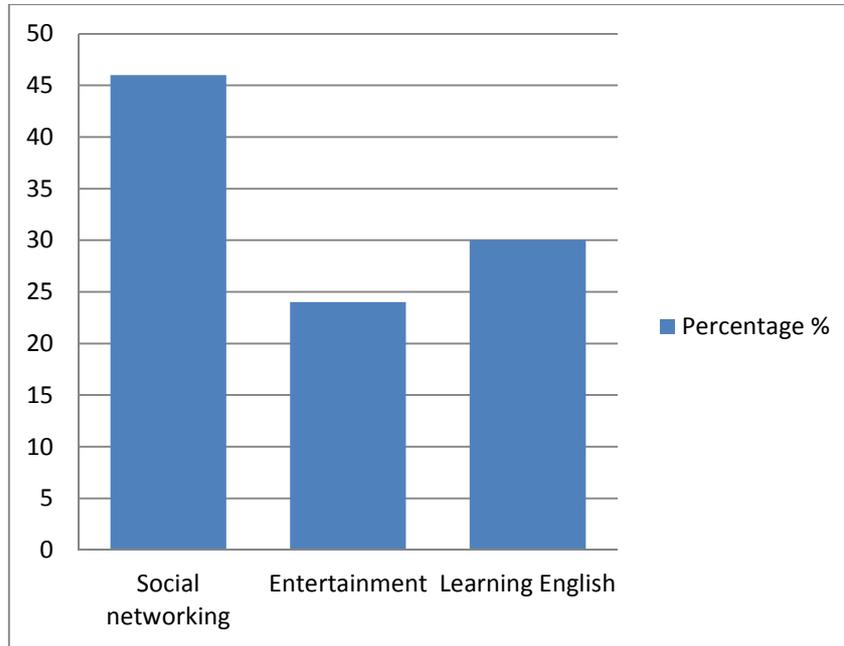


Figure 3.3: Ranking of Most Frequent Activities.

Figure 3.3 shows that most of the learners (46 %) prefer social networking activities. Since social media are widely used among them, they tried to direct it towards learning. (30%) of the respondents like to use their mobile devices for learning English such as using phone dictionaries or sharing audio lessons. However, (24%) of the participants who use their mobile devices for entertainment activities is placed at the least preferred state, they claim that it is more distracting than helpful.

Would you specify examples of the activities?

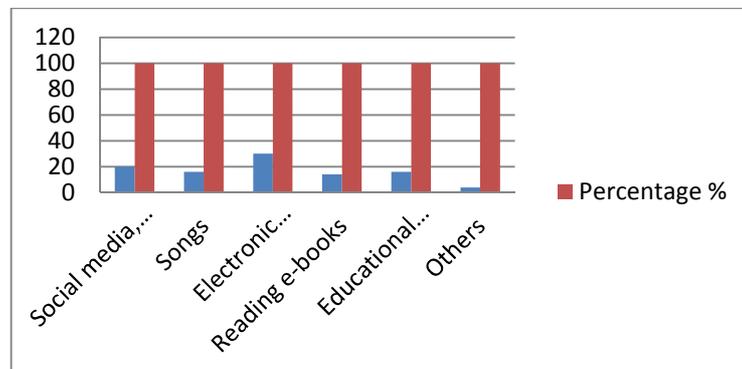


Figure 3.4: Most Frequently Accessed Mobile Applications.

According to the above graph, electronic dictionaries (30%) are the most popular mobile applications accessed by learners due to its significance in learning foreign languages. Social media, blogs, and other social networks are the second activity used by learners (20%) in learning English because it is widely used by learners. In addition, songs come as the third mobile activity accessed by students (16%) since it enhance learners listening skill as well as the speaking one. However, educational applications and reading e-books ranked as the less accessed activities by EFL learners. Finally, the rest of the respondents (4%) added other mobile activities such as online and offline games, movies, audio books.

Item Four:

What advantages do you think learning via mobile device offer?

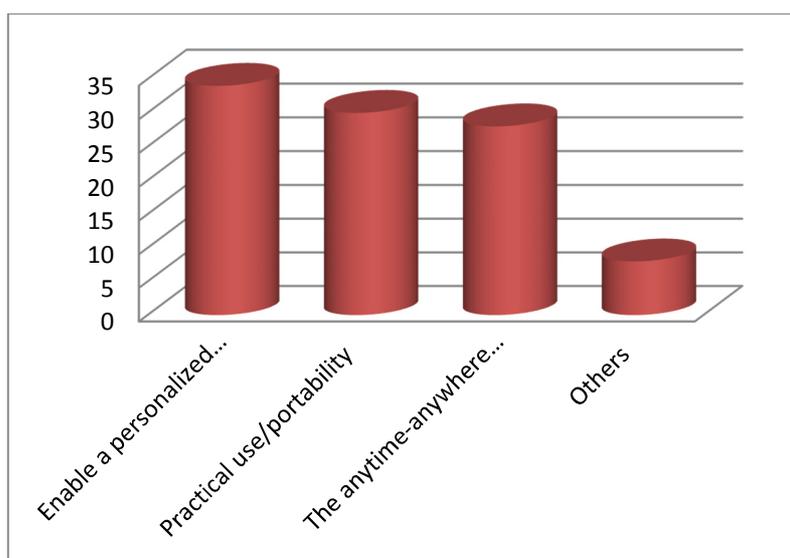


Figure 3.5: Advantages of Learning English with Mobile Devices.

From the above results, the majority of respondents (34%) claim that mobile devices enable EFL learners to experience a personal learning situation that helps them to discover their individual learning abilities. Next, the second advantage goes to the practical use and portability (30%) since it facilitates and enables learners to access information easily. Furthermore, the anytime-anywhere advantage placed at the last one as (28 %) respondents reported, they said that this advantage does not limit the learning area. Finally, they mention other advantages, for example; they reported that mobile devices also increase

social interaction and communication between learners by sharing information as well as they claim that learning through mobiles is faster than using traditional tools.

Item Five:

What are the challenges in learning via mobile devices?

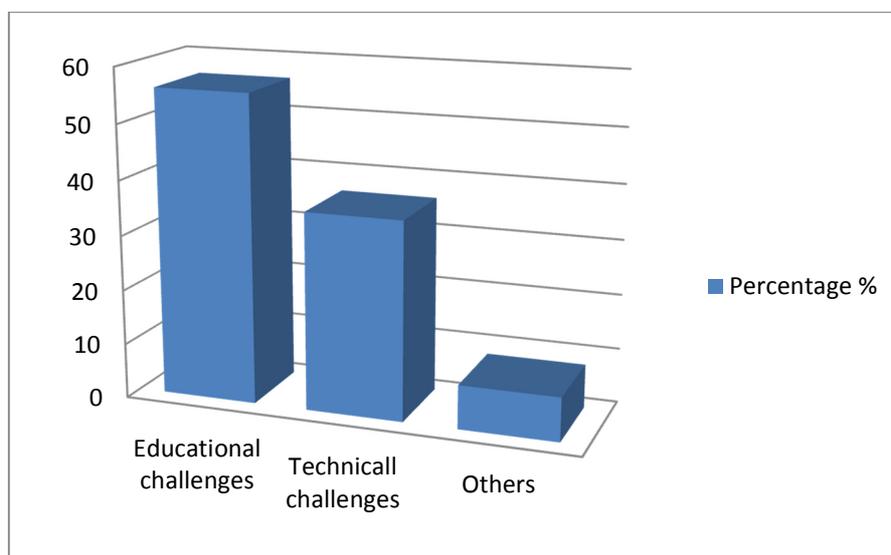


Figure 3.6: Challenges in Learning English with Mobile Devices.

The graph reveals that the main challenge in learning English through mobile devices is the educational challenges as stated by the majority of respondents (56%). They claim that mobile devices provide some educational problems such as classroom and time management, tackling all the lesson objectives, and other educational challenges. However, (36%) the respondents state that they face technical challenges while learning with mobile devices like the screen size, the small size of the key board, mobile battery, and other technical issues. Furthermore, the least percentage (8%) stated that there are other challenges in learning with mobile devices such as costs and internet connection. They said that not all learners are able to pay for mobiles applications or for expensive devices.

Section Two: The Use of Mobile Devices in Learning English

Item Six:

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

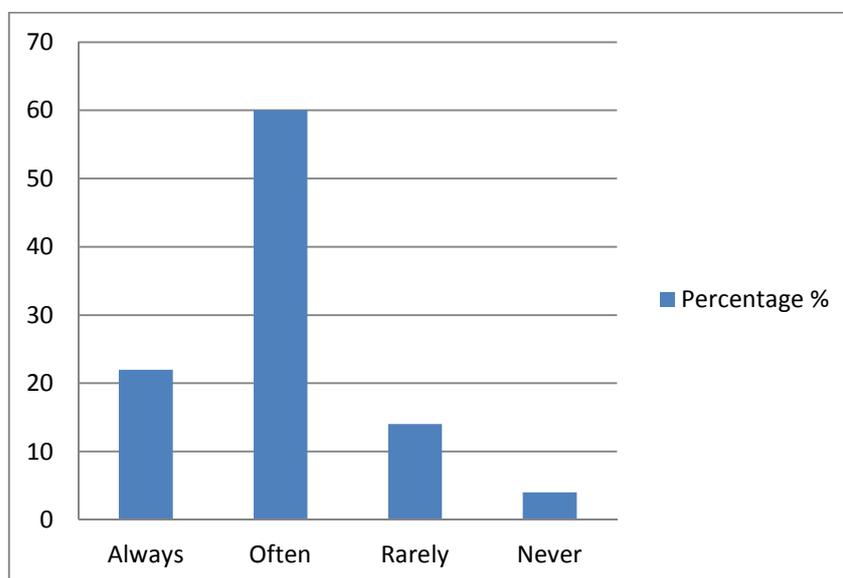


Figure 3.7: Frequency of Using Mobile Devices to Learn English (MALL).

Figure 3.7 indicates that most of the learners (60%) often use their mobile devices as a mean for learning English. In addition, eleven respondents (22%) state that they always use their mobile. However, (14%) of the participants claim that they rarely use those devices as learning tools while only two learners mention that they never use them for learning because they prefer using books instead.

Item Seven:

If you do not use mobile devices as learning tools, it is because?

Learners had stated some barriers that slow down learning through mobile devices. Internet accessibility represents the main obstacle for EFL learners in the learning task. They found difficulties to use internet, as well as its cost since not all of the learners are able to pay for it. Another issue is the reliability of information; learners claim that the traditional tools are more reliable than mobile devices. While other learners respond that they feel bored easily in using mobile devices because they spend more time in reading the small letters, others claimed that their mobiles lack some features.

Item Eight:

When do you use your mobile device to learn English?

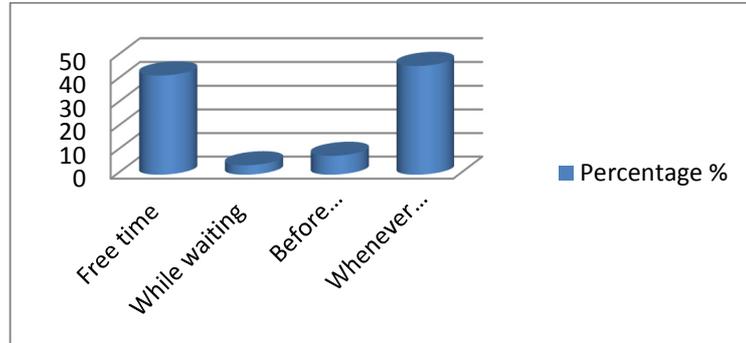


Figure 3.8: Times of Using Mobile Devices to Learn English (MALL).

Figure 3.8 demonstrates that (46%) of the respondents access to MALL activities whenever the opportunity arises. According to them this new learning tools does not limit the area of learning. While (42%) of the participants claimed that they use their mobile devices to learn English in their free time when they feel free and comfortable to learn. Other learners state that they use their mobile devices to learn English while waiting. For instance, while they wait for their teacher to arrive to the class, they take advantage of those minutes to learn new words through their mobiles. Finally, the rest of the respondents reported that they use their mobile devices before sleeping.

Item Nine:

Where do you use it to learn English?

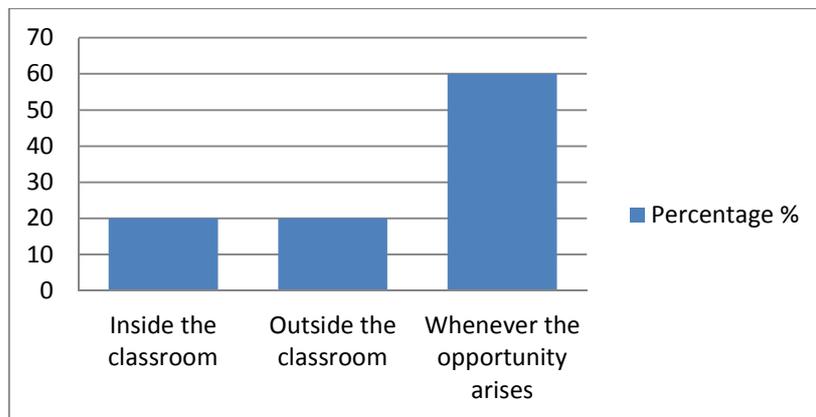


Figure 3.9: Places of Using Mobile Devices to Learn English (MALL).

The graph shows that (60%) of the participants which represents the highest percentage often use their mobile devices to learn English wherever the opportunity arises; they always attempt to find the opportunity to learn. Next, (13%) of the students use their mobile devices to learn English inside the classroom while (10%) do so outside the classroom.

Item Ten:

Which aspects of the English Language do you intend to improve when using mobile activities?

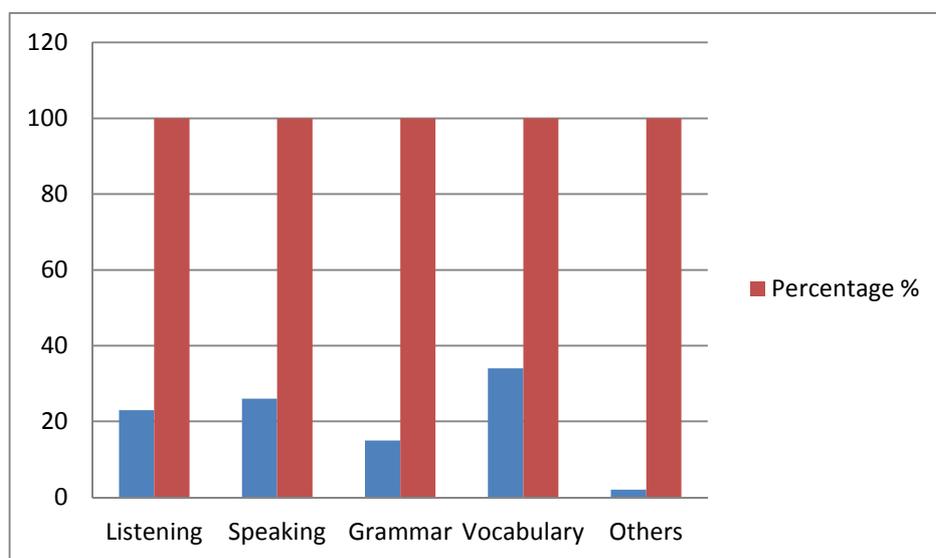


Figure 3.10: Language Aspects to Improve Through Mobile Devices.

The above results show that the majority of informants (34%) intend to improve their vocabulary through the use of their mobile devices because they claim that communication are based on acquiring and learning new lexical items. However, (26%) of them ranked speaking as the second skill that needs to be improved through mobile devices since they are foreign learners, they should produce and speak the language whether with native speakers or between each other. Besides, (23%) of the informants stated that listening is another skill that needs to be improved since it has an interrelated relationship with speaking, they intend to improve this skill by listening to native speakers’ conversation, listening to songs and other listening activities that make them understand the language. Moreover, grammar is placed as the less interesting language aspect as (15%) the participants reported. They claim that language is not a matter of rules and grammar; it is about the ability and the knowledge to produce and understand the English language.

Finally, there were two respondents who added pronunciation, culture and social awareness as language aspects that needs to be improved through mobile devices.

Item eleven:

Are you allowed to use your mobile device in the classroom?

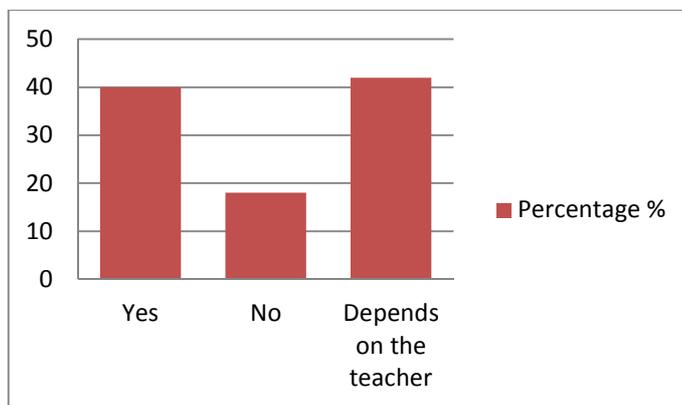


Figure 3.11: Allowance of Mobile Devices Usage inside the Classroom.

(42%) of the informants reported that the allowance of mobile devices usage inside the classroom depends on the teacher, they are able to use them only if the teacher give them the opportunity to do so. While (40%) of the participants stated that their teachers allow them to use their mobile devices inside the classroom, others (18%) claimed that they do not allow them to use these devices because they consider it as a disturbing issue rather than beneficial one.

Section Three: Using Mobile Devices to Develop Learner’s Lexical Competence

Item twelve:

Do you use your mobile device to learn new lexical items?

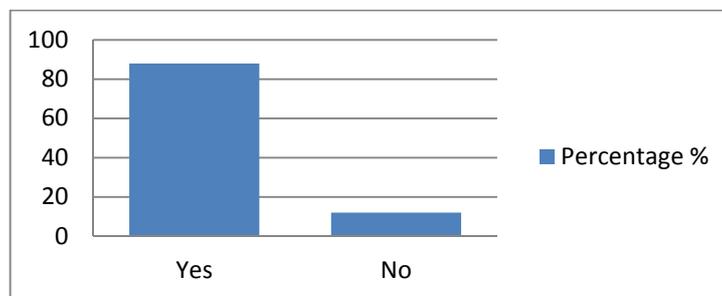


Figure 3.12: The Use of Mobile Devices to Learn Vocabulary.

As it is illustrated by the graph, (88%) of the participants use their mobile devices to learn new vocabulary while only (12%) who does not do so. The high percentages of the respondents assert that they use their mobile devices in learning English words as those devices offers more opportunities to learn the language.

If yes, does it motivate you?

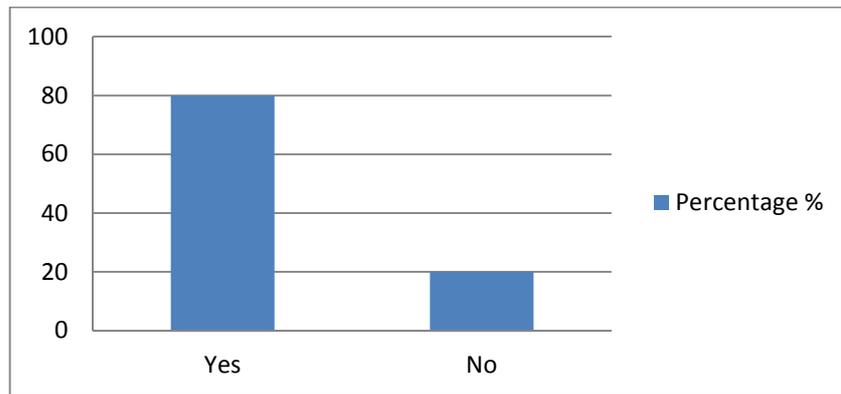


Figure 3.13: Degree of Motivation when Using Mobile Devices to Learn Vocabulary.

The graph shows that the highest percentage of participants (80%) is motivated when using their mobile devices to learn vocabulary comparing to others (20%). The majority of them state that mobile devices motivate learners to learn new words because it is a new way of learning that encourages learners to be more active whether learning individually or by collaborative work as sharing materials.

Item Thirteen:

What kind of activities do you use to learn new lexical items?

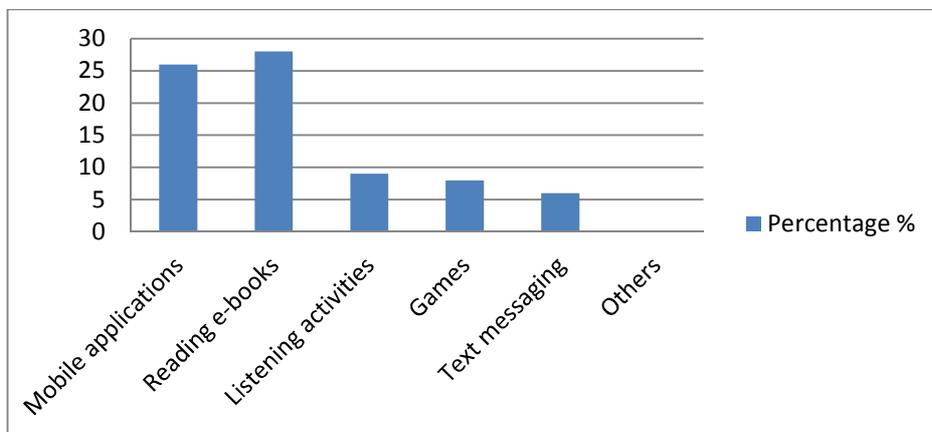


Figure 3.14: Types of Mobile Activities for Vocabulary Learning.

Figure 3.14 shows that reading e-books is the highly accessed activity by students (28%) to learn vocabulary items. It seems to them more beneficial in learning lexical items as they provide a vast amount of information. In addition, other learners put more emphasis on mobile applications (26%) such as mobile dictionaries that is widely used among EFL learners. Other students focus on listening activities such as audio books, playing word games like puzzles, and using text messaging to share different interest and information whether by sending SMS or sending tweets to each other. Moreover, the participants did not mention other activities.

Item fourteen:

Does learning Lexis through your mobile device help you with your courses?

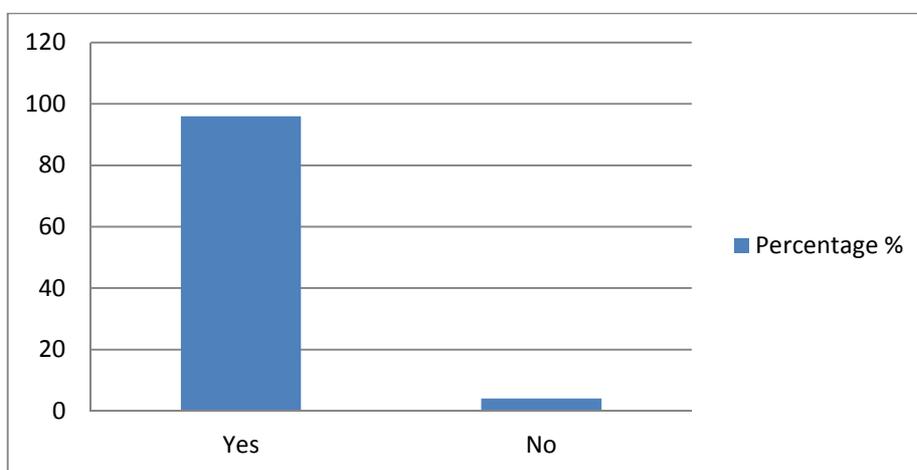


Figure 3.15: Mobile Devices Assistance in The courses.

The results revealed that the highest percentage of the respondents (96%) claimed that learning through mobile devices help them in their course since it provides them more learning opportunities comparing to the traditional tools. However, the least percentage of informants (4%) stated that it does not assist their learning courses because they believe that traditional learning means as raw books are more helpful and reliable in learning lexical items.

If yes, which courses?

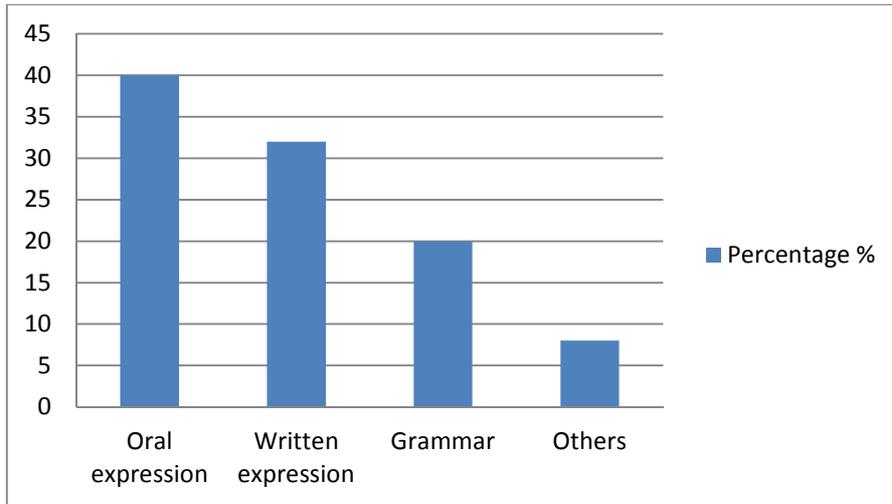


Figure 3.16: Courses Assisted Through Mobile Devices.

As it can be seen from the figure, oral expression is ranked at the top course that is assisted through mobile devices (40%) due to its nature that is based on the variation of the learning activities as playing games, role plays, and using mobile devices for learning purposes. Written expression is placed on the second course (32%); learners claim that sending written message helps them to improve their writing skill. However, grammar course take the least percentage (20%) of students since they are interested in learning vocabulary rather than rules. Others mention ESP, pragmatic, and phonetics courses.

Item fifteen:

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

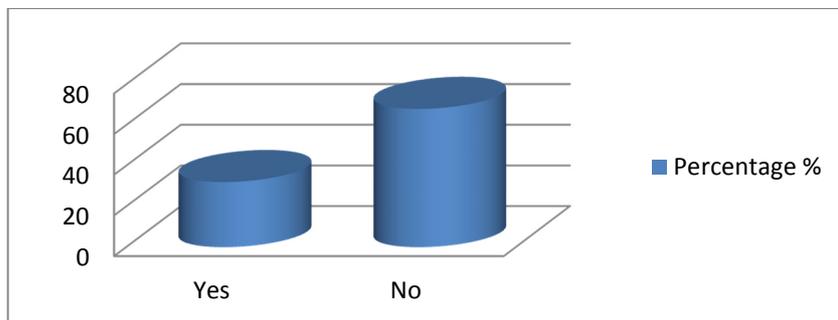


Figure 3.17: Teachers' Use of Mobile Devices in Teaching Vocabulary.

The graph shows that most of the respondents (68%) claimed that their teachers do not use mobile devices to teach vocabulary due to a number of reasons such as the lack of time

which represents the main obstacle for learning. However, there are some teachers who use mobile devices in teaching vocabulary since they claim that it is the time for the digital age and learners need to be up to date.

If not, do you like to see teachers/instructors use mobile devices in courses to teach vocabulary?

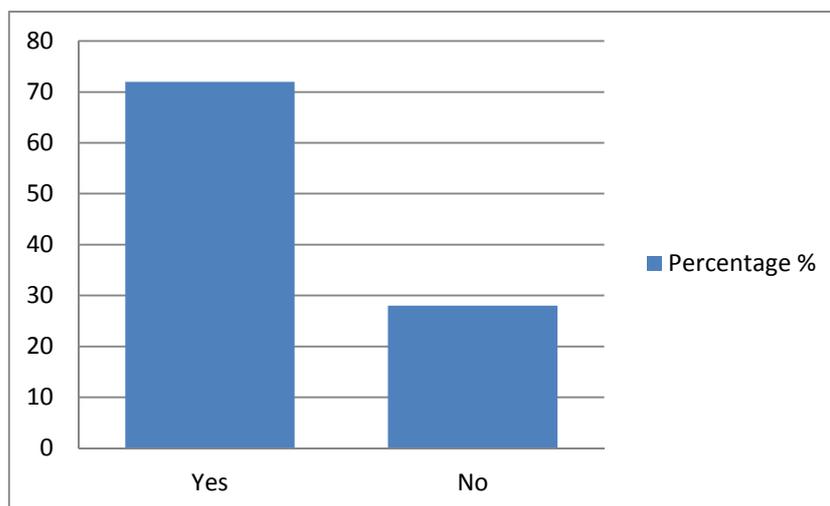


Figure 3.18: Students' Attitude towards the Teachers' Use of Mobile Devices.

It seems from the above results that the large portion of respondents want their teachers to use mobile devices for learning vocabulary while others refuse the idea. (72%) of participants are with the idea that teachers should use mobile devices in teaching vocabulary since they always look for new teaching ways. The rest of them (28%) are against the idea because they believe that nothing can replace the traditional tools as books that are more reliable.

Explain why:

The majority of respondents supported the use of mobile devices as vocabulary teaching tool. They explained that mobile devices motivate them and makes learning more enjoyable. It was also mentioned that teachers can benefit from the anytime-anywhere advantage and makes their learners discover new learning ways. Other respondents state that mobile devices offer better understanding of vocabulary items. However, (28%) of the respondents who did not support the teachers' use of mobile devices claim that mobile devices can interrupt them and it wastes time and effort.

Item Sixteen:

How would you evaluate your level before and after learning vocabulary through your mobile devices?

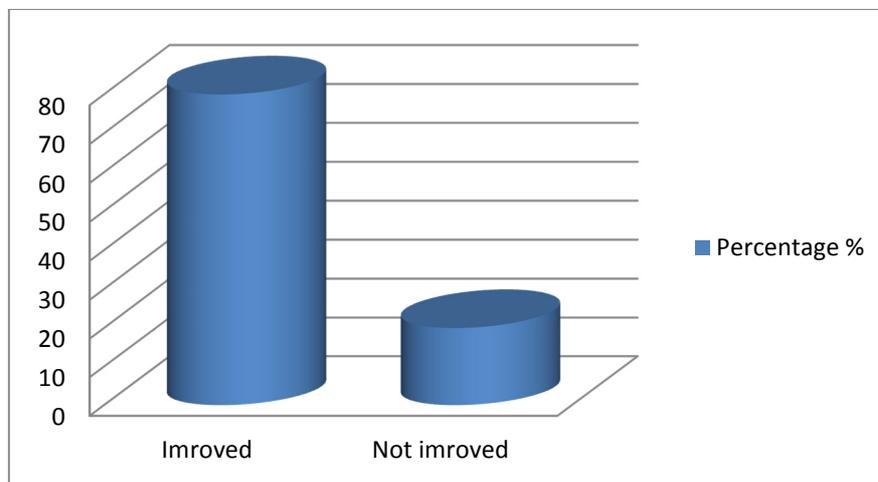


Figure 3.19: Vocabulary Level When Learning with Mobile Devices.

Figure 3.19 indicates that the majority of respondents evaluated their level of vocabulary knowledge before and after using mobile devices as improved. (80%) of them state that using mobile devices in learning lexical items brings more opportunities to enhance their level, they think that this new tools facilitates learning and make it faster and more easier while the least percentage of the respondents (20%) claim that using those devices brings no improvement to their level in terms of learning vocabulary.

Item seventeen:

If you do have any comments with regard to the study, please feel free to add them.

Many informants' provide some comments related to this new topic since they found it as an attractive and an interesting one. They shared the same idea that teachers should depend more on using mobile devices to teach vocabulary, they claim that traditional learning is boring and based on theoretical aspect while this new way of learning makes learners practice the language. Most of their comments where common, they shared the same point of view that teachers should allow and encourage the use of mobile devices since those devices are available and enhance learners' motivation to learn.

3.3. The Teachers' Questionnaire

3.3.1. Aim of the questionnaire

The teachers' questionnaire aims to explore how EFL teachers perceive this new educational tool and how they adapt themselves in using mobile devices to teach vocabulary. In addition, this questionnaire seeks to collect different teachers' attitudes towards MALL.

3.3.2. Administration of the questionnaire

The questionnaire was administered to five teachers who teach modules that have a relationship with vocabulary learning such as Oral Expression, ESP, Grammar, and Written Expression. In order to achieve the worthwhile results, the selection of those teachers was based on the nature of the course they teach in which the implemented of mobile devices within the courses assist them to teach and help their students to learn vocabulary items.

3.3.2. Description of the questionnaire

Another data collection tool which was used in this study is a semi structured teachers' questionnaire. This administered teachers' questionnaire is intended to discover if EFL teachers at Biskra University use their mobile devices as a supporting and teaching tool to enhance their teaching style. In addition, it aims at exploring the teachers' perceptions about the usefulness of the mobile devices in learning vocabulary. The teachers' questionnaire consists of seventeen items ranging from close-ended, open-ended to multiple choice questions and comprises of three main parts. The first part is consists of four questions related to the general information about the teachers. The second part is concerned with exploring teachers' perceptions on MALL learning. It means that this section aims to find out how EFL teachers perceive this new educational tool in teaching particularly vocabulary. The last part is devoted to investigate the use of mobile devices in teaching vocabulary items. At the end of this part, teachers provided their opinions about the importance of using MALL as teaching tools in general and as means to teach vocabulary in particular.

3.3.3. Analysis of the Results

Part One: General Information

Item One:

How long have you been teaching English?

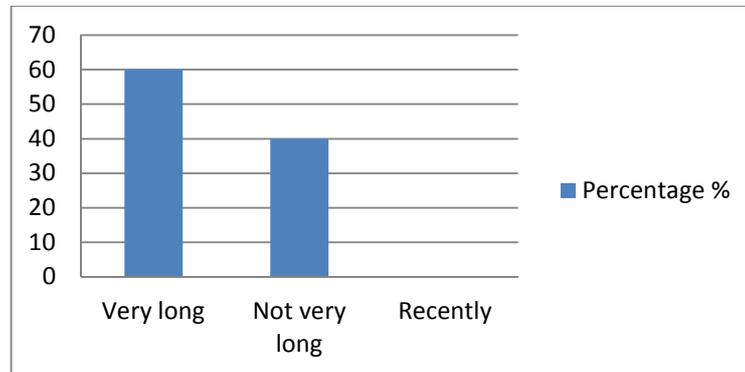


Figure 3.20: Teachers' Experience in Teaching English.

The results show that (60%) of our sample state that they have been teaching English for a long period. It means that this sample is experienced in teaching English as a foreign language. For instance, one of those teachers said that he has been teaching English for almost thirty five years; twenty years in the middle school and fifteen years in the university. However, two teachers state that they started teaching English not for a very long time but for a considerable period that provide them a certain level of expertise.

Item Two:

What modules do you teach?

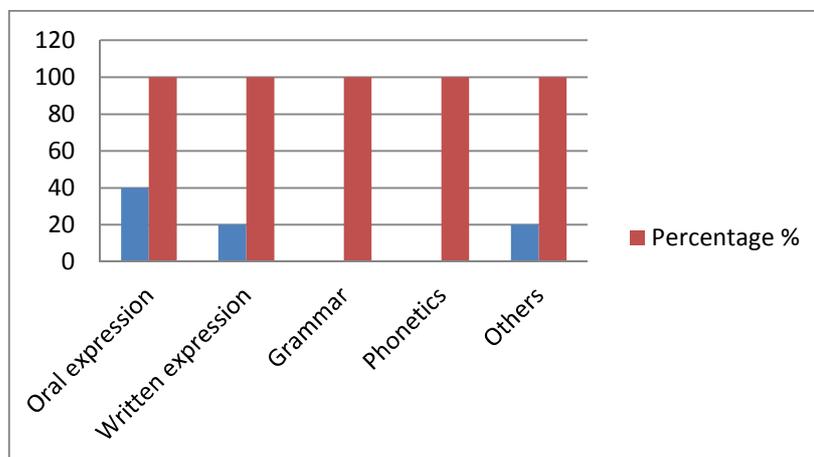


Figure 3.21: Teachers' Teaching Modules.

As the graph shows, all of the five teachers teach the same module which is oral expression. Besides, four of them also state that they teach written expression module. They claim that those two modules are very important to teach foreign languages, especially English. For example, they point out that oral expression make learners more active and involved in the task of learning. This sample said that they did not teach phonetics but they teach other modules such as English for Specific Purposes (ESP), culture of the language, social sciences and humanities, and didactics.

Item Three:

How often do you teach per week?

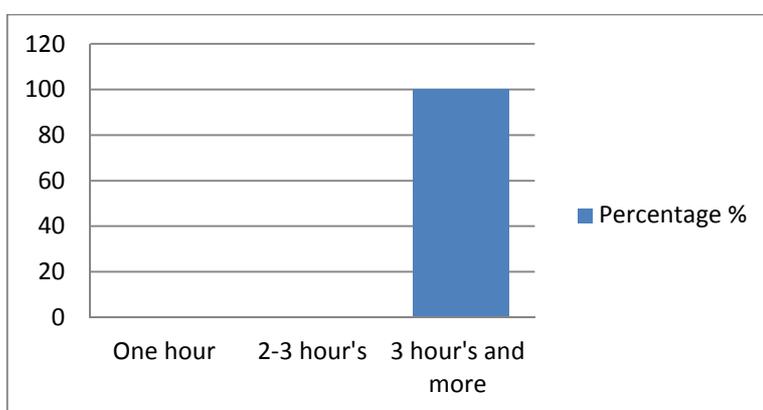


Figure 3.22: Frequency of Teaching English.

As it can be seen, all of the teachers (100%) answer that they teach three hours and more per day. They said that the reason behind their long hours of teaching is that they teach more than one module and more than one class.

Item Four:

Do you like educational technology?

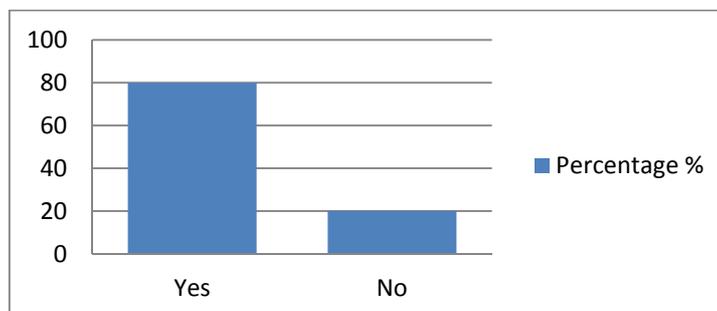


Figure 3.23: Teachers' preference of educational technology.

Figure 3.23 show that (80%) of the sample prefers educational technologies. They reported that this new wave of education brought more learning opportunities and improvements concerning the way teachers should effectively teach English vocabulary that seems the most difficult task for EFL learners. However, only one teacher did not like educational technologies due to its belief. “Nothing can replace tangible books because they are more reliable and brings the sense of learning” he claimed.

If your answer is yes, justify?

Teachers who answer by yes provide some reasons behind their positive choice. First, their reaction towards this topic was positive since we live in the digital age. They state that this new wave of education brings authenticity to the lesson and make it up to date comparing to the traditional ways of learning. In addition, they also claim that it motivates learners and make the learning task more easier, faster, and enjoyable.

Part Two: Perceptions on Mobile-assisted Language Learning

Item Five:

Do you care about your student’s needs?

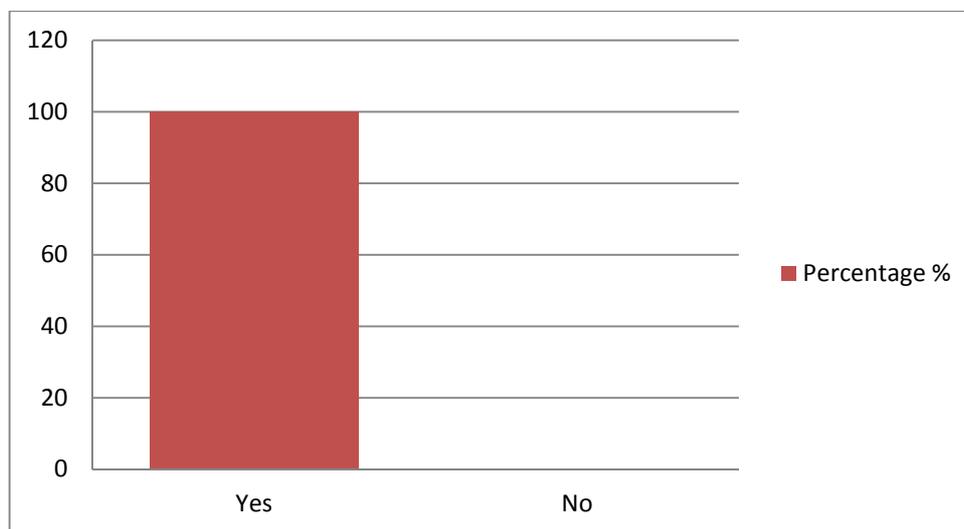


Figure 3.24: Teachers’ Care about Learners Needs.

From the above results, all of the teachers tend to care about their learners’ needs and interests. They reported that learners’ needs represent their first priority in teaching. That is

way they often try to give the best to their learners and select the most important learning elements that fit their level and learning abilities.

Item Six:

Are you with or against using mobile devices as a tool of teaching?

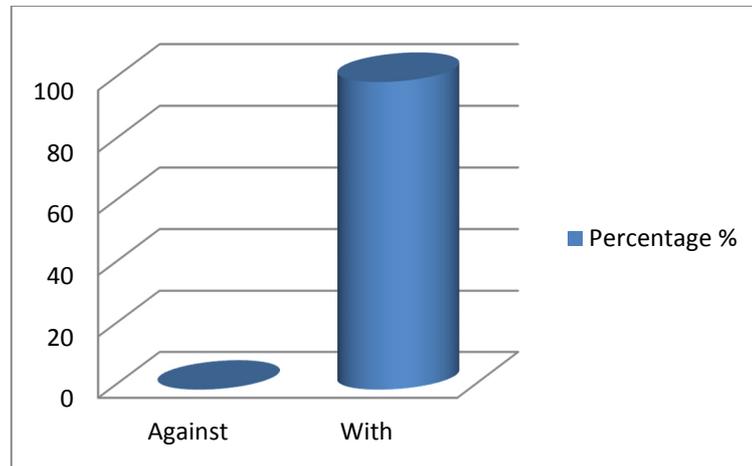


Figure 3.25: Teachers' Opinion of Using MALL.

Figure 3.25 indicates that the entire sample is with the idea of using mobile devices as tools of teaching. They think that it represents a source of motivation for the learner. Besides, they notice that all students are familiar with those devices which make using them in teaching more easily and faster. They also demand that it can reflect learners' creativity when learning.

Item Seven:

Do you use your mobile device as a tool to improve your teaching style?

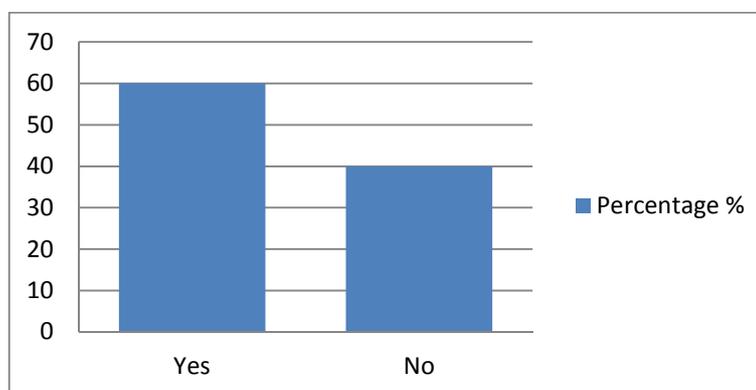


Figure 3.26: Teachers' Use of Mobile Devices as a Tool of Teaching.

As it can be seen from the above graph, (60%) of the sample uses their mobile devices as teaching tools to improve their teaching style as well as to achieve a good learning results. They intend to integrate those devices within their courses in order to allow their learners' to experience more learning opportunities. The rest of the sample (20%) reported that they do not use their mobile devices in teaching because they think that it is a waste of time and effort and learners often direct their attention to other stuff that has no relationship to learning.

Item Eight:

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

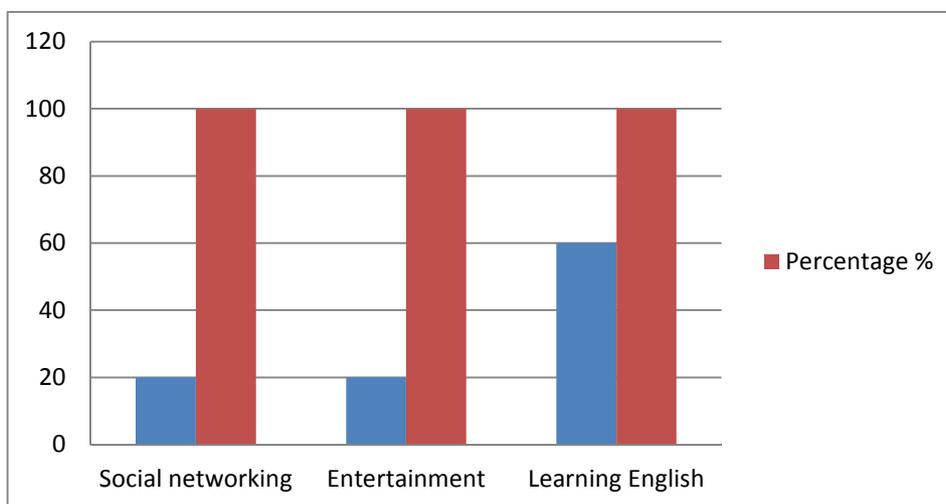


Figure 3.27: Teachers' Ranking of Most Used Activities.

It can be seen from the graph that the majority of teachers (60%) often use their mobile devices for teaching English as a foreign language. They claim that this new technology brings several advantages to the learning and teaching process. They also consider those devices as efficient tools which motivates learners to learn English. Social networking and entertainment activities share the same percentage (20%). Only two teachers state that they use their mobile devices for social networking and entertainment because they think that those devices bring no improvements or effectiveness to the task of learning English.

Item Nine:

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

Most of the teachers answered that they allow their students to use their mobile devices inside the classroom only if they can tackle all the lesson objectives in the devoted time for their session. They also depend on the designed activities to allow their learners to use those devices. However, they may allow them to use those devices for entertainment from time to time but within the context of learning. For instance, students are allowed to play games which help them learn new words such as puzzles.

Item Ten:

Do you think learning via mobile device has advantages?

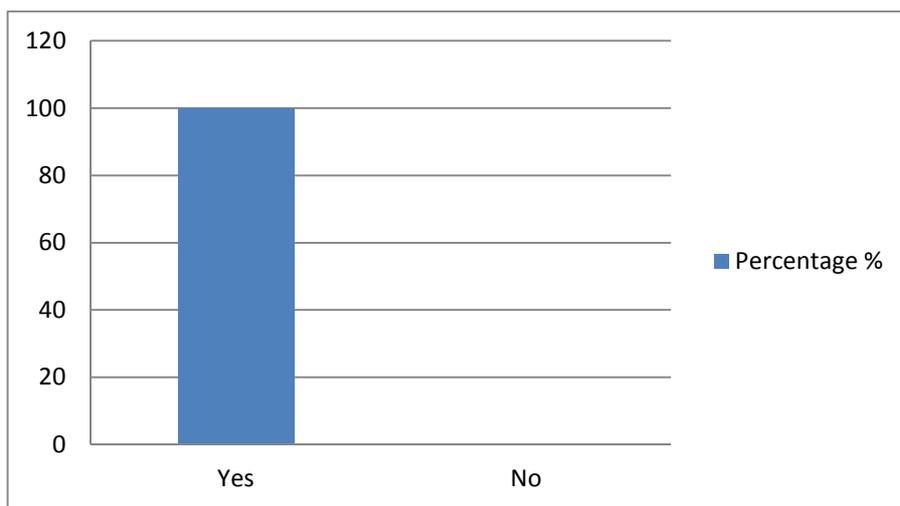


Figure 3.28: Advantages of Teaching English with Mobile Devices.

Figure 3.29 reveals that all of the teachers (100%) think that learning through mobile devices has several advantages to the learning process. They notice that their learners prefer to experience new ways of learning instead of the old ones and since we witnessed a tremendous growth of technology, mobile devices gained a wide popularity among EFL learners.

If yes, give examples:

Teachers have mentioned a set of advantages that mobile devices offer to learning. First, they mention that those devices enable EFL learners to improve their learning skills.

For instance, mobile devices enhance the ability to speak with native speakers and writing good essays by using dictionaries to check for word spelling. Besides, they state that these new learning technologies also develop learners listening and reading skills. For example, learners may listen to audio extract to learn new words and identify their meanings as well as they may read online materials to improve their skill such as reading articles, journals, online advertisements and other online information. Moreover, one teacher claim that it gains time in teaching vocabulary since it takes few seconds to check electronic dictionaries to find the word rather than using the copied one. Finally, teachers demand that there are other benefits which are in the process of discovering as technology growth.

Item Eleven:

Are there challenges in learning via mobile devices?

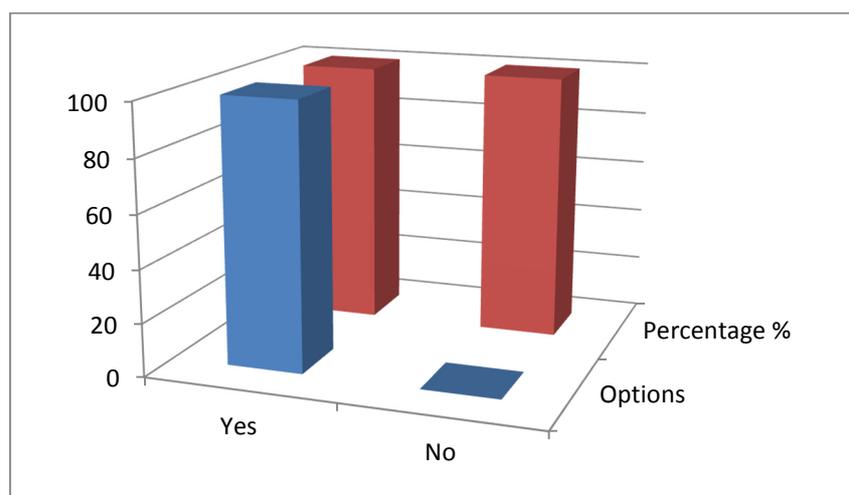


Figure 3.29: Challenges in Using MALL.

As the result shows, the entire sample agreed that there are a set of challenges that face both EFL teachers and learners in using mobile devices as learning tools. This new wave of education brings both advantages and challenges to the learning task. They said: “since it is a new learning way, both teachers and learner need to be adapted with using this new technology in order to achieve reliable and good academic results”. Thus, these challenges made learning via mobile devices seem as a challenge.

If yes, give examples:

Teachers have mentioned a set of challenges that they witnessed during teaching with mobile devices. First, they notice that some types of mobile advices are not available for all learners because not all of them are able to pay for it. Next, they also mention some technical challenges such as screen size, key board, and mobile battery. Finally, time consuming seems to them the main challenge because they intend to deal with all the lesson objectives at the exact time of the session but they claim that they always face obstacles while using those devices in the classroom.

Part Three: Using Mobile Devices in Learning Vocabulary

Item Twelve:

How often do you use your mobile device to teach English?

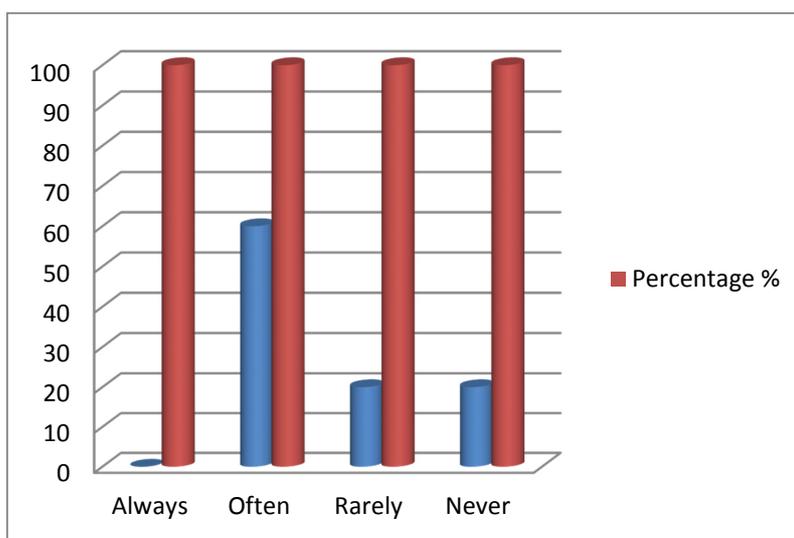


Figure 3.30: Frequency of Using Mobile Devices in Teaching English.

The above graph shows that (60%) of the sample stated that they often use mobile devices to teach English while (20%) of them claimed that they rarely use it. It means that teachers preferred this new learning way and see it as beneficial tools. The rest of the sample reported that they never use it because they do not support the idea of implementing MALL in EFL classrooms.

Item Thirteen:

Which aspects of English Language do you intend to improve when using mobile activities?

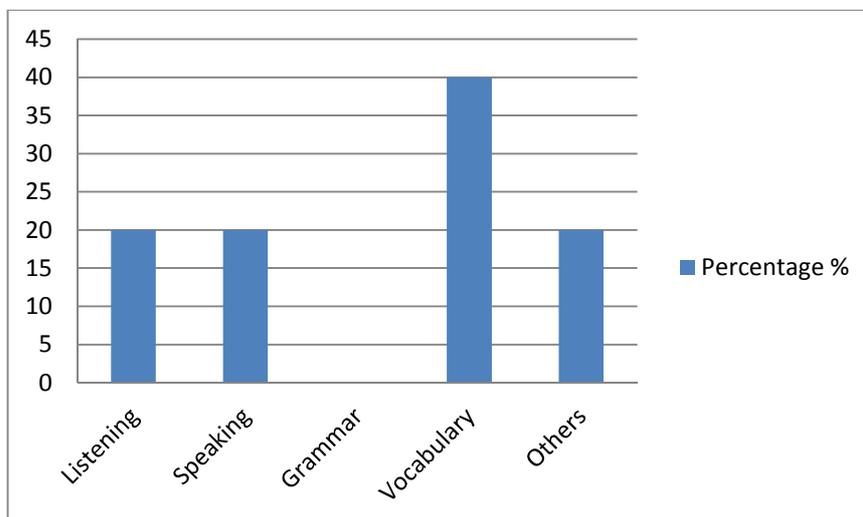


Figure 3.31: Language Aspects to Improve through Mobile Devices.

As it can be seen, vocabulary placed at the first priority that EFL teachers intend to improve (40%) due to that learners need to gain a rich vocabulary background in order to be able to communicate effectively. Both speaking and listening skills shared the same percentage (20%) since those two teachers share the same thought that mobile devices should be used to improve those two language skills. However, grammar did not gain any interest among our sample because they claim that nowadays learning new words and the ability to use them in their real context is much more important than knowing language rules. Finally, only one teacher from the entire sample poses other language aspects that need to be improved by mobile devices. This teacher mentioned culture, history and civilization; he claimed that learners should have a cultural and historical background about the English language. For example, learners can download articles or short stories to their devices about the history of England in order to be acculturative about the language.

Item Fourteen:

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

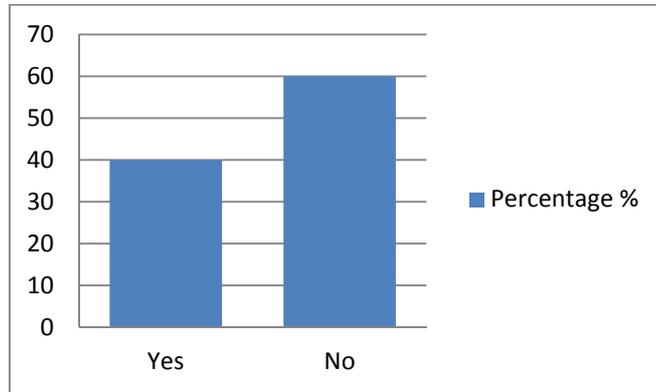


Figure 3.32: Course Activities Assisted by MALL.

Figure 3.33 show that (60%) of the sample reported that they use certain mobile activities within their courses. They mention that they tend to depend on new learning tools which motivate learners rather than using old ones. While the rest of the sample (40%) answered that they did not use any mobile devices in their courses and only depend on traditional learning.

If yes, what kind of activities do you use to teach new lexical item?

Teachers who answered by yes had posed some mobile activities which they use in teaching new lexical items. They mentioned that they use YouTube videos in order to start free discussions that lead learners to share their different interests with each other and learn new words. In addition, they also use vocabulary quiz, listing and gab filling.

Item Fifteen:

Does teaching Lexis through mobile devices help you with your courses?

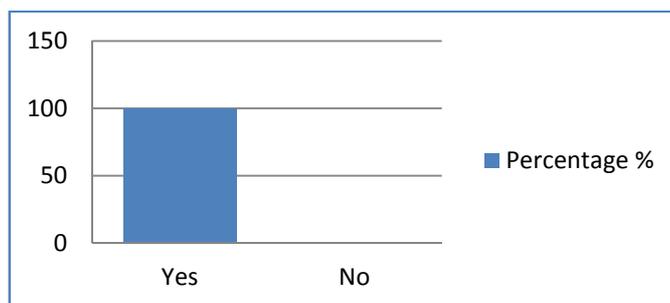


Figure 3.33: Teachers' Courses Assisted by MALL.

The results show that the entire sample indicates that using mobile devices within their courses help them in teaching vocabulary although some of them claim that they still prefer old learning tools which are based on using copied a printed books and dictionaries.

If yes, which courses?

Teachers who positively react to MALL state that they use mobile devices in their oral expression, written expression, phonetics, and culture of the language courses. For instance, in their oral expression course they use YouTube videos for free discussion activities, play vocabulary games as filling the gaps. In addition, EFL teachers support using SMS messages during their written expression courses in order to make learners to be more active and collaborative to learn new vocabularies. Moreover, they focus on using listening extract to improve learners' pronunciation as they listen to native speakers' speech. Finally, they intend to make their learners more acculturative by making them search for historical and cultural topics using their mobile devices.

Item Sixteen:

Does teaching vocabulary through mobile devices motivate your learners?

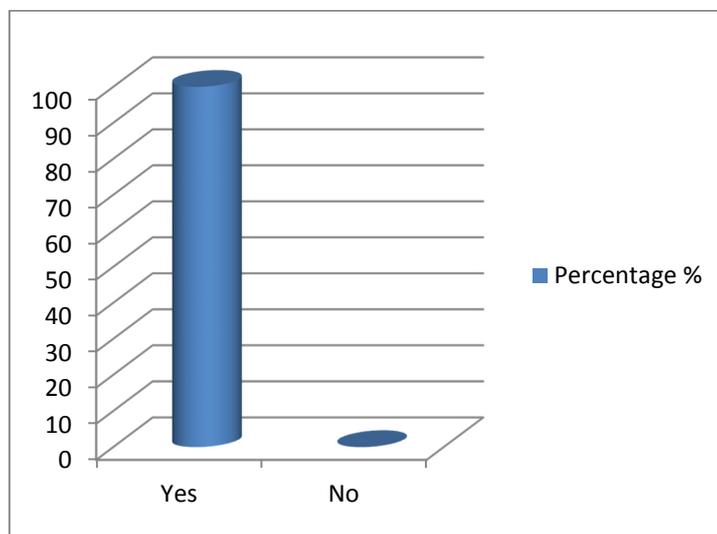


Figure 3.34: Degree of Motivation when Using Mobile Devices to Teach Vocabulary.

Figure 3.36 demonstrates that the whole teachers agreed that the use of mobile devices in teaching vocabulary makes learners motivated and fully engaged in the task of learning. They claimed that learners supported the idea of using technology in education especially mobile devices since they are available and learners are familiar with.

In both cases, explain why?

EFL teachers explained that the use of mobile devices in teaching vocabulary motivates their learners because they enjoy having technology in the class since it dominates their social lives. Besides, their learners benefited from using this new wave of education as they benefit from the authentic materials. Teachers always attempt to find new ways to help their learners to achieve good academic results. Thus, MALL seemed to them more beneficial than traditional means.

Item Seventeen:

How do you think that MALL is important to teach English as a foreign language in general and lexical competence in particular in the future?

All of the teachers shared the same point of view concerning the importance of using MALL in enhancing students' vocabulary learning. They think that using mobile devices is very important to facilitate and assist learning and teaching vocabulary whether now or for future use.

3.3. Interpretation of the Results:

The study has delivered interesting results concerning the impact of MALL on developing EFL students' vocabulary learning at Biskra University. It revealed that EFL students at Biskra University to some extent use their mobile devices as learning tools to enhance their English level, especially their vocabulary knowledge. The present research work also revealed interesting insights from teachers' about the use of mobile devices in teaching vocabulary. Therefore, the findings will be carefully discussed.

Firstly, the findings revealed that the ownership of mobile devices is widespread among EFL students which prove the ubiquity and availability of such devices. It was also found that the majority of students' spent more time on using mobile devices ranges from three hours to more per day and showed high addiction to their mobile devices since they preferred new technologies. In addition, they evaluated the mobile devices in terms of both advantages and challenges. Enabling a personalized learning experience and portability advantages were identified by students as the main features of mobile devices. However, the educational issues represented the major challenges that hinder MALL such classroom

and time management. Reliability issues and technical barriers like small screen size and battery life were other challenges that reduce the time spent on mobile devices.

Second, the results demonstrated that EFL students' at Biskra University often use their mobile devices to learn English. It is worth noting that students spend most of their time on reading e-books and using mobile applications such as mobile dictionaries. That is, students' prioritize learning English as an explicit mobile activity. Moreover, they also learn English through their mobile devices whenever the opportunity arises. That is to say that they learn English in a natural and unplanned manner rather than in a regular one which proves that learning is not limited only on the informal setting. In other words, they do exploit their free time in learning mainly vocabulary learning.

Third, findings in this study revealed that vocabulary and speaking are the most language components that EFL students intend to improve through MALL activities because they tend to use the language for communicative purposes that require vocabulary knowledge and speaking abilities. Since motivation is significant to learning in general and vocabulary learning in particular, findings revealed that EFL students were motivated when they used MALL activities to learn lexis, that is; it created an enjoyable learning environment that made students fully engaged in the learning task.

Fourthly, EFL students' at Biskra University showed positive attitude towards the effectiveness of mobile devices as vocabulary learning tools. They agreed that MALL vocabulary activities increased and improved their vocabulary knowledge. So, it indicates that MALL offers more vocabulary learning opportunities compared to the traditional means. Hence, mobile devices are effective vocabulary learning tools because such devices offered unlimited learning opportunities.

Finally, the teachers' questionnaire analysis, as the students' one, has also delivered interesting results. It was found that EFL teachers at Biskra University were more conscious about the use of mobile devices in teaching and learning English. They also perceived its importance as essential in developing students' skills, especially their vocabulary learning. The results revealed that EFL teachers allowed and encouraged their students to use their mobile devices inside the classroom only for educational purposes, particularly for learning new lexical items. Therefore, the study showed that MALL vocabulary activities helped the students in their courses, especially in Oral Expression, Written Expression, and Phonetics. However, one can conclude that MALL activities

adopted by teachers are still restricted and non-innovative. To conclude, findings proved the importance of MALL in the teaching and learning process. Teachers also agreed that MALL is effective in developing the language skills, especially students' vocabulary learning due to its learning opportunities.

Conclusion:

This chapter has presented the findings concerning the impact of MALL on developing learner' lexical competence, the analysis and the interpretations of the data gathered. The collected data was by means of students' and teachers' questionnaires. First, the results of students' and teachers' questionnaires were analysed, represented both statistically and descriptively in figures, and interpreted. Third, the chapter ends with a discussion of the study findings in order to test the research hypothesis and answer the research questions. Finally, the chapter ends with the possible limitations that may have affected the study findings. In addition, the study revealed some pedagogical implications in order to provide clear vision on this new educational technology. To conclude, the chapter provides answer to the research questions of this study, as well as confirms the research hypothesis which stated that EFL students use their mobile devices as teaching and learning tools in order to develop their lexical competence as well as EFL teachers perceive MALL activities as an effective means in enhancing vocabulary knowledge.

Pedagogical Implications:

In general, mobile technologies become an integral part of both learners and teachers daily life. These technologies which include Smartphones, laptop computers, MP3/MP4 players, and so many other handheld devices has brought many effective learning opportunities to both EFL teachers and EFL learners. Hence, it is very necessary to raise EFL practitioners' awareness to exploit these digital devices in the learning process. Therefore, the current study leads us to provide some pedagogical suggestions for developing learners' lexical competence through the use of mobile devices.

1. Implementing Information and communications technology (ICT) in the EFL classrooms by using mobile devices.

2. Encouraging both Teachers and learners to use and implement the different mobile devices as teaching and learning tools through different MALL activities.
3. Taking advantage of the widespread ownership of mobile devices among learners by selecting the different MALL activities that fit the learner' devices and needs.
4. Encourage teachers and learners to use MALL vocabulary activities such as games, puzzles, word guessing games to learn vocabulary.
5. Guiding learners to choose the appropriate mobile learning devices to use in their vocabulary learning.
6. Encourage and assist learner' autonomy which enables learners to combine formal and informal learning.

Limitations of the Study:

Since MALL is a new learning approach and because of some limitations identified in this study, this exploration research work raised various issues and questions that may provide a basis for future research. Thus, a brief reference to the limitations will be presented.

Firstly, this study was conducted over a short time. As it was not a longitudinal study and did not allow the researcher to tackle all the related issues to this new educational wave, any conclusions established do not provide a full picture of the impact of MALL on developing learners' lexical competence.

Another limitation of the study was the limited number of participants. The findings of the study may not be generalized to represent all the Algerian universities. Therefore, more generalizable results could be attained if the research was conducted with more participants in more than one setting. However, they can be regarded as an illuminative one, applicable to other similar contexts.

General Conclusion:

The main goal of education is to develop learners' competence and performance. That is why many practitioners and researchers tried to find effective learning ways to achieve this goal. Thus, the MALL had emerged as a new learning approach to assist teachers and

learners to teach and learn foreign languages. The current dissertation has explored the impact of MALL on developing EFL learners' vocabulary learning at Biskra University. This research work aimed to investigate whether both EFL teachers and EFL learners use MALL activities to assist their vocabulary teaching and learning. It was conducted in order to test the hypothesis and answer the research questions stated earlier in the general introduction. Moreover, it is worth mentioning that this thesis goes through three main sections. The first two sections were concerned with the related literature review to the topic while the last one was devoted to the study findings and end up with the limitations of the study and some pedagogical suggestions. Hence, the results of this study were positive since it provided students as well as teachers a clear idea about the new concept of learning and teaching beyond traditional instruction. It also encouraged learners to use mobile activities to assist their vocabulary learning. In addition, it attempted to give EFL teachers the necessary guiding lines to start applying mobile devices in presenting their courses and to prepare the EFL students with the required abilities.

To conclude, the present dissertation highlights the emergence of MALL as new educational technology to the teaching and learning process in general and vocabulary learning in particular. This new wave of education has been proved to be an effective aid which assist and motivate EFL learners' language skills and EFL teachers' teaching styles, especially in vocabulary teaching and learning.

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Appendix A

Students' Questionnaire

Dear students,

This questionnaire aims at exploring The Impact of **Mobile-assisted Language Learning** on Developing **EFL Learner's Lexical Competence for Master One Students**. Your answers will be of a great help to us for this master research. Please, tick the appropriate answer or make a full statement whenever necessary.

Gacem Narimane

Section One: Mobile Devices Usage

Q1-What kind of mobile devices do you have?

- a-Traditional phone (no camera/video, no applications, etc.) b-Smartphone
- c-PDA (Personal Digital Assistant) d-MP3/MP4 Player's
- e-Tablet Computer f-Laptop computer's

g-Others:

.....

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.....

Q2-How often do you use your mobile device applications (per day)?

- a-Less than one hour b-1-3 Hours c-3 Hours or more

Q3-What kind of activities do you often use with your mobile device?

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

Would you specify examples of the activities? (You may tick more than one option)

- a-Social media, blogs, etc. b-Songs
c-Electronic dictionaries d-Reading e-books
e-Educational applications

f-Others:

.....
.....
.....

Q4-What advantages do you think learning via mobile device offer?

- a-Enable a personalized learning experience
b-Practical use/ portability
c-The “anytime-anywhere” advantage

d-Others:

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.....
.....

Q5-What are the challenges in learning via mobile devices?

a-Educational challenges (e.g. funding and affordability)

b-Technical challenges (e.g. screen size, keyboard size, etc.)

c-Others:

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.....
.....

Section Two: The Use of Mobile Devices in Learning English

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

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

Q7-If you do not use your mobile device to learn English, it is because:

.....
.....

Q8-When do you often use your mobile device to learn English?

a-Free time b-While waiting (e.g. for a bus)

c-Before sleeping d-Whenever the opportunity arises

Q9-Where do you often use it to learn English?

a-Inside the classroom

b- Outside the classroom

c-Wherever the opportunity arises

Q10-Which aspects of the English Language do you intend to improve when using mobile activities? (You may tick more than one option)

a-Listening b-Speaking c-Grammar d-Vocabulary

e-Others:

.....
.....

Q11-Are you allowed to use your mobile device in the classroom?

a-Yes b-No c-Depends on the teacher

Section Three: Using Mobile Devices for Developing Learners Lexical Competence

Q12-Do you use your mobile device to learn new lexical items?

a-Yes b-No

If yes, does it motivate you?

a-Yes b-No

Q13-What kind of activities do you use to acquire new lexical items? (You may tick more than one option)

a-Mobile applications

b-Reading e-Books

c-Listening activities

d-Games

e-Text messaging (e.g. sending SMS, chatting, twitting)

f-Others:

.....
.....

Q14-Does learning Lexis through your mobile device help you with your courses?

a-Yes

b-No

If yes, which courses?

a-Oral expression

b-Written Expression

c-Grammar course

d-Others:

.....
.....

Q15-Do your teachers use their mobile devices as tools to teach vocabulary?

a-Yes

b-No

If not, do you like to see teachers/instructors use mobile devices in courses to teach vocabulary?

a-Yes

b-No

Explain why:

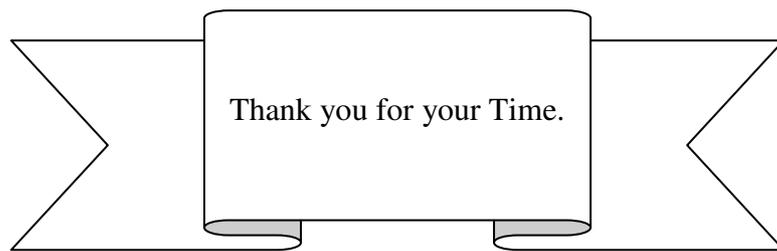
.....
.....

Q16-How would you evaluate your level before and after learning vocabulary through your mobile device?

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Q17-If you do have any comments with regard to the study, please feel free to add them.

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Appendix B

The Teachers' Questionnaire

Dear teachers, we would be so grateful if you could answer these questions required for the accomplishment of my master dissertation that aims at exploring “The Impact of **Mobile-assisted Language Learning** on Developing **Learner’s Lexical Competence** for Master One Students”. We hope that you will give us your fully interest and attention.

Gacem Narimane

Part One: General Information

Q1-How long have you been teaching English?

a-Very long b- Not very long c-Recently

Q2-What modules do you teach?

a-Oral expression b-Written expression

c-Grammar d-Phonetics

e-Others:

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.....
.....

Q3-How often do you teach per week?

a-One hour b-2-3 Hours c-3 Hours and more

Q4-Do you like educational technology?

a-Yes b-No

If your answer is yes, justify?

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.....
.....

Part Two: Perceptions on Mobile-assisted Language Learning

Q5-Do you care about your student's needs? Justify.

a-Yes b-No

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.....

Q6-Are you with or against using mobile devices as a tool of teaching? Justify.

a-Against b-With

.....
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Q7-Do you use your mobile device as a tool to improve your teaching style?

a-Yes b-No

Q8-What kind of activities do you often use with your mobile device?

a-Social networking b-Entertainment c-Learning English

Q9-To what extent do you allow your students use their mobile devices inside the classroom?

.....
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.....

Q10-Do you think learning via mobile device has advantages?

a-Yes b-No

If yes, give examples:

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.....
.....
.....

Q11-Are there challenges in learning via mobile devices?

a-Yes b-No

If yes, give examples:

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.....

Part Three: Using Mobile Devices in Learning Vocabulary

Q12-How often do you use your mobile device to teach English?

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

Q13-Which aspects of English Language do you intend to improve when using mobile activities?

a-Listening b-Speaking c-Grammar d-Vocabulary

e-Others:

.....
.....
.....

Q14-Are there any specific mobile activities you use within your course?

a-Yes b-No

If yes, what kind of activities do you use to teach new lexical items?

.....
.....
.....

Q15-Does teaching Lexis through mobile devices help you with your courses?

a-Yes b-No

If yes, which courses?

.....
.....
.....

Q16-Does teaching vocabulary through mobile devices motivate your learners?

a-Yes

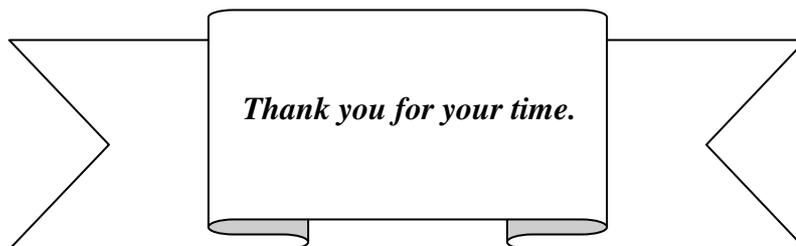
b-No

In both cases, explain why?

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.....
.....

Q17-How do you think that Mobile-assisted Language Learning is important to teach English as a Foreign Language in general and lexical competence in particular in the future?

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.....
.....



ملخص

يعتبر التعلم المتنقل كحقل تعليمي جديد متعدد التخصصات لتكنولوجيا التعليم والذي يهدف الى تحسين وتطوير المستوى التعليمي لذلك اكتسبت هذه الموجة الجديدة شعبية كبيرة بين مختلف الطلاب والأساتذة مما ادى الى ظهور منهج تعليمي جديد يدعى "تعلم اللغة بمساعدة المحمول" حيث يعتمد هذا المنهج على استعمال الاجهزة النقالة كوسائل لتدريس وتعليم اللغة. تبرز هذه الدراسة الاستخدام الحالي للأجهزة النقالة بين الطلاب ومدرسي اللغة الانجليزية كلغة اجنبية في جامعة بسكرة. وبما ان معرفة المفردات تعتبر جزء اساسي لتعلم اللغة الانجليزية كلغة اجنبية فان الهدف الرئيسي من هذه الدراسة هو استكشاف تأثير استعمال الاجهزة النقالة على تطوير وتحسين تعلم المفردات لطلاب اللغة الانجليزية وكيف يمكن ايضا لمعلمين اللغة استخدام هذه الاجهزة لتعليم المفردات. تم جمع البيانات الضرورية لهذه الدراسة باستخدام استبيانين، واحد مخصص للطلاب بينما الاخر للأساتذة.

أظهرت النتائج مواقف ايجابية لكلا الطرفين (الاساتذة والطلاب) الى اهمية استخدام الاجهزة النقالة لتحسين المستوى التعليمي لطلاب اللغة الانجليزية. بالإضافة الى ذلك، تعلم اللغة الانجليزية باستخدام الاجهزة النقالة اثبتت فعاليتها في تحسين مفردات طلاب اللغة الانجليزية كلغة اجنبية. وفي الأخير اتفق كل من اساتذة وتلاميذ اللغة الانجليزية في جامعة محمد خيضر ببسكرة على اهمية استخدام الاجهزة النقالة كوسائل تعليمية جديدة بطريقة مناسبة من اجل الحصول على نتائج تعليمية جيدة، لذلك فان نتائج الدراسة الحالية توفر فائدة لكل من اساتذة وتلاميذ اللغة الانجليزية.