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Teachers' and Students' Attitudes Towards the Use of Mobile Assisted Language Learning

A case Study of Master One EFL Students and EFL Teachers at University of Mohamed Kheider of Biskra

Dissertation submitted to the Branch of English language or the Partial Fulfillment of Master Degree in Science of Languages

Supervised by: Dr. Ahmed BASHAR

Prepared By: Mr. El Boukhari GHRIEB

Board of Examiners

Chairperson: Mrs. Salima RABEHI	**University of Biskra**
Supervisor: Dr. Ahmed BASHAR	**University of Biskra**
Examiner: Mrs. Amina Zohra MEBARKI	**University of Biskra**
Examiner: Mrs. Nachoua HASSINA	**University of Biskra**

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Dedication

I dedicate this simple and humble work to:

My parents

My family members

And

All my friends and whoever helped me directly or indirectly to finish this work

Acknowledgements

I am sincerely grateful to my supervisor Dr. Ahmed BACHER who has patiently read and corrected my dissertation and for his insightful guidance and precious advice. Without Dr. BACHER's thoughtful comments, advice, and encouragement, this work would have never been completed.

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Last but not least, I would like to thank all my family members and relatives and also my friends for their moral and financial support during this work.

Abstract

Besides being used for basic functions such as making calls and texting, mobile technologies are developed to handle educational application as well. As a result, the current research endeavors to investigate the attitudes of foreign language teachers as well as learners of English at the University of Mohamed Kheider-Biskra toward the effectiveness of mobile-assisted language learning (MALL). In this research, it has been hypothesized that the integration of mobile assisted language learning would enhance the process of teaching/learning in general and language skills in particular. To test the hypothesis, the study used the questionnaires to collect data. The questionnaire was distributed randomly to 90 master one students, and 7 teachers of English as a foreign language at Mohamed Kheider University of Biskra. From the questionnaire both quantitative as well as qualitative data were collected and analyzed. The findings of this study revealed that both students and teachers had a positive attitude toward the effectiveness of mobile assisted language learning. Similarly, both showed a general agreement on the potential of MALL as a promising approach to learning foreign languages. Listening, speaking, reading, and vocabulary were identified as the most appropriate language skills that can be taught through mobile devices such as mobile phones. By contrast, both participants were uncertain on the potential of MALL to enhance academic writings. Students have shown both their willingness and motivation to adapt their mobile devices for language learning; however, teachers showed that mainstreaming mobile education is still early. The finding suggests that more time, pedagogical infrastructure, and training is required.

List of Abbreviations

BYOD: Bring Your Own Device model

BYOT: Bring Your Own Technology model

CALL: Computer Assisted Language Learning

EFL: English as Foreign Language

ICT: Information Communication Technology

MALL: Mobile Assisted Language Learning

OPD: Organization Provided Devices model

PDA: Personal Digital Assistant

SCPD: Shared Cost Provided Devices model

SMS: Short Message System

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General Introduction

Mobile technology (particularly mobile phones) are being used, most of the time, for their basic functions such as making calls, sending messages, listening to music, playing games, and watching videos, to name but a few. The potentiality of these light technology to handle activities that has relationship with language learning and teaching has raised the curiosity of some researchers to investigate to what extent can these devices contribute to learning in general and language in particular.

Starting around the 2000s, research has created from these mobile technologies an approach of language teaching known as mobile assisted language learning, usually shortened as MALL. Generally defined as the use of mobile devices to learn language, MALL is much related to individual learner than their teaching institutions. For the reason that, learners are using their mobile devices for language learning in either explicit or implicit manner. This can be observed in students' texting, listening to music and other audio sounds, as an example. Language learner are using it in more explicit way as well, this can be observed in students' usages of mobile phone for translating words, reading electronic books, and listening to podcasting, among other.

1. Statement of the Problem

Mobile devices have recently invaded every aspect of our lives. Their use has been shifted from tools for communication to tools for entertainment and education. To date, mobile technologies are developed to have the ability of computer. But, thanks to their small size these technologies are more popular than computers. The widespread of mobile devices and their ability to handle multifunction tasks have raised the motivation of some scholar to investigate the potential of these technologies for language teaching and learning. Recently, a number of research has been conducted on mobile assisted language learning, however little or no investigation is done on Algeria.

This study aims to investigate the perception of students majoring in English as a foreign language toward the effectiveness of Mobile-Assisted Language Learning (MALL). And since, the teacher is a vital element in the teaching/learning process, their attitudes, also, is also taken into consideration. The focus of this study on the attitude of teachers and students is not random. Unlike machine, human beings' actions are the by-product of their attitudes. Hence, investigating stakeholders' attitude is a necessary.

An attitude is the psychological gate of any human being, through which any decision has to be made. Or as Bogardus (1931) puts it "An attitude is a *tendency to act toward or against something in the environment which becomes thereby a positive or negative value"* (p. 62 As cited in Bashar, 2012). In mobile education this means that whether the integration of mobile devices as a learning/teaching materials or not depends much, in the first place, on the attitude students and teachers have toward these smart technologies, regardless of whether it is effective or not.

2. Research Questions

In order for the current study to achieve its ultimate objective toward surveying the attitude of EFL teachers and EFL students towards the use of mobile devices as a learning material, and to cover this issue at Mohamed Kheider university the study attempts to answer the following research questions:

1. What are the attitudes of EFL teachers toward the use of mobile assisted language learning inside the classroom?

2. What are the attitudes of EFL students toward the use of mobile assisted language learning inside and outside the classroom?

3. What are the similarities and differences between students' and teachers' attitudes toward the use of MALL?

3. Research Hypothesis

The study is designed to test the following hypothesis:

We hypothesize that the integration of mobile assisted language learning would ease the learning/teaching process in general and develop language skills in particular.

4. Aim and Significance of the Study

The focal aim of the present study is to survey the attitudes of both EFL teachers and EFL learners towards the effectiveness of mobile assisted language learning. The value of the current research is twofold. First, its findings will contribute to the literature of M-learning research community, as its findings is based on different setting and participants. Mobile learning is still in its infancy: research in mobile learning starts only around the 2000s, so such

study as well as subsequent studies is required. Second, since there is a shortage of research in mobile learning in Algeria, the finding obtained from this study can act as a foundation for coming researcher to investigate mobile learning in depth.

5. Research Methodology

The research methodology used in this study is the descriptive. Relying on the questionnaire as a research method, both quantitative and qualitative data is included.

5. 1 The Sampling

The population of the present research is EFL students and teachers at Mohamed Kheider University of Biskra. Since it is not an obligation to include all the population in the study, a sample of N=90 students enrolled in Master One were randomly assigned the questionnaire. In addition, a sample of N=07 teachers were randomly assigned the questionnaire as well.

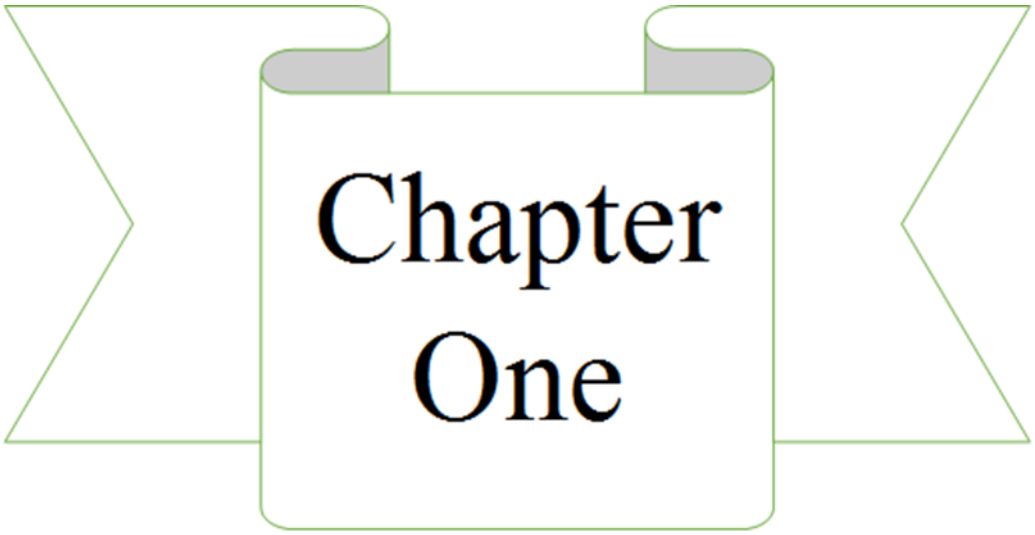
5. 2 Data Collection Tools

The present study aims to find out the perception of EFL teachers and students toward the effective use of mobile technology (particularly, mobile phones) in language learning. To collect the necessary data for answering the research questions, the study uses the questionnaire. Using the questionnaire in this context is not random, nevertheless it is deliberate. This study depends on the questionnaire as its main data gathering tool based on a number of variables. First, the nature and objective of the study. This study is in the first place a survey that aims to investigate teachers and students attitudes towards mobile assisted language learning. Second, the number of the sample studied, (N=90 students and N=07 teachers). Third, the nature of the variable under investigation (attitude). All these factors contribute to why the questionnaire is used in this study.

The designing of the questionnaire is based heavily on the literature. After reviewing mobile learning in general and mobile assisted language learning in particular, the questionnaire was designed. Basically, the questionnaire administered to the students is similar to that of the teachers. The rationale behind delivering the same questionnaire to both students and teachers is to compare the results obtained from each. The questionnaire is designed to collect both quantitative and qualitative data.

6. Research Structure

This research is divided into two parts: literature review and field work. The literature review is divided into two chapters. The first chapter covers the concept about M-learning and it relation to other types of learning. Similarly, the second chapter tries to give an overview about Mobile-Assisted Language Learning (MALL) and its relation to Computer-Assisted Language Learning. It highlights, also, the use of mobile devices in developing language skills such as listening, speaking, reading, and writing. Concerning the third chapter, it is mainly devoted to analyzing, discussing, and interpreting of the results.



The Context of M-learning

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Chapter One:

The Context of M-learning

Introduction

In this chapter we try to give a comprehensive literature review about mobile learning in general. The element included are to some extent the most controversial issues in the era of mobile learning. To begin with, the differences between the conventional E-learning and M-learning is discussed. This to understand where m-learning is located when compared to previous forms of learning. Second, the definition of mobile learning will be discussed in depth. Third, the literature will proceed with a short overview about the history of mobile learning. Fourth, the theory of mobile learning will be discussed since this topic have a significant challenge to mobile learning. Fifth, we will shed some light on mobile learning in Africa, trying to understand is there any attempt to implement this new approach in the developing countries. Then, mobile learning in higher education will be viewed. Seventh title will be devoted to mobile devices: mobile phones, podcasting, Personal Digital Assistant (PDA), and Media Players (iPods).

1. E-learning vs. M-learning

The proliferation of the terms of e-learning and m-learning made some researchers suspicious about the nature of these methods of learning, how they relate to each other, and where they fit into. Overwhelmingly, (Brown, 2003) asks "over the past decade we have become familiar with the term e-learning and now m-learning is emerging. So what is the relation between m-learning (mobile learning) and e-learning (electronic learning)?" (p.4). this confusion can be attributed to overlapping elements between the two form of learning. Maybe it is easy to differentiate between mobile learning and traditional learning, but there is a difficulty in contrasting between two forms of learning their main tools of material delivery is technology.

To begin with, Urdan and Weggen (2000, p. 8) define E-learning as:

> The term e-learning covers a wide set of applications and processes, including computers-based learning, web-based learnings, virtual classrooms and digital collaboration. We define e-learning as the delivery of content[and interaction]

> via all electronic media, including the internet, intranets, extranets, satellite broadcast, audio/video tape, interactive TV, and CD-ROM (p. 8, cited in Brown, 2003)

This claim provide a comprehensive definition of e-learning, but the generalization it makes in " digital collaboration" and " all electronic media" would include m-learning implicitly if not explicitly stated as such.

The approach that takes m-learning as e-learning in mobile devices have many supporters (Quinn, 2000; Georgiev, Georgieva, and Smrikarov, 2004; Low and O'Connell, 2006; Brown, 2003). Georgiev *et al.* (2004) assert the importance of e-learning as it offers new methods for distance learning; an approach characterized by the separation of the teacher and learner in terms of time and distance. In this claim, m-learning is nested inside e-learning which is an extension of distance learning.

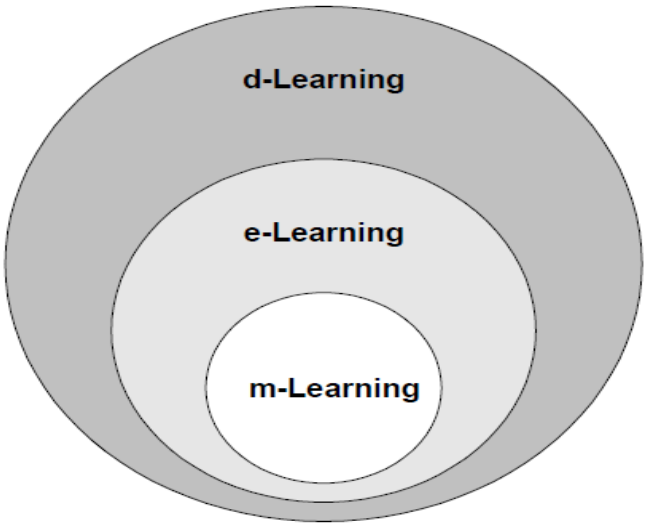


Diagram 1: M-learning as Part of E-learning and D-learning (Georgiev *et al* 2004)

As illustrated by the (**Diagram 1),** distance learning occupies in a broader sense e-learning and m-learning. Brown (2003) believes, on the other hand, that e-leaning is a macro concept that include both online and mobile learning. In other words, M-learning is a subset of E-learning which is in turns a subset of distance learning. The following diagram shows where M-learning fits as illustrated by (Brown, 2003).

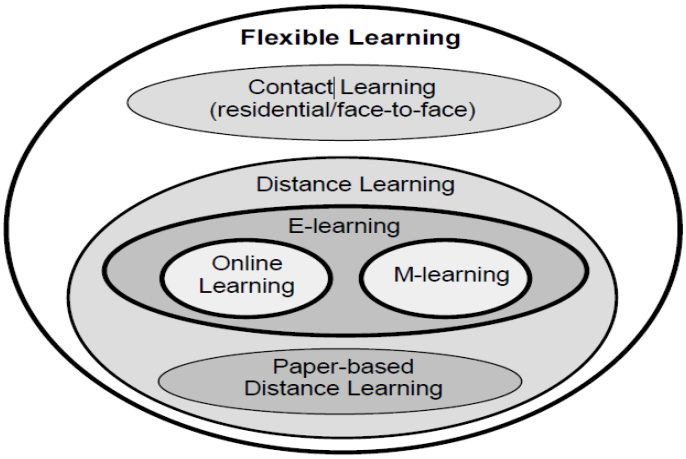


Diagram 2: The Subset of Flexible Learning (Brown, 2003)

In the other part of discussion, if m-learning is just e-learning in mobile devices what makes it m-learning? Turner (2012)argues fiercely against the previous belief by saying " It is a BIG mistake to think that m-learning is simply e-learning on a mobile device, and an even bigger (and often costly one) to assume you can simply transform existing e-learning on mobile devices"(para. 8) m-learning differs from e-learning for a number of reasons including: the way students access the internet; mobile phone are best suited to bite-sized courses, e-learning is more structured and formal, mobile devices can be used just-in-time and on demand learning at the moment it is needed, and m-learning needs a new strategy of assessment.

While trying to define mobile learning Traxler (2009), conducts a word analysis on published literature about both mobile learning and tethered e-learning. Attributes such as "personal, spontaneous, opportunistic, informal, pervasive, situated, private, context-aware, bite-sized, and portable," were used to describe mobile learning. While words such as "structured, media-rich, broadband, interactive, intelligent, usable," were used to describe e-learning. Another list provided by Laouris and Eteokleous (2005) who describe mobile learning as spontaneous, intimate, situated, connected, informal, lightweight, private, personal" while terminology such as multimedia, interactive, hyperlinked, media-rich environment are used to refer to e-learning.

Based upon (Traxler, 2009) and (Laouris and Eteokleous, 2005) research on mobile learning terminological jargon, Crompton (2013b) suggests a comprehensive distinction between traditional learning, e-learning, and m-learning drawn from attributes considered within pedagogical practice. To illustrate, Crompton (2013b) provides the following **Table 1:** in which she compares traditional, conventional, and M-learning based upon a number of

criteria: time allotted to learning, Personalization of learning, Private learning or public, Context of learning, whether learning is formal/informal, among others.

	Traditional learning	Conventional tethered e-learning	M-learning
Time	Often constrained by formal school hours	Constrained to time sat in front of a computer, but can occur at any time of the day	No time constraints, Learning can take place anywhere you can carry and use a mobile device at any time of the day
Personalized	Limited in all aspects of differentiation and concepts taught	Some personalization, with a choice of programs and concepts to be taught, but computers are typically shared and non-personalized	Personalization through applications, concepts, and often the ownership of devices modified for the user
Private learning	Not private	Typically private	Private
Context	Highly limited to a set location and framework	Various locations, although still tied to specific locations and milieu	Learning can take place in numerous environmental and social settings, where wireless access can be obtained
Formal/informal	Formal	Formal and informal	Informal and can also be formal

Socio-connectivity	Connections made to those in direct environment	Virtual connectivity to the networked world	Connections made to those in the direct environment and those networked
Spontaneity	Not spontaneous	Partially spontaneous	Highly spontaneous

Table 1: Comparing Traditional Learning, E-learning, and M-learning (Crompton, 2013b).

From this table we can infer the following: decrease of limitations, sense of flexibility, as well as augmenting learner-centered orientation as moving from left to right between columns. Both e-learning and mobile learning seems to offer new opportunities that decrease the limitations of traditional learning (Georgiev *et al*. 2004) with more flexibility in learning offered by m-learning. Characteristics such as highly spontaneous, private and ownership can be considered as a motivating factors that can have a positive outcomes on the learners.

2. What is Mobile Learning

The concept of mobile learning, also known as 'm-learning' or 'mobile education' does not lend itself to a simple definition. Or as Kadirire (2009) puts it," [m]obile learning can mean different things to different people" (p.15) Different definitions offered by many stakeholder, since the inception of the term 'mobile learning'. The definitions differ from each other as a result of from which angle mobile learning can be seen.

After reviewing the literature mobile learning, Winters (2006) categorizes the definitions of mobile learning into four main categories: technocentric, relations to e-learning, augmented formal education, and learner centered. In another work (Traxler, 2009) classifies the early definitions as those which focus on technology, those which fall under the mobility of learners, those which emphasis the mobility of the content, and those which define mobile learning in relation to context whether formal or informal.

Among the definitions that thought to be technocentric comes the one offered by Keegan (2005) who defines mobile learning as" the provision of educational and training on PDAs/palmtops/handhelds, smartphones and mobile phones". He restricted his definition to these small devices, "which a lady can carry in her handbag or gentleman can carry in his

pocket". For an activity to be labeled "mobile learning". According to Keegan (2005), for a technological device to be considered as mobile device, he identifies a number of requirements. These characteristics include:

- Citizens are used to carrying everywhere with them,
- Which they regard as friendly and personal devices,
- Which are cheap and easy to use,
- Which they use constantly in all walks of life and in a variety of different settings, except education. (Keegan, 2005 p. 3-4).

Kukulska-Hulme (2005), however, attributes her to definition of mobile learning to the mobility of learner. "It [mobile learning] is certainly concerned with learner mobility, in the sense that learners should be able to engage in educational activities without the constraints of having to do so in a tightly delimited physical location." (p. 01). This definition put learning in the context of the move, learning is not that process that happen in a scheduled time and place, but rather it is that process in the move. In other words, mobile learning can happen inside the classroom, as it can happen outside the classroom, in the bus, or at home, as well.

Mobile devices such as mobile phone, Personal Digital Assistances, Tablet Pcs, and Mp3 Players are perceived as opportunity-providers for mobile learning to take. "What is new in 'mobile learning' comes from the possibilities opened up by portable, lightweight devices that are sometimes small enough to fit in a pocket or in the palm of one's hand" (Kukulska-Hulme, 2005 p. 1). These devices can ease and facilitate the learning process more than traditional materials do. Although this definition tries to take the learner's mobility as its main defining feature, it seems to neglect the affordance of mobile devices.

On the other hand, O'Malley et al. (2003), extends the definition of mobile learning and urges for widening it to include both the mobility of learner and mobility of technology as a key characteristics. In defining mobile learning, they said "Any sort of learning that happens when the learner is not at a fixed, predetermined location, or learning that happens when the learner takes advantages of the learning opportunities offered by mobile technologies." (2003: 06). Thus, the learning that happens inside classroom as a result of using mobile devices, or the learning that happens on the bus while using mobile devices, for reading, translating or any other sort of learning are both termed as mobile learning.

Mobile learning, in another perspective, is defined as an extension of eLearning. A good example is the definition of (Quinn, 2000) who defines it as "eLearning through mobile

computational devices: Palms, Windows CE machines, even your digital cell phone." (para. 1). In the same perspective Kadirire (2009) gives similar definition as he says "We define mobile learning as a form of e-Learning, which can take place anytime, anywhere with the help of a mobile communication device such as a mobile phone, a personal digital assistant (PDA), iPod or any such small portable devices. These definitions are seen by some mobile learning protagonists as too 'technocentric and imprecise' (Traxler, 2009). To put it in another words, "they merely put mobile learning somewhere on e-learning's spectrum of portability" (Traxler, 2009 p. 3). What meant by this is that mobile learning is an e-learning but on the move.

3. The History of Mobile Learning

Speaking about the history of mobile learning entails tracing the history of technological developments. People in ancient civilization used a handheld clay tablets to read and write on, this also can be seen as mobile learning. However mobile learning as we know it today can be traced back to 70's. At the Xerox Palo Alto Research Center, a team lead by Alan Kay who suggested a low-cost interactive wireless handheld device labeled the Dynabook. This handheld device was perceived to give a boost to learning inside as well as outside classroom, and help children students to collaborate, interact and share their creative ideas in a way that traditional tools cannot do (Sharples & Roy, 2014).

Nevertheless, the Dynabook was never invented. This is because in one side, as believes, technologies were not developing so fast, and on the other side because at the time even desktop computer still had no reputation inside classroom. After the idea of the Dynabook, it tooks three years for Motorola to develop its first mobile phone DynaTAC 8000x, however it was not until 1983 that the commercial version was on sale. Although the Dynabook never created and the first mobile phone was on sale only in 1983, it was the ideas of these technologies which continue to the 21st century and shape mobile learning as we know it today (Crompton, 2013b).

Mobile learning history as a research community dedicated in research journals, seminars and conferences began only around the 2000s. Among other, 'mLearn' is cited to be the first leading annual international conference of mobile learning. Its first event took place in Birmingham in 2002, followed by mLearn 2003 in London, mLearn 2004 in Rome, mLearn 2005 in Cape Town, mLearn 2006 in Banff, Alberta. Its 13th conference 2014 was held in Istanbul, Turkey. What can be said so far, however, is that mobile learning has a long past, but a short history.

4. Theory of Mobile Learning

Understanding what factors need to be considered is a prerequisite of postulating a new theory of mobile learning. Hence, proposing a theory of mobile learning is not an easy task (Crompton, 2013b). Although the literature showed a lack of m-learning theories, researchers are trying to theories about it. Echoing this lack of theories, Traxler (2009) argues that "the communities cohering around mobile learning may still feel the need for a theory of mobile learning as well as a definition" (p.8). Bearing in mind that theorizing about mobile learning maybe problematic due to the confounding variables which make of mobile learning a noisy and dynamic phenomena.

In an early attempt to identify the key prerequisites of theorizing about mobile learning, Traxler (2009) argues that in looking for a theory of mobile learning, by simplification, the mobile learning community is faced with three challenges:

- Import a theory from "conventional" e-learning and worry about transferability;
- Develop theory ab initio locally and worry about validity;
- Subscribe to some much more general and abstract theory and worry about specificity and granularity (p. 9).

To solve the problem of the lack of theory of mobile learning, (Naismith, Lonsdale, Vavoula, and Sharples, 2004) Relate m-learning to more than one theory. Naismith *et al.*(2004) take an activity-centered perspective to draw on previous theories. Their review of literature indicates six broad theory-based categories of activity: behaviorist, constructivist, situated, collaborative, informal and lifelong, and learning and teaching support. For illustration, Naismith *et al*. (2004), for each theory, they provide a number of activities that can be held by mobile devices.

The following table show as identified by Naismith *et al.* (2004), the main theory, its theorists, its perspective, and example of certain activities supported by mobile learning.

Theory	Theorist	Perspective	Examples of mobile activities
behaviorism	Skinner, Pavlov	activities that promote learning as a change in observable actions.	• drill and feedback •classroom response systems
constructivist	Piaget, Bruner, Papert	activities in which learners actively construct new ideas or concepts based on both their previous and current knowledge.	•participatory simulations
situated	Lave, Brown	activities that promote learning within an authentic context and culture.	• problem and case-based learning •context awareness
collaborative	Vygotsky	activities that promote learning through social interaction.	• mobile computer-supported collaborative learning (MCSCL)
informal and lifelong	Eraut	activities that support learning outside a dedicated learning environment and formal curriculum.	• supporting intentional and accidental learning episodes
learning and teaching support	n/a	activities that assist in the coordination of learners and resources for learning activities.	• personal organisation • support for administrative duties (eg attendance)

Table 2: An Activity-Based Categorisation of Mobile Technologies and Learning Naismith *et al.* (2004).

Such attempts to relate m-learning to multiple theories is not alone, also Keskin and Metcalf (2001) as cited in (Crompton, 2013b) listed 15 different theories related to mobile learning namely: behaviorism, cognitivism, constructivism, situated learning, problem-based

learning, context-awareness learning, sociocultural theory, collaborative learning, conversational learning, lifelong learning, informal learning, activity theory, connectivism, navigationalism, and location-based learning.

As has just been indicated, the mobile learning community is facing a diversity of perspectives, models and approaches used by various researchers for the purpose of understanding, explaining, and theorizing about mobile learning activities. According to some researchers (Pachler, Bachmair, and Cook, 2010) this proliferation of views and theories can be understood in two opposing ideas. In the one hand, this depicts the liveliness of the field which inspire different researcher from different parts of the world to indulge investigating the field. On the other hand, this could represent a threat to the development of a homogeneous theories.

5. Mobile Learning in Africa

The developments of mobile learning across the continents depends mainly on small-scale projects, large scale projects are rare. All the pilots and trials aimed to implement mobile learning initiatives can be categorized under one of the following approaches:

a. Organization Provided Devices (OPD) projects, where a university or province or even a company takes the complete responsibility for the project costs.

b. Shared Cost Provided Devices (SCPD) projects. In this type of projects the cost of devices is shared between the learners and the organization.

c. Bring Your Own Device (BYOD) which requires students to bring their own devices during the project (Tsinakos, 2013).

The penetration of mobile phones in Africa makes it the second continents after Asia in the number of subscribers. According to Reed (2014), Africa had about 778 million subscribers in 2012. The same source forecasts that by end-2018 Africa will reach 1.2 billion subscribers 2014.

The increase number of mobile subscribers brings with it the chances for using these devices for pilots and trials for educational purposes. According to Isaacs (2012) report the majority of mobile learning projects in Africa focus mainly on formal education in primary and secondary schools, with high emphasis of projects in South Africa, Kenya and Uganda. In higher education, also, a number of projects were launched, for instance the University of

Stanford in the United States and three universities in Africa developed a project in 2009. The project used mobile technologies to access course materials, enable field research and assignments, and facilitate learning collaboration between students and faculties. The Egypt's message program is another projects which developed by World Education to increase basic education, literacy and numeracy, among women (Isaacs, 2012).

6. Mobile Learning in Higher Education

In questioning why higher education in particular need to focus on mobile learning, Quinn (2012) convincingly states that "mobile devices are out there, and consequently they can be ignored to the instructor's peril or capitalized on for the learner's benefit" (p 4). Students are using their mobile devices for learning purposes, if not in formal way with their teachers and administrators, they are doing it informally among themselves. Sometimes students are using their devices with their instructors either to answer a question or for rearranging the schedule. In all, they are using them, and as a result higher education can exploit the opportunities that these devices are seizing Quinn (2012).

Mobile learning has the potential to support all forms of education be it primary, secondary, or high schools; however higher education in particular is more appropriate to integrate student-centered mobile learning (Cheon, Lee, Crooks, and Song, 2012). This is true since the widespread of mobile devices have already made their way among college students. The study conducted by (Cheung, 2012) shows the percentages of students using smart-phones, tablet devices and notebook PCs. It is shown that the majority of students owned smart-phones (83%) and notebook devices (63%), and one third of the students owned tablet devices (34%). It is also shown that (28%) of students own 3 or more devices, another (28%) who own 2 devices, and the majority (42%) who own at least 1 device. And only a small percentage (2%) of students who did not own any mobile devices.

To give credibility to their research concerning the suitability of mobile learning in higher education, (Cheon *et al.* 2012), reports that there are numerous research that have been conducted in college environment and yield supportive evidence. For instance, students have been experimented on to receive formative evaluation and feedback via mobile phones. Mobile devices have been used also to support face-to-face courses by using Quick Response (QR) codes that link the material in hand to supplemental courses in the internet. And also, mobile

devices have been used to ease the administrative tasks such as checking attendance and learning progress.

Despite the need and the likelihood of mobile learning in higher education, (Cheon *et al.* 2012)indicate that implementing mobile learning in higher education is a complex task that have to face complex technical and cultural challenges. To overcome that challenges, Cheon *et al.* (2012) study of students' perception towards mobile learning in higher education indicates that higher institutions should develop plans, such as design guidelines, development phases and articulating norms, and considering the current level of students' readiness. Although all are important the latter must come first and should investigate the teachers' readiness as well.

7. Mobile Learning Technologies

The concept of M-learning is twofold- mobile and learning. Mobile devices comprises half the concept- if we presume the other half is learning. Maybe mobile learning would not have been called as such without mobile devices. Therefore, identifying what are these devices and what do they consists of is necessary and timely. To take it to an expert words, Guy (2010) says "[a]s students have access to a multitude of devices it is important to identify and classify those technologies that are applicable to mobile learning" (p.3) in general and language in particular.

In an attempt to classify mobile technology devices (Naismith *et al.* 2004) provide a twofold orthogonal dimensions: Personal versus Shared and Portable versus Static. The diagram bellow shows the classification in more details.

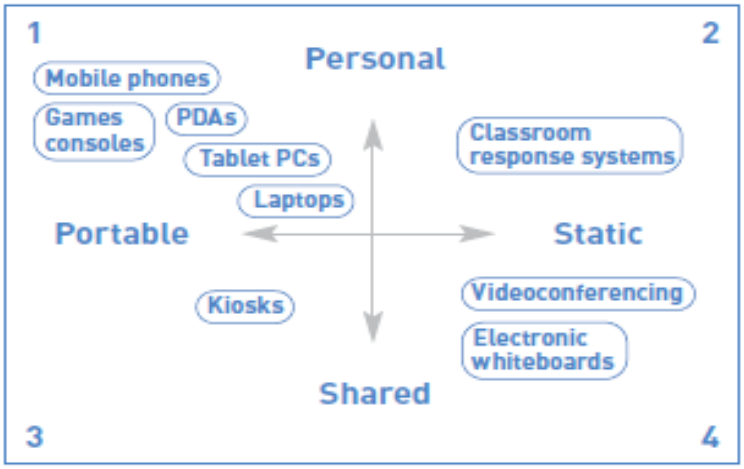


Diagram 3: Classification of Mobile Technologies Adapted from (Naismith *et al.*, 2004).

As shown in the (**Diagram 3**), Quadrant 1 illustrates the devices that are both personal and portable, among these devices mobile phones, PDAs, tablet Pcs, laptops, and hand-held video game consoles. Quadrant 2 includes classroom response system, a personal static technology. This technology is static because it can only be used in one location, yet personal due to its small size and allocation to a single user. Kiosks, which occupy Quadrant (3), depicts technologies that are not moveable in the meantime can provide learning experiences on the move. Portable in this quadrant refers to the learner not the delivery technology. The fourth Quadrant 4 depicts technologies that are less personal but can be shared between multiple users. Naismith *et al.* (2004) concludes that mobile technologies comprise all devices from quadrants (1-3), and those from quadrant (4) that are not at the extreme end of the 'static' dimension.

Even in this categories we can put mobile devices in further classification. As an example, in the first Quadrant 1 we can distinguish between mobile phones and PDAs, or iPod and Tablet Pcs. These technological devices share a certain features, yet defer in others. It is these distinctive features that prompt some devices more appeal than others. In a slightly different classification Kenning (2007) urges that "Within mobile learning, a distinctions should be made between different types of device. This is not simply a matter of properties but of availability, of the positioning of the device in the cultural milieu, and the psychological relations users have with it" (p. 191). A distinction between mobile devices should not be limited to the properties that each devices can offer but to the availability of these devices, and the psychological affect it have on the individual.

As far as mobile devices are concered, this study is limited to devices discussed in the first quadrant (1) in (Naismith *et al.* 2004) classification. But not all devices in this quadrant will be includded, as a consqeuent only mobile phones and PDAs are discussed. Two other mobile technologis will be included as discussed by (Chinnery, 2006), iPods and Podcasting. In sum, we will limit ourselves to mobile phones, PDAs, iPods, and Podcasting, with much emphasis on mobile phones because of the convience and widespread of these technologis among Algerians than other devices.

7.1. Mobile Phones

Mobile phones have inspired many researcher in the field of m-learning. Its uses as a pedagogical tool was not tied to a single subject. Rather, it has been utilized in different fields: medicine, mathematics, journalism, geography and language. The deployment of mobile phones

in learning and teaching seems to follow its technical development, from a single purpose devices into being multi-functional devices. Mobile phones' early uses in language teaching and learning focus mainly on (SMS) Short Message Service (Chaka, 2009a). Among studies that exploit SMS function in their investigations ranges from Vocabulary (Levy and Kennedy, 2005; Abbasi and Masoud, 2013) Writing short paragraphs (Chaka and Ngesi, 2010), and even composing novels (cell phone novels) which has been documented to be done on mobile phones (Roy, 2013).

However, today mobile phones have a certain added privileges, consequently they offer new opportunities for language instruction. According to (Chaka, 2009a), it is these privileges which make mobile phones a multi-purpose teaching and learning devices. Current mobile phones leverage new technologies such as Internet access, (3G) Third Generation Technology, Video/audio recording, built-in camera, to mention just some. To put it in (Chinnery, 2006) words " In language learning, all of these features enable communicative language practice, access to authentic content, and task completion. Though research of such uses is scarce, it is not non-existent" (p. 10).

On the other hand, the small size of mobile phones have advantages as well as disadvantages on the learning experience. Kenning (2007) asserts that "As a learning platform, the mobile phone has a number of distinctive characteristics that offer opportunities for new pedagogical applications while restricting others" (p. 191). A key distinctive feature of mobile phones that can contribute to language learning is portability. Portability, as Kenning (2007) claims, is an asset of mobile phones since it enables anytime-anywhere learning as it can offers opportunistic learning.

Although motivating and proved to be welcomed, Kenning (2007) argues that, portability has a price to pay. Both small screen and small keypad have been questioned on whether mobile devices in general and mobile phone in particular can handle the huge amount of text, either in display or encoding. As cited in (Shinagawa, 2012), Avellis *et al.* (2004) summarize it as follow:

> The small screen size of mobile devices…makes some people question their worth as e-learning delivering tools. Some…critics do point to the restricted input capabilities…of some of these devices, questioning students' ability to

enter large amounts of text into a device to take notes or answer an essay-type question(p.15).

As far as the written skill is concerned, this seems restrict the learner to type an essay on a mobile phone. However, (Kenning, 2007)sees a positive value of the small keypad as the limited number of characters of typing can be a useful incentive to improve summarizing skills of learners who find it too hard to shrink a long amount of text to just a few lines.

7.2. Podcasting

Podcast is usually classified as a form of m-learning (Tayebinik and Puteh, 2012; Evans, 2008). It is composed by constructing iPods (portable digital players) and broadcasting (Tayebinik & Puteh, 2012). Evans (2008) Suggests that podcasting is a good tool for learning "[c]oupled with the advantages of flexibility in when, where and how it is used, podcasting appears to have significant potential as an innovative learning tool for adult learners in Higher Education" (p. 491).

Podcasting is usually defined as "an audio BLOG that users create and upload to a server or website so it can be downloaded to computers or portable devices "((Richards & Schmidt, 2010) hence, podcast can be created by organization (e.g. BBC, British Council…) or individual then published into the internet for public users. In language learning this means that a teacher can request his/her students to download podcasts from the internet; create their own podcasts; or the teacher him/herself download the podcasts for classroom discussions.

However recent technology, podcasting has gained a widespread acceptance among language educators, both for recording as well as accessing authentic materials. Voice of America' Special English is an example of authentic material that have been converted in a form of podcasts. Also, Englishcaster provides a variety of podcast addressing English language learners (Chinnery, 2006).

In a study that aims to find out the effectiveness of podcasting, (Evans, 2008)conducted an investigation to measure the effective use of mobile learning in the form of podcasting among undergraduate student. Prior to their examination, and after completing a course in Information and Communication Technology, a group of 200 first-level students were given a series of revision podcasts to prepare for their exam. As part of the study, the students have to complete a questionnaire on their learning experience with revision podcasts. Evan (2008) indicates that

the finding were positive and appealing. The students believe that podcasts are more efficient revision tools than textbooks and they are more effective than their own notes in helping them learning. Also student found to be more receptive to podcast than traditional textbooks and lectures.

7.3. Personal Digital Assistants

PDA is a computer-based handheld device. It integrates personal organizer tools such as calendar, memos and clock-reminder. As it can be connected and exchange information with desktop PCs. Originally, PDAs were designed as electronic diaries and personal organizers. To date, however, they can perform a multifunctional tasks. Among other tasks, PDA can be used to view picture and videos, listen to sound files, write notes, and play games (Trinder, 2005).

Personal digital assistants (PDAs) are said to be more attracted to m-learning than mobile phones. One of its primary uses, in language learning is as a translator. Due to its software programs, the most acknowledged of its kind, MobiLearn which turns PDAs into a speaking phrasebook (Chinnery, 2006). Still, other believe that the built-in organizational tools (i.e. diary, and note taking) may help the students to better develop his/her time management skills (Trinder, Magill, & Scott, 2005)**.**

7.4. Digital Media Players

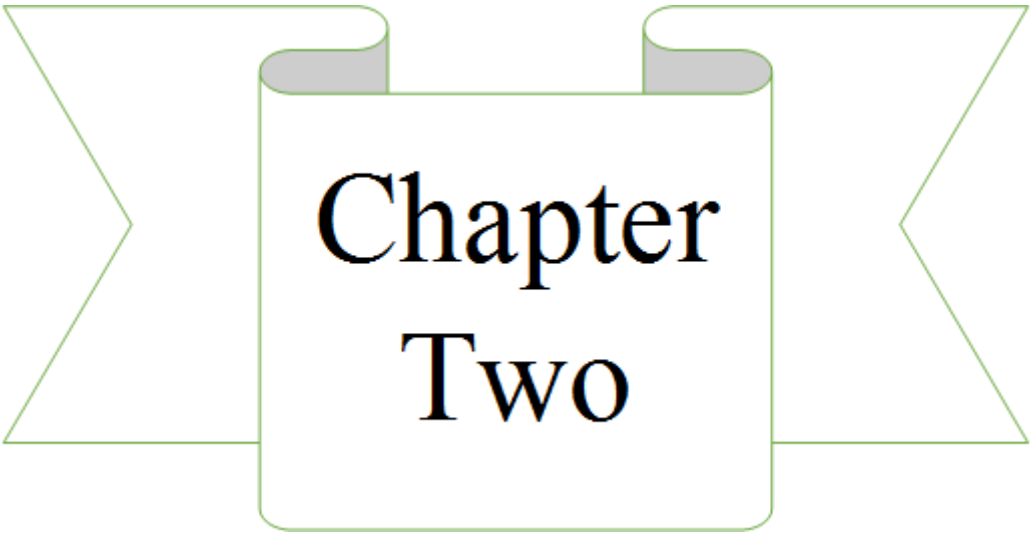
Digital media players include Mp3/4 players as well as iPods. Like mobile phones and PDAs, these media players have a number of potentials that can be exploited for language learning purposes. It can used as a voice recorder to record once' own voice for oral activities, for instance. And it can be exploited for its high- quality sounds for listening activities during classroom for formal learning as well as outside classroom for entertainment or informal learning, depends on the intention of the user himself/herself.

As an initiative in applying digital media players to encourage creative uses of technology in education and campuses, in the fall of 2004, the Duke University hosted a program in which all the 1600 new coming freshmen students where provided with 20GB Apple iPod devices, equipped with voice recorder. Using these devices both faculty and students recorded lecture and discussion for listening and participation. The students find it easy to

review the missed classes since they can have a recording lectures on their iPod devices. Students' use of these devices for language purposes was also reported. Students learning Turkish used them for listening to authentic materials, songs, poems, and news. While the Spanish class used them to receive oral feedback from their instructors, submitting audio assignment and recording activities (Belanger, 2005).

Conclusion

In this chapter we have discussed the significant issues concerning the field of M-learning. We intended throughout this chapter to provide a comprehensible overview of the field, focusing on the most controversial topics. As a start, we distinguished between mobile learning and other types of learning such as E-learning and D-learning. Then the focus shifted to definitions of mobile learning since mobile learning has been defined in different ways. The chapter also talks about the history and theory of mobile learning. Also, the different mobile devices used in mobile learning were discussed.



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Chapter Two:

MALL: A Theoretical Probe

Introduction

In the following section we try to examine mobile-assisted language learning, (MALL) and its relation to language skills. In advance, we need to discuss briefly what is meant by computer assisted language learning. The discussion will continue to cover MALL and its relation to language skills (listening, speaking, reading and writing). Also, a brief discussion will cover the phenomenon of cell phone novels. The advantages and disadvantages will be discussed briefly as well. Finally, the chapter will end with a brief discussion of teachers' and students attitude and their impact on mobile devices for language learning.

Usually begging upon an expert' words is a safe place to avoid ambiguities.. Young, (2011) once said that "to fully understand a particular theory about language and communication it is useful to examine the roots of the theory before going on to discuss the main conceptual base of the theory itself." However, this is true not only in language and communication, but also is true in other fields where debating views co-existed. He adds "Also consistent in introducing a theory is contrasting it with other prominent approaches to language that surface at the same time or similar time frames"(p.625). In mobile assisted language learning, this means to contrast it with computer assisted language learning.

Accordingly, understanding mobile assited language learning can be achieved only with relationship to computer assisted language learning. Palalas (2012) asserts that "mobile assisted language learning draws on the theory and practice of computer assisted language learning" (p.20). Based on this claim and by extension to what has been said by Young (2011); about mobile-assisted language learning in the previous paragraph, it can be said that to fully understand mobile-assisted language learning as new way of approaching language learning and teaching, it is necessary to examine its roots in the theory of computer-assisted language learning since it draws from it, then we try to take insight before discussing its conceptual base.

2. Computer-Assisted Language Learning

Computer-Assisted Language Learning is usually shortened as (CALL) has a great effect on language teaching and learning, to date. Hubbard (2009) describes this approach of teaching and learning language as an exciting; meanwhile a frustrating field of research and practice. He ascribes the excitement of the field to the complexity, dynamic and the rapid changing of the field. And these factors in turns explain why it is frustrating too. Adapting CALL for language learning and teaching requires new skills and knowledge, yet technology is developing so fast a reason which makes it a hard to adapt. Hubbard (2009) argues against the question of whether to use computer for language learning and teaching. Instead, the question that need to be asked is how to adapt computer for teaching and learning languages.

Computer assisted language learning can be defined broadly as "*any process in which a learner uses computer and, as a result, improves his/her language*" (Beatty 2010, p. 7). Though this definition is broad, (Beatty, 2010) consider it a good start since it gives a clear idea on how computers are used for language learning and teaching. Hubbard (2009), on the other hand, claims that this definition gives rise to two questions: what do we mean 'computer' in the first place, and secondly, what does it mean to improve?

Hubbard (2009) argues that computer in the field of CALL includes not only computers (desktop and laptop), but also mobile devices such as mobile phones and the like. While the questions of what to improve can be answered from the following key benefits of computer-assisted language learning:

- learning efficiency: learners are able to pick up language knowledge or skills faster or with less effort;
- learning effectiveness: learners retain language knowledge or skills longer, make deeper associations and/or learn more of what they need;
- access: learners can get materials or experience interactions that would otherwise be difficult or impossible to get or do;
- convenience: learners can study and practise with equal effectiveness across a wider range of times and places;
- motivation: learners enjoy the language learning process more and thus engage more fully;

- institutional efficiency: learners require less teacher time or fewer or less expensive resources (p. 02).

While the word 'improve' in Beatty's definition was meant for language, these cases indicates that CALL can improve learning conditions language learning rather than language itself. Also, while computer can achieve some of these the outcomes are not always guaranteed Hubbard (2009). Chaka (2009), on the other hand, claims that CALL, besides, being as an approach of teaching and learning language mediated by computer as a material to present, reinforce, and assess the content to be acquired, CALL ,also, "it is a catch-all term referring to the use and study of computer application in language learning and teaching"(p. 539).

The development of CALL reflected both development in technology used for learning and teaching, and a development of learning and teaching theories and philosophy of pedagogy. Chaka (2009) asserts that there is a mutual effect between CALL technologies such as programs, applications, and platforms; and pedagogy. That is to say, in one sense these CALL technologies are determined by language theories and approaches; meanwhile these technologies shape pedagogical and learning paradigm. Warschauer and Healey (1998) trace the history of CALL to the 1960s when the first computers were used for language instruction. (Beatty, 2010) in his brief history divides CALL development into CALL in the 1950s and 1960s, CALL in the 1970s and 1980s, CALL in the 1990s, and CALL in the twenty-first century

2. 1 1950s and 1960s CALL

The behavioristic CALL dominated the period of the 1950s, 1960s, and early the 1970s. The uses of CALL during this period was framed by the behavioristic models of learning- language drills (Warschauer & Healey, 1998). Chaka (2009) points out that the language learning during this period was mediated by first generation technologies called mainframe computers. The uses of these mainframe computers in language learning and teaching crystalized in activities such as:

- Repetitive drilling of the same material (e.g., grammar, vocabulary, spelling)
- Pronunciation and reading activities
- Constant error analysis
- Listening to audio recordings of the target speech
- Reading, speaking, and writing (p. 540).

2. 2 1970s and 1980s CALL

According Warschauer and Healy (1989) the communicative CALL appeared in the late 1970s and the beginning of the 1980s. This shift of paradigm from behavioristic CALL to communicative CALL was a result of the rejection of behaviorism as a theoretical foundation of learning, and the appearance of the personal computer. Warschauer and Healy (1989) claim that the communicative CALL technologies" corresponded to cognitive theories which stressed that learning was a process of discovery, expression, and development."(P. 57). (Chaka, 2009b) Points out to three foundational basis to this approach which distinguish them from behaviorism. First, knowledge is constructed through social interaction. Learners build their knowledge while interacting with other learners. Second, language is taught in context of use rather than in isolation: this featured stimulating software that can promote learners cooperation. Third, computers are resources rather than tutors for language acquisition. In other words, Warschauer and Healy (1989) argues that the main emphasis of communicative CALL is on what the learners can achieve while interacting with each other using computer than on while the learners are interacting with the machine.

2. 3 1990s CALL

According to Chaka (2009b), the 1990s CALL technologies are framed by a sociocognitive theory of learning and the rise of the multimedia networked computer technologies. This, according to (Warschauer and Healey, 1998), corresponded to the reassessment of communicative theory of learning based on cognitive view to a communicative teaching based on socio-cognitive perspective which emphasize the meaningful interaction in real context. As a consequence, a new perspective, which is a reaction to behaviorism and communicative CALL, has been emerged known as integrative CALL (Warschauer & Healey, 1998).

Integrative CALL means the integration of the various language skills teaching and learning by means of technology (Warschauer & Healey, 1998). In other words, it means the integration of technology to integrate the language learning skills. Accordingly, this activity can be mediated through various technologies, among them Chaka (2009b) cited the following:

- The use of multimedia CD-ROMs and DVDs
- Synchronous and asynchronous communication (e.g., MOOs [Multi-User Domains])

• Object Oriented, Internet Relay Chats (IRCs), chat rooms, and e-mail
• Newsgroups and bulletin boards
• The use of the Internet and the Web
• Interactive pair and group work
• Audio- and videoconferencing
• Content- and task-based activities (p. 541).

Nowadays, these multimedia computer technologies are now at the disposal of most students in the development world. As these technologies are becoming a common feature of modern life, their uses as a tool to read, write and communicate has been integrated in daily use of these technologies (Warschauer & Healey, 1998).

2. 4 The Twenty-first Century CALL

This period of CALL is characterized by the new digital technologies such as mobile phone which start to replace laptop as mobile phone start to leverage computing facilities (Beatty, 2010). Beatty (2010), in his book *Teaching and Researching Computer-Assisted language learning* includes the mobile devices PDA and mobile phones as CALL applications. He argues that CALL can be approached from a different ways, and mobile devices such as PDA and mobile phones are creating a new ways of approaching CALL. This view found consolidation from (Hubbard, 2009) who also claims that CALL does not make use of computer (desktop and computer) only, but also" the networks connecting them, peripheral devices associated with them and a number of other technological innovations such as PDAs (personal digital assistants), mp3 players, mobile phones, electronic whiteboards and even DVD players" (p. 2).

Both (Beatty, 2010) and (Hubbard, 2009)' claim’s put MALL somewhere inside CALL. In other words, they believe that MALL is just an extension of CALL. They made no differences between CALL and MALL. What makes Beatty (2010) believes in that mobile devices as tool for computer assisted language learning may stem from his belief that mobile devices are just a new version of computers since they function the same way as computer. While (Hubbard, 2009) still see mobile devices as just a peripheral of computer so they are dependent on them.

However, the revolution made by George Chinney's article 'Going to the MALL' in 2006 bring a new direction to the perception of mobile devices and their contribution to language teaching and learning. In this work, Chinnery (2006) claims that as other technologies mobile technologies can used in language teaching. This is not to say they are instructors by themselves, but rather they are instructional tools and their use depends on sound and thoughtful application second language pedagogy.

2. Mobile Assisted Language Learning

Mobile assisted language learning is a branch of the growing field of m-learning. (Viberg & Grönlund, 2012). M-learning or mobile learning as we have seen in previous sessions has been defined from different angles, the issue that makes it problematic somehow among some researchers. However, mobile-assisted language learning seems to have no problem from this since researchers have define it in the same way. The definition agreed upon among mobile assisted language learning takes a technocentric orientation. It commonly defined, MALL, as the use of mobile devices in language learning and teaching (Kukulska-Hulme, 2013a).

Kukulska-Hulme (2013a) argues that " MALL differ from computer-assisted language learning in its use of personal, portable devices that enable new ways of learning emphasizing continuity or spontaneity of access and interaction across different contexts of use"(p. 3701). Mobile devices, unlike computer, can provide the learners with immediate access to the internet. This is a key feature resulted from the portability of the devices which is absent in computers. It is this which makes some researchers such as (Traxler, 2007) believe that learning with mobile devices is becoming more personalized, situated, and authentic.

According to Chaka (2009b) the future of language learning lies more with MALL than CALL. This claim find its foundation from the key features he presents as the distinctive characteristics of MALL. These features include, mobility, ubiquity, connectivity, portability, handheldibility, convergence, multifunctionality, cross-platform blending, optionality, convenience; access, accessibility, availability, affordability, context-aware-ness, personalization, and flexibility Chaka (2009b) believes that these factors give MALL both a competitive and utilitarian edge over CALL.

On the other hand, Stockwell and Hubbard (2013) argue that mobile-assisted language learning is not a fully independent. The two major field that MALL bounds to are: computer

assisted language learning and mobile learning in general. This is not to deny that MALL takes its foundation from second language acquisition (SLA). This claim tries to represent MALL in Venn diagram where computer assisted language learning, mobile learning and mobile assisted language learning overlap in some areas.

3. Mobile-Assisted Language Learning Versus language skills

Developing a proficiency in foreign language is not an easy task. This is, in part, because of its isolation from its real context of use, as represented in textbooks. And second, due to the need to the mastery of its various skills. Kumaravadivelu (2003) asserts that language traditionally is divided into four skills: listening, speaking, reading and writing. And their teaching reflects this division, as each skill was taught separately. However, in everyday practice these skills are integrated, and so their teaching should be. "Rare indeed is the day when we only listen, or only speak, or only read, or only write" (Kumaravadivelu, 2013 p. 225). Hence, this integration of language skills reflects our daily use of mobile technologies (mobile phone): we often listen and speak, while making calls; and write and read while sending or receiving messages or making our own notes.

Mobile technologies have attracted users due to their sophisticated uses and increasing capacity (Viberg & Gronlund, 2012). They have already make their presence among people in general and students in university in particular. Nevertheless, their use in teaching and learning has been more gradual, since educators are seeking to understand how to effectively use them to support various types of learning (Kukulska-Hulme & Shield, 2008). A review of published work during 1994 to 2012 on mobile assisted language learning indicates that there are approximately 575 works that have been published in the last two decades. Among these works, topics such as attitude of users, pedagogical design, motivational effects and others have been investigated (Burston, 2013).

In their recent work, Viberg and Grönlund (2012) provide a comprehensive literature review of MALL papers published during the period 2007-2012. The literature review consisted of 54 papers published in the domain of second and foreign language acquisition. This review shows that most research papers focus on vocabulary acquisition, listening and speaking skills, and language acquisition in general. Also, the findings indicates the lack of studies on grammar, pronunciation, and writing skills.

In a similar study, FeiYanga, JuChaoa, and Changa, (2013) examine 44 MALL-related studies that have been published during the 2008 to 2012 and the results were quit similar to Viberg *et al.* (2012) findings. The study shows that vocabulary learning lead the list of language learning topics with 13 (28%) followed by listening skill 12 (26%) studies, and speaking and reading 7 (15%) studies each, and writing skill has only 3 (7) studies. The rest 4 (9%) studies topics were not specified. FeiYanga *et al.* (2013) assert that this research indicates that mobile technologies are best application for learning vocabulary. However insightful these literatures, mobile devices cannot be limited to a specific skills, as technology is developing and new research is also being conducting to have a fully understanding of this new field.

3.1 MALL Research on Listening and Speaking

As reading and writing, speaking and listening are also essential skills of language. Kuluska-Hulme (2013a) claims that mobile devices are an effective tools for speaking activities. Especially, for unconfident learners who feel shy in front of other learners. Mobile devices can create, for this category of learners, a private space to practice speaking or pronunciation. Also, the ability to practice and connect, using mobile phones, with others learners were among the positive factors reported in successful projects. As a way of assessing his/her students, the teacher can ask students to record their speech, then send the content to" receive private feedback" (Kukulska-Hulme, 2013a).

Listening activities on mobile phones or digital media players can be done effectively anywhere and anytime (Kukulska-Hulme, 2013a).Using their mobile phones, learners are in constant informal listening activities. Listening to foreign language is no longer a restricted activity that a learner has to attend to while seating in front of computer or while seating in classroom. Listening is becoming an integrated part of daily activities; listening while traveling, queuing, or even during classroom time. In other words, the availability of accessing podcasts and audio materials in general have extended the opportunities to listen to authentic material more frequently (Kukulska-Hulme, 2013a).

According to Pegrum (2014) nowadays the Internet abounds with opportunities for listening activities. The graded content available in the form of podcasts and audiobooks or listening apps is a good source for providing comprehensible input for learners who have different levels in language competency. "Students can practice [using their mobile phones]

with the copious content designed for native speakers to stream (like radio channels or news broadcasts) or download (like radio podcasts or talking books)" (Pegrum 2014 p. 144).

Also, videos, which can be delivered in mobile phones, have been proven to be an effective materials for teaching listening activities. Not only for listening activities, but also for understanding of the functional, pragmatic, paralinguistic and sociocultural aspects of language, besides, grammar and vocabulary. Furthermore, as a supporting content, the subtitle or the captions can augment listening comprehension and vocabulary acquisition (Pegrum 2014). In foreign language teaching, this means that the teacher can select what he/she see as an appropriate contents for listening comprehension activities and either download it to send it to his/her students or request their students to do the task. And in classroom, instead of traveling to laboratory room, the teacher and the students could practice upon these activities using their mobile phones.

In a recent study, Kukulska-Hulme and Shield 52008) point out that," Although mobile phones were developed to allow oral interaction, MALL rarely seems to make use of this affordance, at least in published research" (p. 5). Further, they say that the research published in MALL concerning speaking and listening may seems to be scarce; however, the research that has been reported so far suggest a promising opportunities for mobile devices to effectively used to support collaborative speaking and listening activities.

Accordingly, Pegrum (2014), cited the Canadian Mobile-Enabled Language Learning Eco-system (MELLES) initiative as a successful project which provides students of English for Specific Purposes (ESP) the opportunity to use their mobile devices to complete eight listening tasks. Pegrum (2014) states that, while the listening tasks were overtly focusing on listening, the completing of activities were based on collaboration among students and teachers, the thing that make students express their satisfaction of the listening tasks.

As a way of implementing this in classroom, students may use their mobile phone to listen to podcast or any other audio or audiovisual material, then the teacher can ask the students a certain questions about the material the students listened to. This can be more fitting than moving all the class to the laboratory just to practice a ten minutes listening task. Other teachers, where the school lack infrastructure, as a way of teaching listening, brought their PCs and, using high speakers, s/he assume the students will listen to the material and complete the following up tasks. However, this might be suitable for students who sit next to the PC or close to it, nevertheless, those sitting in the back may not hear the material well.

3. 2. MALL Research on Reading

Reading is a critical skill in developing language proficiency. Both language instructor and language learner have been trying ways to harness this skill. More importantly reading in foreign language where printed material are scarce poses another issue for motivating reading among learners of foreign languages.

Reading usually defined as the ability to interpret meaning from the printed page and comprehend information appropriately (Grabe & Stoller, 2013). However important, the printed page, it seems no longer an important element in defining reading, since technology makes reading available on digital screens. Reading in mobile devices is a recent issue that developed by the developing of mobile technology. People start to find their mobile phones a good tool for their daily reading. As an experience we have observed people reading the holy Qur'an in mosques in their mobile phones while books are on shelves. This can indicates that

Kukulska-Hulme (2013a) asserts that reading in foreign language has become a more attractive potentiality, essentially for students who have a long commute day or students who have no possibility to interact with fixed computer. This comes as a result of the widespread of mobile devices that support electronic books such as smart phones, tablet PCs, and Kindles. These mobile devices have extended daily basis reading as it opens new opportunities for second and foreign language readers to access newspapers as well as other news channels online.

Advantages of reading on mobile devices have found support from empirical studies and they include. In his study, Huang (2011) attempts to explore students preferences for reading. As part of the study, participants were given short texts and longer texts. And both short texts and longer texts were delivered to students via mobile phones, emails, and hard papers. The results indicates that, reading from papers were preferred for both longer and short texts. However, short texts were reported more preferred than email. Students preferred the short screen as a result of the small screen of the mobile phones.

Shimane and Shimane(2013) reported on three years project of providing reading and grammar material to students via mobile phones. The researcher concludes that delivering reading and writing material through mobile phones were reported as a positive experience; however, a criteria such as; “(a) providing engaging learning materials that are neither too long

nor overly-demanding; (b) a proper degree of teacher monitoring; (c) student involvement; (d) the need for incentives; (e) a respect for privacy; and (f) a safe and secure mobile-learning technical environment" (p.117), must be applied.

3. 3. MALL Research on Writing

Research on the writing skills is scarce in the literature of mobile assisted language learning (Kukulska-Hulme, 2013b). There are only a few researchers who try to exploit mobile devices to investigate its potential to developing this critical skill -writing skill, in foreign language. This is also was shown by (Viberg and Grönlund, 2012) who observe that research focusing in writing skill is "underrepresented" (p. 7). Kulkulska-Hulmes (2013b) ascribes this to the technical limitation of mobile devices such as the small keypad "Writing practice can be more problematic since it is largely constrained by means of input such as small screens and keyboards, which can present a barrier to extensive writing" (p. 4).

On the other hand, although mobile devices seems to be a suitable devices for listening and reading, they also can offer students to practice speaking and writing (Beatty, 2013). As far as writing is concerned, (Kukulska-Hulme, 2013a) suggests that the optical character recognition function equipped in mobile devices can be used to practice the scripts of unfamiliar languages. This also can be helpful for learners who are unfamiliar with the spelling of some words, as this function gives the learner the correct spelling when he/she fails to. Furthermore, the ability to share written material through mobile blogging can promote student motivation (Kulkulska-Hulme, 2013a).

Although most writing done on mobile phones are informal (i.e. blogging, commenting, or sending intimate SMS), academic writing also find support from some empirical studies as well. (Chaka and Ngesi, 2010)report on an experimental study at Walter Sisulu University on using mobile phone for writing short paragraphs by English for Academic Purposes (EAP) students. The study uses SMSes as a platform for writing short paragraphs as well as providing feedback. As a finding, the incompleteness of ideas and thoughts, and the conversational outlook of the paragraphs were among the reported key features of students' paragraphs. However, providing instant feedback was stated as key benefit facilitated by SMSes.

Furthermore, regarding academic writing, (Oyinloye , 2009) attempts to investigate the potential of using mobile phones Global system for mobile communication (GSM) in enhancing "students writing skills in essay writing with special references to expression, content generation, organisation, tense and punctuation. The finding of this study show that mobile phones can used for teaching writing skills, generate main ideas and organize them. Also, it gives the opportunity of constant feedback.

4. M-Novels

The use of mobile phones abound. Chaka (2009b) Claims that the telephone itself may not be suitable for language learning and teaching; however, its multifunctionalties such as Short Message Services (SMS), videoconferencing, and voice messaging are unique to mobile phones. Among these features, SMS has being deployed to write short paragraphs (Chaka and Ngesi, 2010), and also essays (Oyinloye, 2009)not only this SMS has made a revolutionary of new literary genre usually referred as cell-phone novels. Not only composing novels, also reading them is done on these cell-phones (Roy, 2013).

Cell-phone novel also known by other names such as mobile phone novel, text messaging novel, m-novel, m-lit, cell literature, phone novel, and even as SMS novel " which is originally written and read on a cellular phone via text messaging" (Roy 2013 p. 82), is defined as novels that are originally composed and read on mobile phones. "The cell-phone novel, or *Keitai Shostsu* is the first literary genre to emerge from the cellular age." (Goodyear, 2008, p. para. 7) "The medium-unfiltered, unedited-is revolutionary, opening the closed ranks of the literary world to anyone who owns a mobile phone" (Goodyear, 2008, p. para. 9).

This new unique literary genre emerged first in "Japan, the land of rising sun" (Roy 2013 p. 82), however its popularity also continue to spread throughout the world to countries such as China, United State, Germany, South Korea, Taiwan, Switzerland, Finland, Italy, India (Roy 2013) and more recently South Africa (Lee, 2009). The spread of cell-phone novels continues to gain wide acceptance in other countries too.

Roy (2013) says that " (p. 83). It can be also attributed to the portability of the mobile devices since the reader can read anytime and everywhere he/she has a chance. In the part of the writer, the portability of mobile phones give a chance to write down when the writer inspiration is high. Levinson (2004) Summarizes this as he says "nowadays, a writer can write

just about as easily, anywhere, as a reader can read" (p 20).This means that reading and writing is no longer an activated limited to a fixed place.

Based on the widespread of this literary genre, (WebJapan, 2004)reports that one of the main causes behind the extensive popularity of this micro-lit is that cell phone novels create a virtual world for the readers, mostly the teenagers, via mobile phone or cell phone or more precisely, via text messages of these novels enjoy the medium for various reason. Most have to do with the potential and convenience inherited in mobile phones. The potential to being able to read anywhere without going to the bookstore or carrying a book that might be heavy compared to mobile phones, and being able to read in the dark are among the cited reasons that make of mobile phones a successful medium for reading as well as writing these novels.

In sum, using Kenning (2007) words who states that:

> the mobile phone may not seem a propitious environment for reading a digitalized book, but the success of phone-delivered novels in Japan, besides highlighting the existence of cross-cultural differences in the diffusion and use of technology, shows that the mobile phone is not ultimately incompatible with large amounts of text" (p.93).

That is to say, as readers are reading their preferred novels and writers writing their novel using their mobile phone, this is a full proof for those who doubted the possibility of handling large amount of texts in mobile phones.

5. Advantages and Challenges of MALL

The successful implementation of mobile learning implies looking at what these new developed devices have to offer for education, and the limitation that might stand before any attempt to foster its employment. Therefore, exploring the affordances of mobile devices as eligible tools in education is timely.

5. 1 MALL Challenges

Broadly, the limitations of mobile learning can be due to different variables, it can be due to the mobile devices itself; as can be due to the learner who owns them; it can be due to the teacher and parents: what they know about these devices as eligible material for learning. Also, some limitations can stem from the field itself, as the mobile learning community still

have a lack of literature in some areas. In other words, mobile learning challenges are multidisciplinary.

In its report, (UNESCO, 2011)states that mobile learning is fraught with challenges that can be classified as: social, economic, and technical challenges. Broadly, people may not see the value of mobile devices as a tools that can enhances learning. This can be due to the "intellectually-light" and "entertainment-heavy" content of mobile devices. Technically, mobile devices have been criticized for their limited screen sizes, limited audiovisual quality, and virtual keyboarding (Chinnery, 2006 p. 13) as a key disadvantages inherited in the portability of MALL devices. Also, the availability of mobile devices can put another burden of using MALL in teaching and learning; "while cell phone ownership maybe almost universal for college-aged individals, this is not true for other population or media" (Chinnery, 2006 p. 13). the cost of mobile devices, also, puts another barrier to mobile learning " mobile phone ownership and usage is still prohibitively expensive in many parts of the world" (UNESCO, 2011, p. 11). However, if compared with the price of computer, mobile phone' cost is motivating and can be afforded.

5. 2 MALL Advantages

Mobile devices, particularly mobile phone, are empowered with various functions. Consequently, there are various benefits in mobile learning. Masrom and Ismail (2010) indicate that mobile devices can be beneficial in a number of ways. While providing information, guidance and learning experience anytime anywhere is needed, this can be used as performance support tools. They add that this can be perceived as:

- Puts training and performance support where actual work takes place.
- Allows new skills or knowledge to be immediately applied.
- Enable learning when it is needed.
- Allows use of rich media when appropriate (p. 17).

In language learning this could mean that the learner while carrying out a task such as reading, easily s/he can use their mobile devices to look up unfamiliar word without stopping reading. And the possibility of rich media can satisfy the different learner styles. As an example, mobile phones are used to watch videos, among other functions. Hence, this function can be helpful for both auditory students as well as visual students.

Also, Zhu, Guo, and Hu (2012) assert that the seating of the students does not have to be arranged in a fixed manner, as it does when interacting with a computer. The portability of mobile devices give more flexibility to learner to carry out collaborative activities inside classroom. Learners can move, interact, and participate while carrying their mobile devices. Similarly, Zhu *et al*. (2012) state that thanks to the camera of mobile devices, the time of learning can be increased as learner can photograph their lecture on the whiteboard, instead of consuming time while copying down their lessons. However, "if the purpose is to get students to practice their copying and writing skills, then taking the photos is a subversion of the objective. But if the purpose is simply for the teacher to share information, then the students have found an economical solutions" (Beatty, 2013).

On the other hand, Beatty (2013) claims that not only taking photos of text on a board, learners can use mobile phones to record or video their lectures. Also, teachers may find it easy to share their PowerPoint presentations with their students. Bluetooth is a good function to handle this inside classroom. Students also can use their mobile phones to check out their teachers' Facebook pages, follow them on Twitter, or even receive their e-mails.

6. Previous research on students' and teachers attitude toward MALL

Although mobile devices have been proven to be successful for educational purposes, their deployment demands from researcher to investigate students attitudes, whether they "can, will, and want to use them for education" (p. 28) (Pollara, 2011). Pollara (2011) goes further saying that people have opposing opinions concerning mobile devices. Some consider them as personal tool, others perceive them as helping students to cheat on exams, and still other acknowledge their pedagogical affordances as a valuable tool for delivering learning content. However important their attitude, students are but a one end of the continuum. At the other extreme end of the continuum is the teacher.

The attitude of teachers is an important factors that can affect the successful implementation of Information and Communication Technology (ICT) in general and mobile devices in particular. Their perception of the potential of mobile devices as a learning tool determine to some extent their preparedness either to advocate or inhibit mobile-assisted language learning. Additionally, being familiar with mobile devices may not signify their willingness to use mobile devices in their learning (Callum & Jeffrey, 2010). According toTai and Ting, (2011). "The attitude and cognizance of teachers in the process of transforming a

mobile device into a teaching or learning tool are important in explaining their adoption of mobile technology"

Callum and Jeffrey (2010) point out that the factors that might justify teachers ability to integrate mobile technology for learning purpose includes:

- Educators feel ill at ease when using technology in the classroom and would be less likely to adopt a new form of technology such as mobile technology.
- Educators may not feel enthusiastic about technology in general and therefore less likely to adopt mobile technology.
- Educators may not be using mobile technology to its potential as a cognitive tool due to teachers' lack of skill in using this technology or lack of awareness regarding its potential (p. 143).

The positive attitudes of teachers towards mobile devices is critical in their deployment for learning. Callum and Jeffrey (2010) claims that teachers need to believe in their ability to implement this technology successfully. Teachers' past experience of using general ICT can determine educators as to hold positive or negative attitude towards new technologies and their implementation. More importantly, the factor that can determine mobile integration in teaching and learning is the users' perception to the need to this new technology. Consequently, educators need both a training on how to use these devices for learning and teaching, but before this a need to convince them of the potential of mobile devices is the first step (Callum & Jeffrey, 2010).

As a strategy to convince educators of the potential of mobile devices for learning and teaching purpose is citing the affordances of MALL. This is an already established foundation as researchers have proven the potential of mobile technologies for language teaching and learning in their empirical studies. Still, educators need to be convinced about the acceptance of mobile learning in other parts of the world. Therefore, gaining a cross-cultural view about mobile language learning may be a convincing strategy for educators to reflect on their contexts.

In a study, Dashtestani (2013) surveys the perspective of 126 Iranian learning English as a foreign language and 73 EFL teachers' attitude on the use of electronic dictionaries. The results shows an overall positive currency concerning electronic dictionaries for learning English as a foreign language. This is because of the anytime anywhere affordance of mobile devices since the electronic dictionaries are installed in students mobile phones. The study, also,

encountered some obstacle as student use unreliable dictionaries, and distraction caused by their use inside classroom.

Levy and Kennedy (2005) cited a study by Dias (2002) who surveyed students asking them whether they practice English using their cell phones, if they trained to do so. According to the study, 57.9% of female students responded positively and 47.4% of male students replied in a favorable way. Broadly, mobile-assisted language learning have gained a wide acceptance as studies result a positive attitude amongst students and teacher, even if studies on attitudes are scarce in MALL literature. Thus, the understanding of MALL as a promising approach in teaching and learning foreign languages will depends partly on attitudinal research.

Conclusion

The discussion of this chapter consisted mainly of providing an overview about mobile-assisted language learning, and its relation to computer-assisted language learning. We have seen that research on using computer for language teaching begins approximately around the 1950s-1960s. This period marks the use of mainframe computer as a pedagogical tool in teaching language, then the period that followed is the 1970s-1980s which uses the PCs to replace mainframe computer. The 1990s, however, characterized the emergences of multimedia networked computers which gives a new way of teaching and learning, finally, the emergence of mobile devices in the twenty first century and its impact on the emergence of MALL was discussed.

Furthermore, we have discussed mobile-assisted language learning. Its definition and what makes it different from previous language technologies were discussed. Afterwards, the discussion moved to language skills and mobile technologies: MALL speaking and listening, MALL reading, and MALL writing. We, too, hinted to the recent phenomena created by mobile phones-cell phone novels. Then, to see the potential of MALL, we discuss both advantages and challenges to using MALL for learning and teaching. Finally, we the discussion ended with both teachers' and students' attitudes and their potential while implementing MALL for learning and teaching.

Chapter Three:

Field Work

Introduction

The widespread of mobile devices (particularly mobile phones) among public in general and students in particularly, and the emergence of the new approach-Mobile Assisted Language Learning (MALL) are the motivating forces of this study. Therefore, the main aim of this study is exploratory. It seeks to survey both teachers' and students' attitude towards the likelihood of mobile integration for learning purposes, specifically for language learning in the context of Mohamed Kheider University. As far as implementing MALL, this study, moreover, aims for some significant uses of mobile phones in language learning.

1. Setting of the study

This study is conducted in the University of Mohamed Kheider-Biskra. The study addresses only EFL teachers and students. The teaching of English in Biskra University start in 1998. Ever since, the teaching of English reflected the educational system of that time known as the 'classic system'. By the year of 2005, the university corresponded to the new higher education reform known as LMD system (license, master, and doctorate). However, the English branch introduced the system only after two years, 2007.

The branch of English at Mohamed Kheider University teach various courses in English. In first year license, students take course in written expression, grammar, phonetics, research methodology, and culture of language, linguistics, oral expression, French, English/American literature, and social and human sciences. Second year students take the same courses, except for social and human which replaced by theme and version. Third year students take courses in Oral expression, written expression, Second language acquisition, Didactics, English for Specific Purposes (ESP), research methodology, Educational psychology, Theme and version, and Linguistics. For Master one/two students, courses included are: Research methodology, Educational psychology, Second language acquisition, written expression, Didactics, Applied linguistics, Discourse Analysis, and Pragmatics. However, master two students study these courses only for the first semester, as the second semester is devoted to thesis writing.

This study is conducted in the second semester of 2015 academic year. After reviewing the literature on mobile learning and mobile assisted language learning, the questionnaires were constructed. Before distributing the final product, some adjustment and refinement were made according to supervisor feedback. Students' questionnaire were distributed to 90 students. All the 90 students were from Master One. For teachers, the questionnaires were administered to 8 teachers, but only seven teachers who returned the questionnaire.

3. Data Collection Tools

The objective of this study is to survey the attitudes of both EFL teachers and student toward the effective use of mobile computing devices for language learning. Hence, the study uses the questionnaire as its instrument for gathering both quantitative and qualitative data, since the questionnaire is considered one of the most common instrument used in second language research for gathering attitudinal data (Dörnyei & Taguchi, 2010). The same questionnaire administered to students is also administered to teachers. However, the questionnaire of teachers contains some extra questions. In section three, the semi-structured item (3.2) and the open-ended questions items (3.3) and (3.4) are not included in students' questionnaire. Also, in the fifth section an open-ended question (5.2) is provided for teachers to give their personal comments and opinion on mobile learning according to their experience and their teaching context.

3. Data Analysis

Participants' Demographic Information

The participants of this study consisted of both teachers and students of English language at Mohamed Kheider University.

Students

This study targeted, in the first place, the learners of English as foreign language at Mohamed Kheider University. The questionnaires were administered to Master One students of English language. The rational driving the selection of Master One students is the enough experience these students have in both: learning English and interacting with mobile devices. Thus, we assume that they have enough knowledge on MALL, so their answer on the questionnaire would be based on their perception as well as on their experience. The number of

students participated in the survey is 90 students. The response rate of the questionnaire is 100% except that some students who had left some items unanswered. But, the overall copies were answered and returned.

The demographics information of students consisted of their age, gender, mobile devices ownership, and the type of mobile devices they own. The finding of this section showed that the age of students' participants ranged from 21 years old to 26 years old. The students aged 21 were 4 (4%), students aged 22 were 37 (41%), students aged 23 were 36 (40%), students aged 24 were 9 (10%), and only one students aged 25 (1%), and 3 students (3%) aged 25. As far as gender is concerned, females predominantly outnumber the males, females who were reported in the questionnaire consists of 72 female students (80%) and only 17 male students (19%) and 1 students (1%) who did not mark their gender. This is not surprising as the population of EFL learners is occupied by females. The 90 students asserts that they own mobile devices. The rate of students who own mobile phones were 35 students. Students who own smart phones are 55 students.

Teachers

Teachers who participated in this survey were 7 teachers who teach English at Mohamed Kheider University. Two teachers were part-time teachers, while the other five were full-time teachers. The original number of teachers were 8 teachers, but only seven teachers who answered the survey and returned it. The questionnaire were administered randomly to these teachers. After analyzing the questionnaire, the demographic information was grouped and calculated manually.

Concerning teachers' questionnaire, teachers were asked to fill their demographic information which was as follow: their age, gender, years of experience, ownership of mobile devices, and the type of mobile devices they have: whether they have mobile phone, smart phone digital media players, or other devices. The two participants who work as part-time teachers were in the 26-30 years old category. Other two teachers were between 31-35 years; one teachers indicates his age in the category 40-45 years old. And the other two participants were above 45 years old. In their experience of teaching English three teachers had more than 16 years of teaching, three participants have between 6-10 years, and only one who indicates the 1-5 category as his years of teaching experience. All participants indicates that they own mobile devices. Most of the participants own just mobile phones. For those who own more than one devices, one shows that he own both a mobile phone and smart phone while another points

out that she owns mobile phone, smart phone, and digital media players. The last tick the four options of mobile devices.

Section (1): Students/teacher general use of mobile phones in daily tasks.

In this section participants were asked to respond to a five-point Likert-scale (Always-Frequently-Sometime-Seldom-Never) type of questions. This section aims to investigate the most frequent used functions of mobile phones. The items were swub-categorized into three subsets:

A- Using mobile phones for socializing;
B- Using mobile phones for entertainment and personal management; and
C- Using mobile phones for educational purposes.

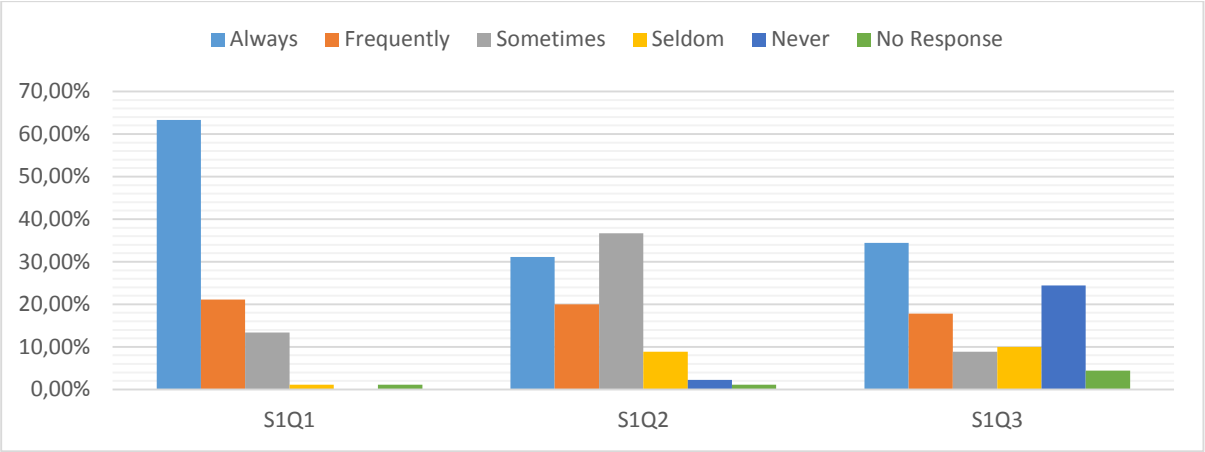
The use of mobile for socializing is measured by using three questions written in a form of statements, S1Q1, S1Q2, and S1Q3. On the other hand, the second sub category aims to measure the extent of mobile uses for entertainment also its uses for personal management such as the use of mobile phone as an alarm clock or reminder. For the third subcategory, a set of items (S1Q8, S1Q9, S1Q10, S1Q11, S1Q12, and S1Q13) were asked to measure participants uses of their mobile for educational purposes in general.

Table 3: Students' Use of Mobile Phones for Socializing Purposes.

Questions	**N.P**	Always	Frequently	Sometimes	Seldom	Never	No Response	Total
S1Q1.	**N.P**	57	19	12	1	0	1	90
Percentage	%	63,33	21,11	0,0	1,11	0,0	1,11	100%
S1Q2.	**N.P**	28	18	33	8	2	1	90
Percentage	%	31,11	20	36,67	8,89	2,22	1,11	100%
S1Q3.	**N.P**	31	16	8	9	22	4	90
Percentage	%	34,44	17,78	8,89	10	24,44	4,44	100%

Note: Q: question; **N.P:** number of participants.

S1Q1: I use mobile phone to make calls
S1Q2: I use mobile phone to send messages
S1Q3: I use mobile phone for socializing (Facebook…)



Graph 1: Students' Use of Mobile Phones for Socializing Purposes.

The table 1 indicates that participants are using their mobile phones for socializing. As shown in the reported answers of the first question (S1Q1), more than half students are *always* using their mobile phone for making calls 63.3%. And still a significant number of students who also report their *frequent* use of mobile phone for making calls. The respondents who circle the option *sometimes* are but a few (12) students. And only one students who claim to rarely make calls.

In the second question (S1Q2), most of students use their mobile devices to send messages. However, their uses ranges mostly from always to sometimes. There are 28 students (31.1%) who *always* send messages from their mobile phones, 18 students 20.0% are frequent users of the SMS function. Students who reported to use mobile phone for its messaging functions consisted of 33 students (i.e. 36.7%). The tables also shows that the students who either *occasionally* 8.9% or *never* 2.2% send messages are a small number of students.

Last questions, shows that students who are always accessing social networks from their mobile phone represents 34.4%. Further, students who never surf social networks from their mobile are 22 students. The students who did not answer this question are but 4 students.

Table 4: Teachers' Use of Mobile Phones for Socializing Purposes.

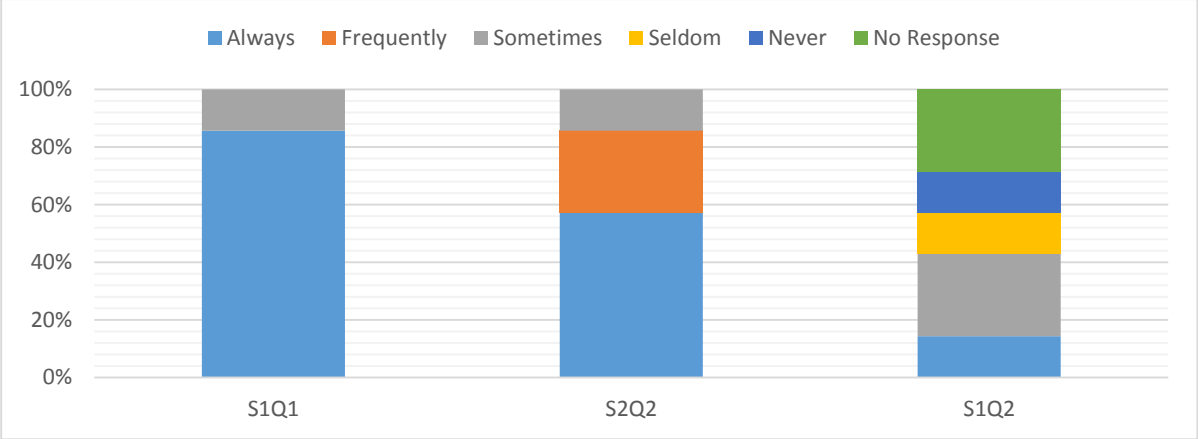
Questions	N.P	Always	Frequently	Sometimes	Seldom	Never	No Response	Total
S1Q1.	N.P	6	0	1	0	0	0	7
Percentage	%	85,71	0,00	14,29	0,00	0,00	0,00	100%
S1Q2.	N.P	4	2	1	0	0	0	7
Percentage	%	57,14	28,57	14,29	0,00	0,00	0,00	100%
S1Q3.	N.P	1	0	2	1	1	2	7
Percentage	%	14,29	0,00	28,57	14,29	14,29	28,57	100%

Note: Q: question; **N.P:** number of participants.

S1Q1: I use mobile phone to make calls

S1Q2: I use mobile phone to send messages

S1Q3: I use mobile phone for socializing (Facebook…).



Graph 2: Teachers' Use of Mobile Phones for Socializing Purposes

The significant number of teachers who responded to the first question (S2Q1), as the graph depicts, made it clear that their usage of mobile phone is much related to making calls. Eighty five percent of participants report that they always making calls. And only one teacher who said he/she make calls sometimes. As for the second items (S2Q2), there was about fifty seven percent of informants who always use the texting function of mobile phones, while twenty percent other use mobile phone to send messages only sometimes. The chart reveals,

too, that teachers are also accessing social networking such as Facebook from their mobile phones. However, the frequency of doing so differ from one participants to another, one teacher said they always browse social network using their mobile phone, another one only seldom, and two others sometimes.

Table 5: Students' Use of Mobile Phones for Entertainment and Personal Management.

Questions	N.P	Always	Frequently	Sometimes	Seldom	Never	No Response	Total
S1Q4	**N.P**	18	24	28	11	6	3	90
Percentage	**%**	20,00	26,67	31,11	12,22	6,67	3,33	100
S1Q5	**N.P**	10	16	27	17	17	3	90
Percentage	%	11,11	17,78	30,00	18,89	18,89	3,33	100
S1Q6	**N.P**	13	17	25	14	17	4	90
Percentage	%	14,44	18,89	27,78	15,56	18,89	4,44	100
S1Q7	**N.P**	51	12	12	5	4	6	90
Percentage	%	56,67	13,33	13,33	5,56	4,44	6,67	100

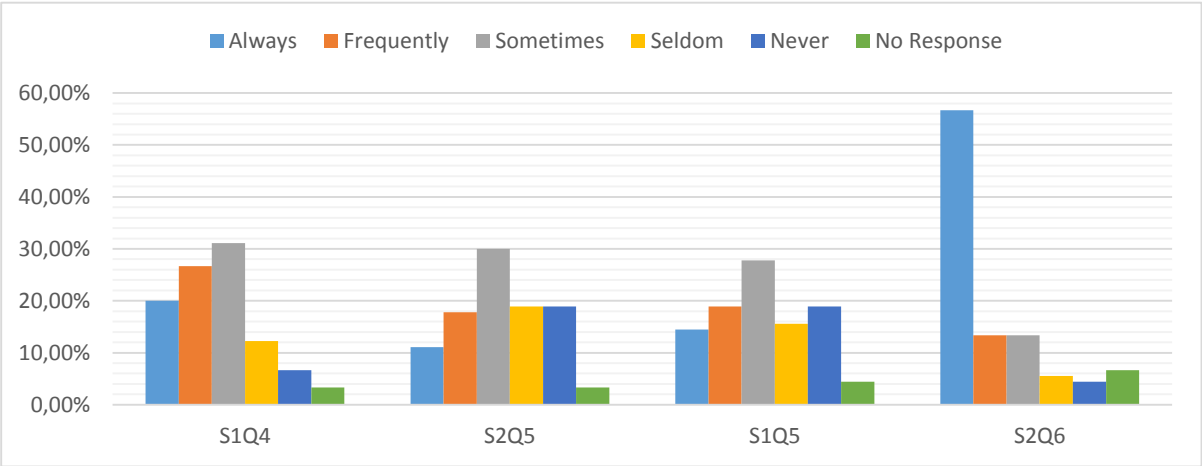
Note: Q: question; N.P: number of participants

S1Q4: I use mobile phone for listening purposes

S1Q5: I use mobile phone to watch videos

Q6: I use mobile phone to play games

S1Q7: I use mobile phone to set alarm clock



Graph 3: Students' Use of Mobile Phones for Entertainment and Personal Management.

As can be seen from the graph, approximately forty six percent of informants reported their use of mobile phones for listening purposes. Additionally, participants who used mobile devices only sometimes represent about thirty percent of the whole respondents. Participants who indicated that they never used mobile for listening purposes are but a few, around six percent. As for watching videos, there were about seventy six of responses indicate that participant are also watching videos from their mobile devices. By contrast, about eighty percent responses said that they never used mobile phone to watch videos. The responses to S1Q6 reveals that students' participants, about seventy four percent, are playing games using their mobile phones. For those who report they never use mobile phone to play games represent about eighty percent. The graph illustrates that there is a high percentage of participants who are always using their mobile phone to set alarm clock, around fifty six percent.

Table 6: Teachers' Use of Mobile Phones for Entertainment and Personal Management.

Questions	N.P	Always	Frequently	Sometimes	Seldom	Never	No Response	Total
S1Q4	**N.P**	2	1	0	2	1	1	7
Percentage	**%**	28,57	14,29	0,00	28,57	14,29	14,29	100
S1Q5	**N.P**	0	1	2	2	0	2	7
Percentage	%	0,00	14,29	28,57	28,57	0,00	28,57	100
S1Q6	**N.P**	0	0	0	1	4	2	7
Percentage	%	0,00	0,00	0,00	14,29	57,14	28,57	100
S1Q7	**N.P**	5	0	1	0	0	1	7
Percentage	%	71,43	0,00	14,29	0,00	0,00	14,29	100

Note: Q: question; **N.P**: number of participants

S1Q4: I use mobile phone for listening purposes

S1Q5: I use mobile phone to watch videos

S1Q6: I use mobile phone to play games

S1Q7: I use mobile phone to set alarm clock

Graph 4: Teachers' Use of Mobile Phones for Entertainment and Personal Management.

The graph represents teachers' answers to four questions: S1Q1, S1Q2, S1Q3, and S1Q4. These items aim to find out whether teachers' participants have any use of mobile devices for activities such as listening, watching videos, playing games, and setting alarm clock. As the graph illustrate, about seventy percent of teachers reported their use of mobile technologies for listening purposes. Responses also shown about five teachers who said they watch videos from their mobile phones. Not surprisingly, the majority of teachers (57, 14%) deny the fact that they have ever played games, using their mobile devices. When asked if they are using their mobile phone for time purposes such as setting alarm clock, almost all teachers (85%) confirm doing so.

Table 7: Students' Use of Mobile Phones for Educational Purposes.

Questions	N.P	Always	Frequently	Sometimes	Seldom	Never	No Response	Total
S1Q8	**N.P**	19	17	15	7	20	2	90
Percentage	%	32,22	18,89	16,67	7,78	22,22	2,22	100
S1Q9	**N.P**	9	18	25	19	16	3	90
Percentage	%	10,00	20,00	27,78	21,11	17,78	3,33	100
S1Q10	**N.P**	9	16	15	17	28	5	90
Percentage	%	10,00	17,78	16,67	19,89	31,11	5,56	100
S1Q11	**N.P**	37	17	12	6	14	4	90
Percentage	%	41,11	18,89	13,33	6,67	15,56	4,44	100

S1Q12	**N.P**	7	11	25	27	18	2	90
Percentage	%	7,78	12,22	27,78	30,00	20,00	2,22	100
S1Q13	**N.P**	14	25	24	10	14	3	90
Percentage	%	15,56	27,78	26,67	11,11	15,56	3,33	100

Note. S3: section (3); **Q:** question; N.P: number of participants.

S1Q8: I use mobile phone to access the internet

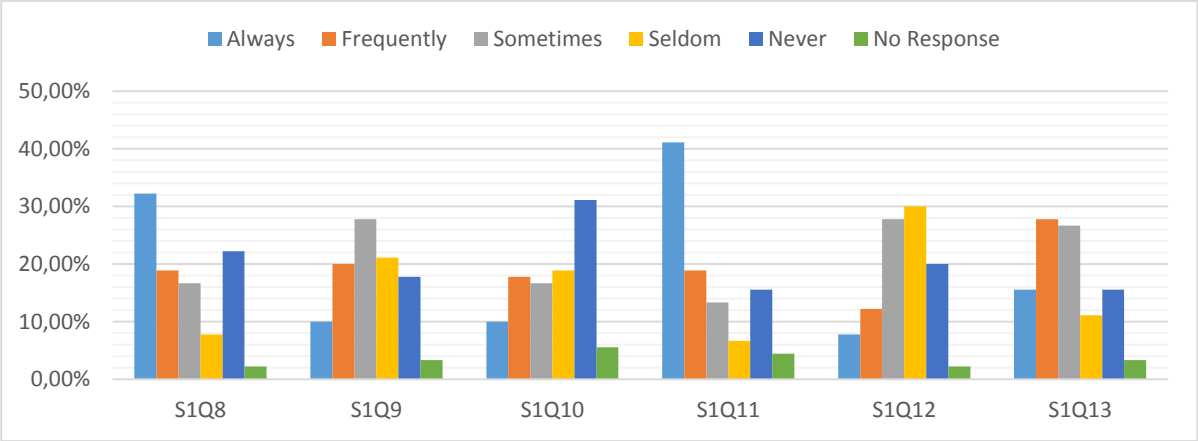
S1Q9: I use mobile phone to take notes

S1Q10: I use mobile phone to read (PDF, notes…)

S1Q11: I use mobile phone to translate words

S1Q12: I use mobile phone for recording purposes

S1Q13: I use mobile phone for educational purposes



Graph 5: Students' Use of Mobile Phones for Educational Purposes.

It is clear from the graph that almost the majority of responses illustrate participants uses of mobile devices for educational purposes, however the different frequency of each usage. As indicated in the S1Q8, responses showed a high percentage, about seventy three percent, of informants are accessing the internet from their mobile phones. Yet, a significant number about twenty two percent said they never access the internet from their mobile phones. As the answers of S1Q9 reveals, (17, 78%) of respondents note that they have never taken any notes on their mobile phone. Conversely, a considerable amount of responses indicate the use of mobile phone as a tool in which students write their notes: twenty seven do so only sometimes, twenty percent do so frequently, and ten percent always do so.

On the other hand, it can be seen from the graph, as the responses to the S1Q10 shown, there is approximately thirty one percent of responses indicating that they never read any notes or book from mobile devices. Still, around fifty seven participants, ranging from always to seldom, who affirmed that they have used their mobile devices for reading purposes. Using mobile phone as a dictionary is the most used function of mobile devices, as far as language learning is concerned. The results of the S1Q11, illustrate the high percentage of participants who indicate that they always translate words using their mobile phones. Responses to S1Q12 showed that most surveyed students (76%) indicated their usage of mobile phones for recording objectives, still twenty percent reported that they never used their mobile phone to record anything. Participants also were asked if they were using their mobile phone for other educational purposes. Most of students, about seventy eight percent indicated that they are practicing educational activities on their mobile phones. However, a small proportion of informants said they never used mobile phone for learning purposes.

Table 8: Teachers' Use of Mobile Phones for Educational Purposes.

Q/P	**N.P**	Always	Frequently	Sometimes	Seldom	Never	No Response	Total
S1Q8	**N.P**	2	1	2	0	1	1	7
Percentage	%	28,57	14,29	28,57	0,00	14,29	14,29	100
S1Q9	**N.P**	0	1	1	2	1	2	7
Percentage	%	0,00	14,29	14,29	28,57	14,29	28,57	100
S1Q10	**N.P**	0	1	2	0	2	2	7
Percentage	%	0,00	14,29	28,29	0,00	28,57	28,57	100
S1Q11	**N.P**	1	1	1	1	1	2	7
Percentage	%	14,29	14,29	14,29	14,29	14,29	28,57	100
S1Q12	**N.P**	1	0	1	2	1	2	7
Percentage	%	14,29	0,00	14,29	28,57	14,29	28,57	100
S1Q13	**N.P**	2	1	3	0	0	1	7
Percentage	%	28,57	14,29	42,86	0,00	0,00	14,29	100

Note. Q/P: questions and participants**; S3:** section (3); **Q:** question; N.P: number of participants**.**

S1Q8: I use mobile phone to access the internet;

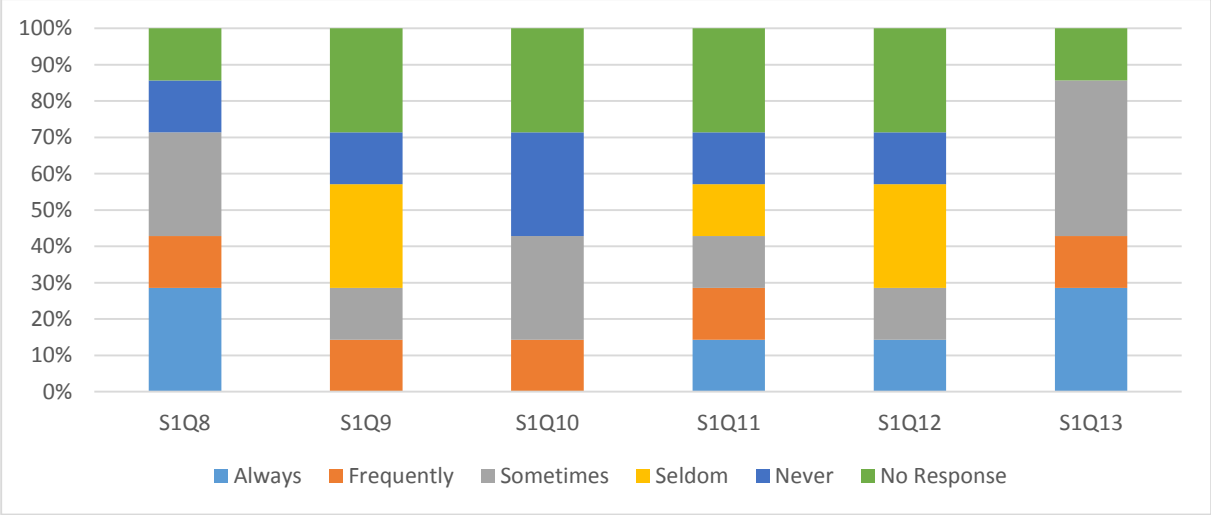
S1Q9: I use mobile phone to take notes;

S1Q10: I use mobile phone to read (PDF, notes…);

S1Q11: I use mobile phone to translate words;

S1Q12: I use mobile phone for recording purposes;

S1Q13: I use mobile phone for educational purposes.



Graph 6: Teachers' Use of Mobile Phones for Educational Purposes.

Broadly, almost the majority of teachers claim their use of mobile technology devices for educational purposes. As the graph depicts, teachers' responses to S1Q1 shown that five out of seven teachers browse the internet from their mobile devices. Similarly, about fifty six of participants reveals their use of mobile phone to take notes. Nevertheless, two teachers refuse to answer this item, and one teacher never take notes using their mobile devices. Surprisingly, only three teachers reported that they use mobile devices to read from. While two teachers said they never read from their mobile devices, and other two refuse to answer this item. As for the S1Q11, teachers who respond their use of mobile phone as an electronic dictionary represent about fifty six teachers' respondents. And only one teacher who said they never translate any word from their mobile phone. Likewise, responses indicate that there is approximately around fifty six of teachers' participants who affirm their use of mobile phone for recording purposes, and one teachers who said they never do such activity on their mobile device. As far as the S1Q13 is concerned, approximately all teachers (84%), except one who did not answer the item, indicate their use of mobile devices for educational activities.

Section (2): Students/teachers' readiness to adapt Mobile-assisted language learning.

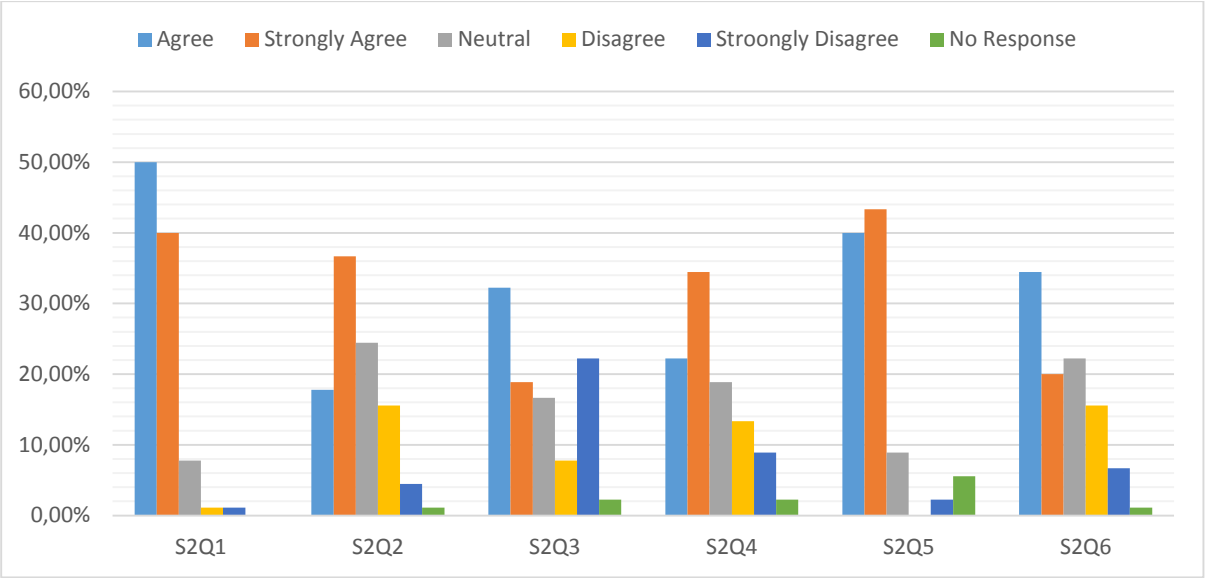
The main aim of this section is to investigate students as well as teachers' readiness to adapt mobile assisted language learning. Doing so, informants were requested to answer six items using five-point Liket-scale type of question (Strongly agree, agree, neutral, disagree, and strongly disagree).

Table 9: Students' Readiness to Adapt Mobile Education

Q/P	N.P	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	No Response	Total
S2Q1	**N.P**	45	36	7	1	1	0	90
Percentage	**%**	50,00	40,00	7,78	1,11	1,11	0,00	100
S2Q2	**N.P**	16	33	22	14	4	1	90
Percentage	**%**	17,78	36,67	24,44	15,56	4,44	1,11	100
S2Q3	**N.P**	29	17	15	7	20	2	90
Percentage	**%**	32,22	18,89	16,67	7,78	22,22	2,22	100
S2Q4	**N.P**	20	31	17	12	8	2	90
Percentage	**%**	22,22	34,44	18,89	13,33	8,89	2,22	100
S2Q5	**N.P**	36	39	8	0	2	5	90
Percentage	**%**	40,00	43,33	8,89	0,00	2,22	5,56	100
S2Q6	**N.P**	31	18	20	14	6	1	90
Percentage	**%**	34,44	20,00	22,22	15,56	6,67	1,11	100

Note. Q/P: questions and participants**; S3:** section (3); **Q:** question; N.P: number of participants**.**

S2Q1: I am ready to use mobile devices for learning purposes
S2Q2: I need training to use mobile devices for learning purposes
S2Q3: I can afford the payment of internet access for learning purposes
S2Q4: I can afford the payment of texting (i.e., SMS) for learning purposes
S2Q5. I want to use my own mobile devices for learning purposes
S2Q6: I want the administration to provide me with mobile devices for learning



Graph 7: Students' Readiness to Adapt Mobile Education

This section of the survey asked students to measure their readiness to adapt mobile assisted language learning. Surprisingly, almost all students, ninety percent of responses, confirmed that they are ready to integrate mobile assisted language learning. Also, participants were asked if they need training to use mobile for learning objectives. Participants who said they do not need any training represents nineteen percent of the sample. However, students who admitted their willingness to receive some training represents around half participants, fifty three percent. Similarly, half students (50%) of participants said that they can afford to pay the fee of internet access for learning purposes. A slightly significant number of students (about fifteen) who neither agree nor disagree with the idea. The rest, ninety eight percent of students did not accept the idea, however. As the results of the S2Q4 illustrate, a large number of participants, fifty two out of ninety said they can pay the texting fees, if that was as part of their learning. The other participants who had no opinion on whether they can afford the payment of texting for learning objectives represents about eighty percent of students. The rest twenty percent showed their disagreement with the idea. The S2Q5 and S2Q6 ask students if they want to use their own mobile devices or they want the university to provide them with these technological tools, as far as the implementation of mobile assisted language learning is concerned. There was a high proportion (74 students, as indicated in **Table 3. 7**) who said they want to use their own mobile devices for that purpose. Surprisingly, also a significant number, forty eight responses, who claimed their willingness to get mobile devices from their

institutions. Nevertheless, about twenty two percent of participants chose neither agree nor disagree.

Table 10: Teachers' Readiness to Adapt Mobile Education.

Q/P	N.P	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	No Response	Total
S2Q1	**N.P**	2	2	2	1	0	0	7
Percentage	%	28,57	28,57	28,57	14,29	0,00	0,00	100
S2Q2	**N.P**	4	1	2	0	0	0	7
Percentage	%	57,14	14,29	28,57	0,00	0,00	0,00	100
S2Q3	**N.P**	2	1	2	0	1	1	7
Percentage	%	28,57	14,29	28,57	0,00	14,29	14,29	100
S2Q4	**N.P**	2	3	1	1	0	0	7
Percentage	%	28,57	42,86	14,29	14,29	0,00	0,00	100
S2Q5	**N.P**	2	4	1	0	0	0	7
Percentage	%	28,57	57,14	14,29	0,00	0,00	0,00	100
S2Q6	**N.P**	2	0	2	0	3	0	7
Percentage	%	28,57	0,00	28,57	0,00	42,86	0,00	100

Note: Q: question; **N.P:** number of participants; **Q/P :** questions/participants

S2Q1: I am ready to use mobile devices for learning purposes

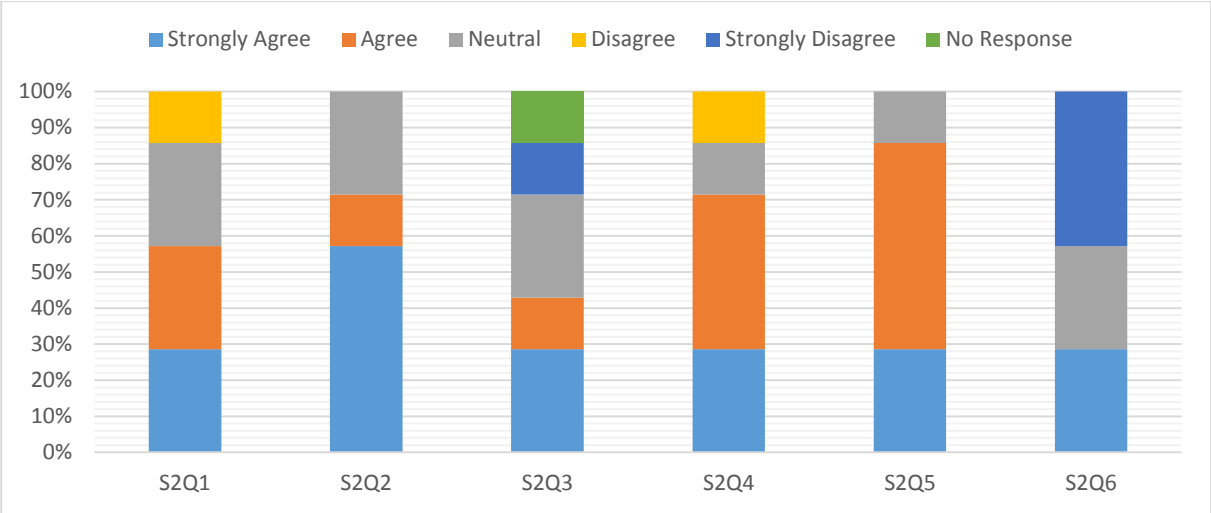
S2Q2: I need training to use mobile devices for learning purposes

S2Q3: I can afford the payment of internet access for learning purposes

S2Q4: I can afford the payment of texting (i.e., SMS) for learning purposes

S2Q5: I want to use my own mobile devices for learning purposes

S2Q6: I want the administration to provide me with mobile devices for learning



Graph 8: Teachers' Readiness to Adapt Mobile Education

As illustrated by the graph, teachers' answers to the S2Q1 showed that about half of responses indicated their readiness to implement mobile language learning. Nevertheless, only one teachers who express their disagreement. Moreover, a high proportion of teachers said that they need training to teach with mobile devices, and the rest two teachers took a neutral point of view, and only one (14, 29%) indicated that they do not need any kind of training to teach using mobile devices. On the other hand, responses to question S2Q3, as can be seen from the graph, showed that there are about forty two percent of teachers who confirmed their ability to afford the costs of internet payment. Additionally, five out of seven teachers said they can afford the payment of texting, if that was required for them to deliver some learning content via texting. Not surprisingly, the majority (around 85%) of teachers point out to their willingness to use their own devices for teaching purposes. Accordingly, forty two percent of teachers showed their strong disagreement to have their institution providing them with mobile technology tools for teaching purposes.

Section (3): Student/teachers' attitude toward the use of mobile devices inside classroom.

This section aims to find out both students and teachers' attitude toward the benefits of mobile assisted language learning, as a material inside classroom. Both participants: teachers and students answered a nine items in a form of a five-points Likerts-scale type of question (strongly agree, agree, neutral, disagree, and strongly disagree).

Table 11: The Use of Mobile Devices Inside Classroom: Students' Attitudes.

Q/P	**N.P**	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	No Response	Total
S3Q1	**N.P**	24	43	12	8	2	1	90
Percentage	%	26,67	47,78	13,33	8,89	2,22	1,11	100
S3Q2	**N.P**	18	38	16	11	7	0	90
Percentage	%	20,00	42,22	17,78	12,22	7,78	0,00	100
S3Q3	**N.P**	16	35	15	16	7	1	90
Percentage	%	17,78	38,89	16,67	17,78	7,78	1,11	100
S3Q4	**N.P**	21	40	14	9	6	0	90
Percentage	%	23,33	44,44	15,65	10,00	6,67	0,00	100
S3Q5	**N.P**	16	26	18	17	13	0	90
Percentage	%	17,78	28,89	20,00	19,89	14,44	0,00	100
S3Q6	**N.P**	16	31	24	12	7	0	90
Percentage	%	17,78	34,44	26,67	13,33	7,78	0,00	100
S3Q7	**N.P**	16	26	18	17	13	0	90
Percentage	%	17,78	28,89	20,00	18,89	14,44	0,00	100
S3Q8	**N.P**	19	32	27	6	4	2	90
Percentage	%	21,11	35,56	30,00	6,67	4,44	2,22	100
S3Q9	**N.P**	8	27	31	13	10	1	90
Percentage	**%**	8,89	30,00	34,44	14,44	11,11	1,11	90

Note. Q/P: questions and participants**; S3:** section (3); **Q:** question; N.P: number of participants.

S3Q1: Mobile devices can be used for learning purposes inside classroom

S3Q2: Mobile devices can enhance collaboration inside classroom

S3Q3: The use of mobile devices inside classroom enhance interaction

S3Q4: Mobile devices should be allowed as a learning material

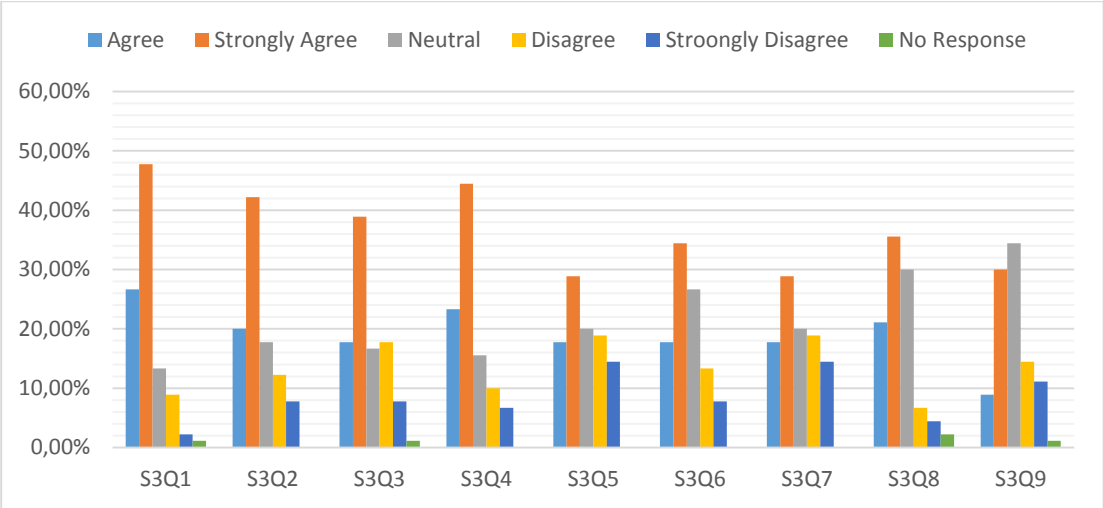
S3Q5: Mobile devices should be encouraged inside classroom

S3Q6: Mobile devices are more suitable for learning than printed material

S3Q7: The use of mobile devices inside classroom is better than computers

S3Q8: Mobile devices can be used as a supplementary to printed material

S3Q9: Mobile devices are a tool for distraction inside classroom



Graph 9: The Use of Mobile Devices Inside Classroom: Students' Attitudes

The graph show the results of students' attitude toward the potential usages of mobile devices inside classroom. Firstly, it is clear from the graph that there is an overall agreement with the eight items, still a significant number of students who chose to neither disagree nor disagree with some items. When students were asked, about seventy three said that mobile devices can be used for language learning inside classroom, around sixty percent of students said that mobile learning can enhance collaboration, and fifty five said that it will enhance interaction inside classroom.

Concerning (S3Q3 and **S**3Q7), approximately sixty seven percent said that mobile devices should be allowed as a learning material, and only forty seven who said that they should be encouraged. When asked whether they think that mobile devices are tools for distraction inside classroom, only thirty eight percent agreed, still a high proportion (34, 44%) took a neutral orientation. When comparing learning materials: printed content, computer, and mobile devices, survey results showed that about half students said that mobile devices are better than printed materials, a forty percent said that mobile devices are better than computer, and sixty seven percent said that mobile devices are better used as a material to support printed materials.

What do you think of using mobile devices for learning purposes inside classroom? (for students).

This questions was addressed, particularly, to students in an open-ended format. The aim from this question is gaining more qualitative data since all sections of students' questionnaire were in a form of closed-ended items. After reviewing students' answers, it was found that 73 students responded in favor of mobile assisted language learning inside classroom, 11 left the answer space blank, and 13 said it is negative. Students who said that MALL is an effective approach of learning foreign languages. The seventy three answers of students are classified as follow:

a. Usefulness of MALL: students stated that mobile phones are useful for learning purposes, and help them in their learning performances.
b. Easy to use: mobile phones are perceived as an easy tool to use for learning purposes.
c. Motivating: a significant number of students said that they feel comfortable while interacting with their mobile phones.
d. Gain more time and minimize effort: the ability of mobile phones to access the internet were cited as useful for learner to obtain the needed information anywhere everywhere they wanted it.
e. Promote interaction inside classroom: as a learning tool, mobile devices are seen by a number of students as a tools that can help interaction inside classroom.

On the other hand, a small number of students believe that mobile devices are not suitable for language learning.

Table 12: The Use of Mobile Devices Inside Classroom: Teachers' Attitudes.

Q/P	**N.P**	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Total
S3Q1	**N.P**	2	2	1	1	1	7
Percentage	%	28,57	28,57	14,29	14,29	14,29	100
S3Q2	**N.P**	0	4	1	1	1	7
Percentage	%	0,00	57,14	14,29	14,29	14,29	100
S3Q3	**N.P**	0	1	3	2	1	7
Percentage	%	0,00	14,29	42,86	28,57	14,29	100
S3Q4	**N.P**	0	4	2	0	1	7
Percentage	%	0,00	57,14	28,57	0,00	14,29	100
S3Q5	**N.P**	1	0	0	4	2	7
Percentage	%	14,29	0,00	0,00	57,14	28,57	100
S3Q6	**N.P**	1	3	2	0	1	7
Percentage	%	14,29	42,86	28,57	0,00	14,29	100
S3Q7	**N.P**	1	0	0	4	2	7
Percentage	%	14,29	0,00	0,00	57,14	28,57	100
S3Q8	**N.P**	2	4	0	0	1	7
Percentage	%	28,57	57,14	0,00	0,00	14,29	100
S3Q9	**N.P**	0	2	2	0	3	7
Percentage	**%**	0,00	28,57	28,57	0,00	42,86	100

Note. Q/P: questions and participants**; S3:** section (3); **Q:** question; N.P: number of participants.

S3Q1: Mobile devices can be used for learning purposes inside classroom

S3Q2: Mobile devices can enhance collaboration inside classroom

S3Q3: The use of mobile devices inside classroom enhance interaction

S3Q4: Mobile devices should be allowed as a learning material

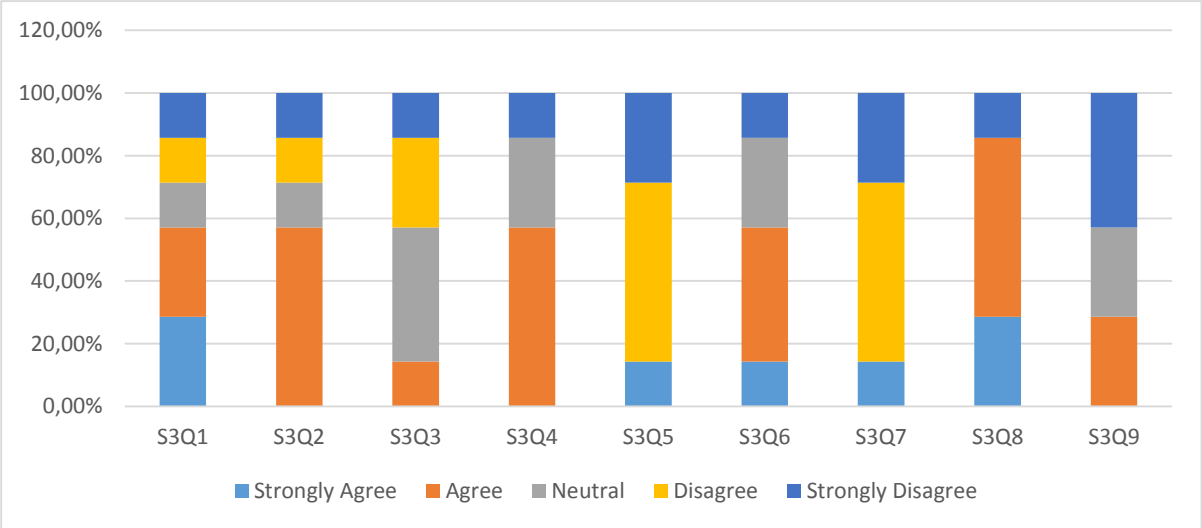
S3Q5: Mobile devices should be encouraged inside classroom

S3Q6: Mobile devices are more suitable for learning than printed material

S3Q7: The use of mobile devices inside classroom is better than computers

S3Q8: Mobile devices can be used as a supplementary to printed material

S3Q9: Mobile devices are a tool for distraction inside classroom



Graph 10: The Use of Mobile Devices Inside Classroom: Teachers' Attitudes.

The main aim of this section is to investigate teachers' attitude toward the potential usages of mobile devices inside classroom. Teachers' responses to S3Q1 showed that above half of them (57, 14%) agreed on the possibility of mobile assisted language learning to enhance collaboration inside classroom. However, around 42% disagree with the possibility of mobile devices to enhance classroom interaction S3Q6. With regard to S3Q2, about fifty six percent of teachers express their agreement with the potentiality of mobile devices for learning purposes inside classroom.

In addition, in questions (S3Q4, S3Q8, and S3Q9) around fifty six percent of teachers welcome the idea that mobile devices are better than printed material, and almost all teachers (85%) said that mobile devices can be used as a support to printed content. But, (85%) of teachers express their disagreement with the idea that mobile devices are better than computer, with regards to language teaching. Similarly, a significant percentages (57, 14) of teachers said that mobile phones should be allowed inside classroom, yet about (85%) of participants, astonishingly, express their disagreement to encourage mobile assisted language learning

(S3Q3). As for the (S3Q5), as depicted in the table, there were three teachers who disagree with the idea that mobile phones are tools for distraction.

Section (4): Students/teachers' attitudes toward the challenges affecting MALL.

This section was composed of a multiple choice questions. Both students and teachers were asked to mark, among eight statements, the factors that they think might affect the integration of Mobile-assisted language learning. After encoding the data and using Microsoft Excel to calculate the results, the following results were obtained:

Table 13: Students/Teachers Perception Regarding the Challenges Facing MALL.

Statements	Students	Percentage%	Teachers	Percentage%
S1	30	33,33	0	0,00
S2	45	50,00	4	57,14
S3	30	33,33	2	28,57
S4	48	53,33	7	100,00
S5	34	37,78	4	57,14
S6	42	46,67	6	85,71
S7	53	58,89	2	28,57
S8	14	15,56	2	27,57

S1: I do not think that mobile devices are useful for learning/teaching purposes

S2: Mobile devices are too expensive

S3: Mobile devices have small screen and small keypad

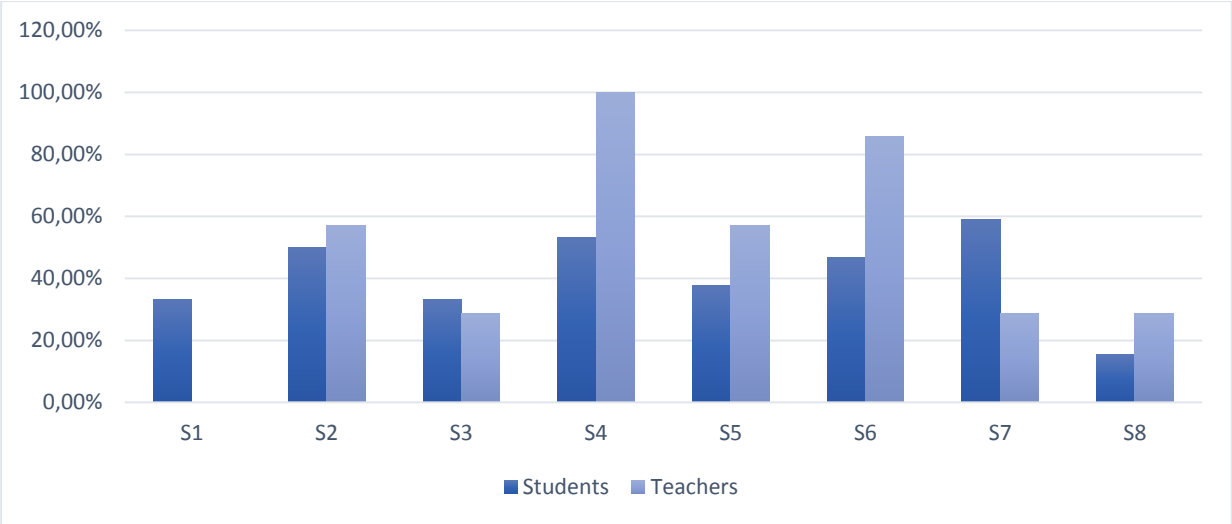
S4: Mobile devices cannot be controlled inside classroom

S5: The internet access is too expensive

S6: Students have different mobile technology devices

S7: Teacher will not accept it

S8: Lack of training to use mobile devices for learning purpose



Graph 11: Students/Teachers Perception Regarding the Challenges Facing MALL.

The main objective of this section is to find out both students as well as teachers attitude toward the main challenges that might affect the adaptation of mobile assisted language learning in their context of learning/teaching. Both participants were given eight statement believed to be a significant challenges to the implementation of mobile assisted language learning. Since this question was given in a type of multiple choice question, participants were told that they might mark more than one statement.

As illustrated by the graph, teachers agree upon four (S2, S4, S5, S6) main reasons that might affect mobile assisted language learning. Fifty percent of teachers agree on the idea that mobile devices are too expensive. Surprisingly, all teachers (100%) believe that mobile devices cannot be controlled inside classroom. Additionally, eighty five percent of teachers also think that the inequity of mobile devices ownership among students is a problem that might stand as an obstacle while implementing MALL.

From students' point of view, the significant challenges agreed upon are (S2, S4, S6, and S7). With regard to S1, about fifty percent of students agree on the cost of mobile devices as a main challenge of MALL. Also, about half students (50%) agree with teachers on the idea that mobile devices cannot be controlled inside classroom. Likewise, around forty seven students mark S6. Bewilderingly, more than half students (58%) believe that teacher will not allow them to use their mobile phones for learning purposes.

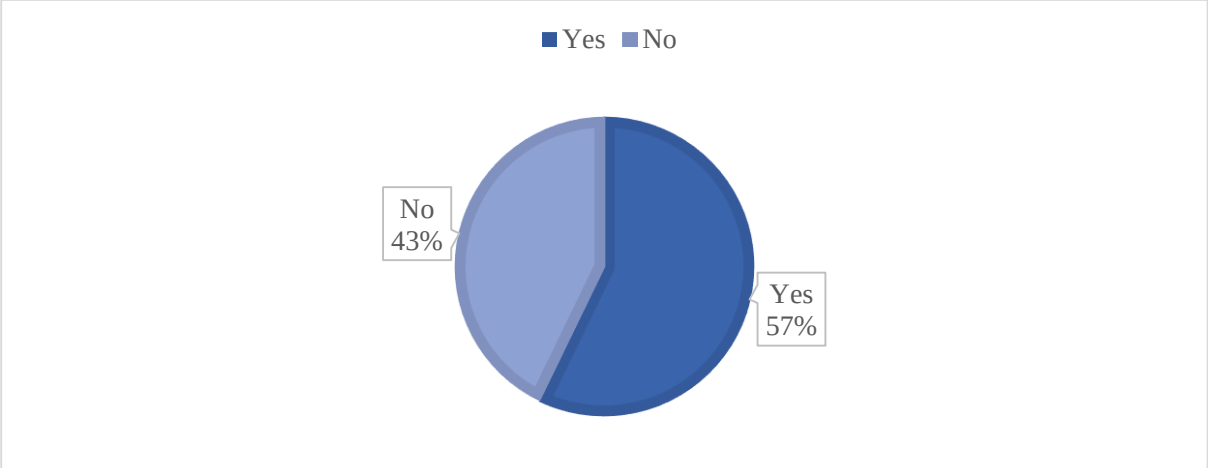
Do you allow the use of mobile phones inside classroom? (For teachers)

Do please justify!

This question was addressed to teachers to know whether they tolerate the use of mobile phone inside classroom or not.

Table 14: Teachers Command of Mobile Use Inside Classroom

Answers	**Yes**	**No**
Frequency	3	4
Percentage	43%	57%



Graph 12: Teachers Command of Mobile Use Inside Classroom

As the pie chart indicates, four out of seven teachers responded that they allow the use of mobile phones inside classroom, while the rest three teachers indicated that they do not allow mobile phone usage inside classroom. This question was followed up with another inquiry in which teachers have to justify whatever their responses were. For the category of teachers who indicates that they allow the use of mobile phone inside class, this is because, they said, that mobile phones can be used for learning purposes, particularly as a support material. One teachers said that "they are allowed according to purpose and need but not much, they are used in case of coping a text and translating words, as well listening to videos…)". Another

teachers justify his answer by saying that “they allow easy and quick access to e-learning and materials (audio-videos-dictionaries etc.)”.

On the other hand, teachers who ban mobile uses inside classroom said that this is because “the presence of the teachers is vital” and the other said that for the time being “we are not yet able” to implement mobile learning, as we need “more time and practice”.

4.3 If you observe your students using their mobile devices inside classroom, what is your immediate reaction?

This question was asked aiming to finding out what are teachers’ reaction concerning students’ uses of mobile technologies inside classroom. The seven teachers responded to this question. And approximately all their answers were positive, as it is “natural” or they “don’t mind” as far as the uses of mobile phones is for learning purposes. However, one teachers said that if he observes one of his students using their mobile devices he would order him to “shut it off”.

4.4 What do you think your students are doing with their mobile devices inside classroom?

All teachers’ answers to this question include translating as the main activity, they think, that most students are practicing through their mobile phones. However, among the other cited activities is texting, chatting, listening to music, and playing games, and “even writing short paragraphs”, as one teacher indicated.

Section (5): Students/teachers attitude toward MALL

Using a Likert-scale type of question (Strongly agree, agree, neutral, disagree, strongly disagree), participants were asked to answer ten items. The first five items are about language skills (listening, speaking, reading, writing), and vocabulary. The second, five items were mainly concerned with students motivation to learn language using mobile technology.

Students’ attitude toward MALL and language Skills.

In this subset, participants (students) were asked to identify their attitude towards the possibility of practicing language skills (listening, writing, speaking, reading, and vocabulary) using mobile computing devices such as mobile phones.

Table 15: Students 'Attitude towards MALL and Language Skills

Q/P	N.P	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Strongly Agree	Total
S5Q1	**N.P**	50	28	5	3	1	3	90
Percentage	**%**	55,56	31,11	5,56	3,33	1,11	3,33	100
S5Q2	**N.P**	4	14	29	29	11	3	90
Percentage	%	4,44	15,56	32,22	32,22	12,22	3,33	100
S5Q3	**N.P**	21	31	15	13	5	5	90
Percentage	%	23,33	34,44	16,67	14,44	5,56	5,56	100
S5Q4	**N.P**	14	38	19	10	4	5	90
Percentage	%	15,56	42,22	21,11	11,11	4,44	5,56	100
S5Q5	**N.P**	35	36	12	3	1	3	90
Percentage	%	38,89	40,00	13,33	3,33	1,11	3,33	100

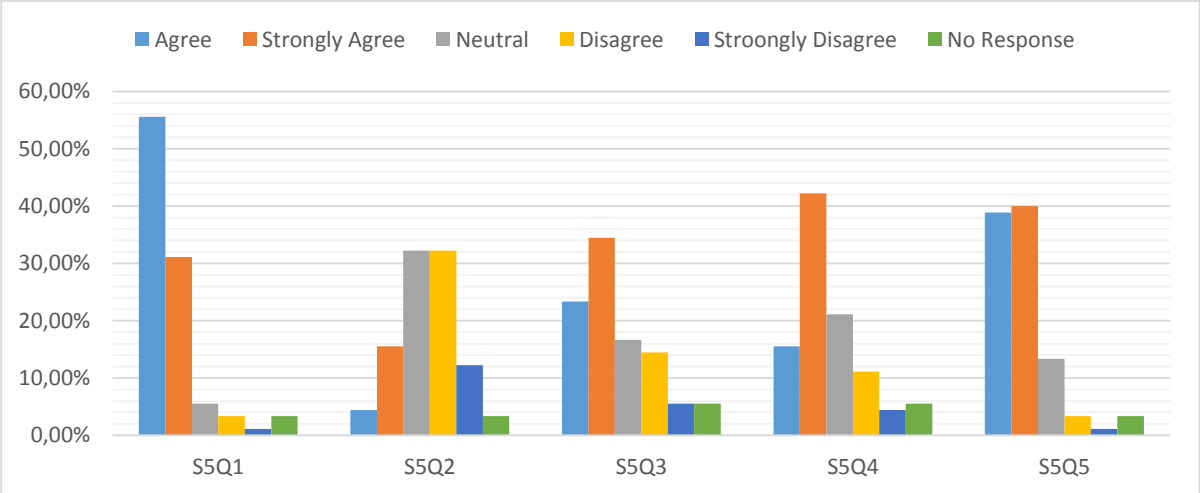
S5Q1: I think that mobile devices are good tool for listening activities

S5Q2: I think that mobile devices are good tool for writing activities

S5Q3: I think that mobile devices are good tool for speaking activities

S5Q4: I think that mobile devices are good tool for reading activities

S5Q5: I think that mobile devices are good tool for vocabulary activities



Graph 13: Students' Attitude towards MALL and Language Skills.

Aiming to find out students attitudes towards mobile assisted language learning, participants were requested to answer to what extent they believe that mobile devices can be used to teach (listening, speaking, writing, speaking, and vocabulary).

As illustrated by the graph, eighty six percent of respondents believe that mobile devices can be exploited to practice listening activities. As far as the second item S5Q2 is concerned, there was about thirty two percent of participants who indicates their neutral attitude, still a similar percentage (32, 22%) of participants who disagree with the idea that mobile devices are suitable for practicing a certain writing activities. By contrast, a low percentage, about fifteen percent, agreed with the notion. Those who strongly agree are but a few as well, around eleven percent.

With regard to (S5Q3) more than half of informants (57%) consider the mobile phone as a material for teaching certain speaking activities. By contrast, about nineteen percent of informants who do not think that they can practice any speaking activities by using their mobile phones. Also, about half students (57%) have shown their agreement with the possibility of providing some reading activities using mobile phones. Furthermore, there were a remarkable percentage, about seventy eight of respondents confirm the idea that mobile phone can be used for learning vocabulary activities.

Teachers' Attitude towards MALL and Language Skills.

In order to gain a clear understanding of the similarities and differences between students and teachers toward the potential of MALL as a new approach to teach language skills mainly listening, speaking, reading, writing, and vocabulary.

Table 16: Teachers' Attitude toward MALL and Language Skills

Q/P	N.P	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Strongly Agree	Total
S5Q1	**N.P**	4	2	1	0	0	0	7
Percentage	**%**	57,14	28,57	14,29	0,00	0,00	0,00	100
S5Q2	**N.P**	1	1	3	0	1	1	7
Percentage	%	14,29	14,29	42,86	0,00	14,29	14,29	100
S5Q3	**N.P**	1	4	1	0	0	1	7
Percentage	%	14,29	57,14	14,29	0,00	0,00	14,29	100
S5Q4	**N.P**	0	4	1	0	1	1	7
Percentage	%	0,00	57,14	14,29	0,00	14,29	14,29	100
S5Q5	**N.P**	2	4	0	0	0	1	7
Percentage	%	28,57	57,14	0,00	0,00	0,00	14,29	100

Note. Q/P: questions and participants**; S5:** section (5); **Q:** question; **N.P:** number of participants.

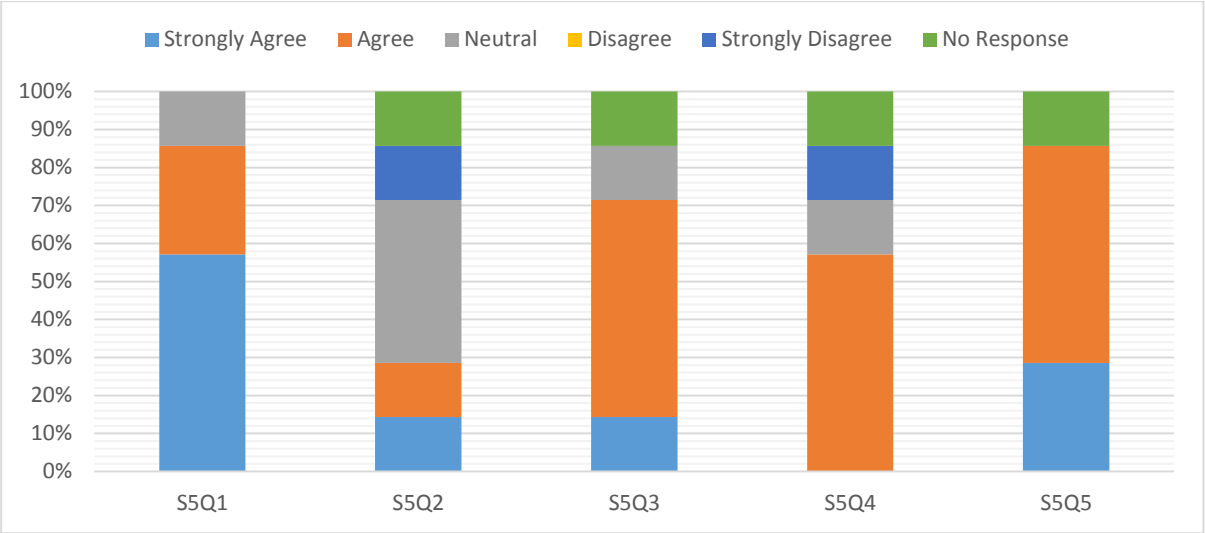
S5Q1: I think that mobile devices are good tool for listening activities

S5Q2: I think that mobile devices are good tool for writing activities

S5Q3: I think that mobile devices are good tool for speaking activities

S5Q4: I think that mobile devices are good tool for reading activities

S5Q5: I think that mobile devices are good tool for vocabulary activities.



Graph 14: Teachers 'Attitude toward MALL and Language Skills.

As is illustrated by the graph, there is a general consensus, among teachers participant, upon the likelihood of using MALL in teaching the following language skills (listening, speaking, reading, and vocabulary). For the S5Q1, it is clear from the graph that the majority of teachers (57, 14%) choosing strongly agree, believing that mobile devices can be used as a material to teach listening activities. However, a significant number of teachers (42, 86%) gave a neutral point of view on whether mobile phones can be used to teach the writing skill. As far as the S5Q3 is concerned, there were about seventy seven percent of teachers agreeing on the possibility of using mobile devices for speaking activities. Also, a high percentage of teachers (57, 14%) agreed on the possibility of using mobile phones for reading practices. Likewise, seventy seven percent of teachers agreed, while twenty eight percent chose strongly agree, and twenty percent strongly agree with the possibility of providing vocabulary activities in mobile phones.

Students' Motivation to Learn Language Through Mobile Devices.

Table 17: Students' Motivation to Adapt MALL.

Q/P	N.P	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Strongly Agree	Total
S5Q1	**N.P**	22	35	17	9	2	5	90
Percentage	**%**	24,44	38,89	18,89	10,00	2,22	5,56	100
S5Q2	**N.P**	27	37	11	9	3	3	90
Percentage	%	30,00	41,11	12,22	10,00	3,33	3,33	100
S5Q3	**N.P**	22	35	19	6	5	3	90
Percentage	%	24,44	38,89	21,11	6,67	5,56	3,33	100
S5Q4	**N.P**	21	24	18	14	6	7	90
Percentage	%	23,33	26,67	20,00	15,56	6,67	7,78	100
S5Q5	**N.P**	39	35	7	4	2	3	90
Percentage	%	43,33	38,89	7,78	4,44	2,22	3,33	100

Note. Q/P: questions and participants**; S5:** section (5); **Q:** question; **N.P**: number of participants.

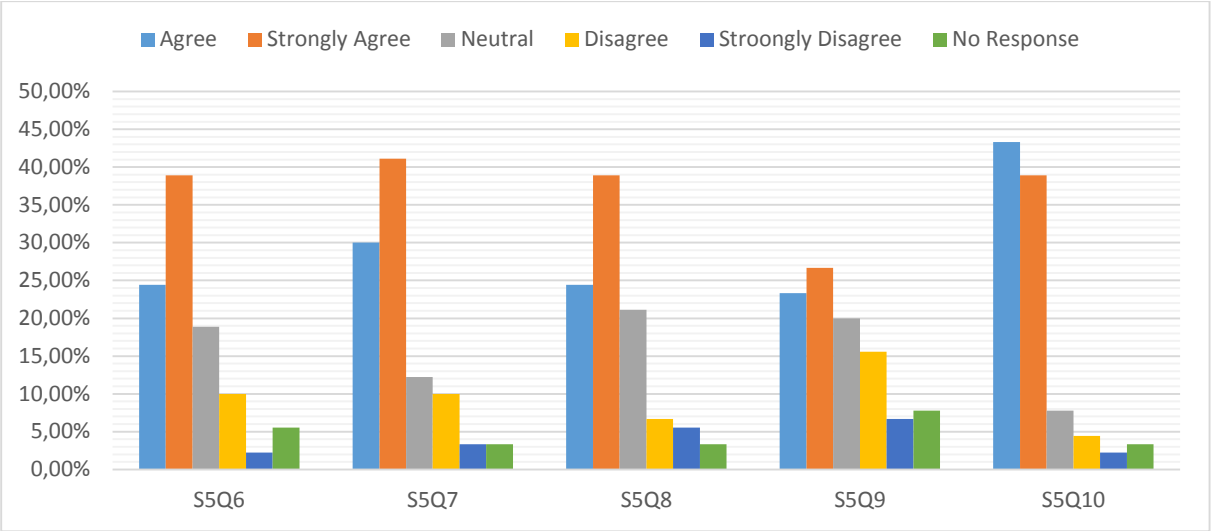
S5Q6: I think I will learn more if I could use my mobile devices

S5Q7: I would appreciate to send my classmates and teacher learning material to their mobile phone through internet, Bluetooth…)

S5Q8: I think I will be motivated if I could use my mobile devices

S5Q9: I think I will participate more if I could use mobile devices

S5Q10: I think that mobile devices are good tools to keep in touch with my classmates and teachers outside classroom.



Graph 15: Students' Motivation to Adapt MALL.

This set of items (S5Q6, S5Q7, S5Q8, S5Q9, and S5Q10) aim to investigates students' perception on whether the use of mobile technology can promote their motivation to learn foreign language. For the S5Q6, the majority of participants, around sixty two percent, who believe they will learn more if they could use mobile technologies. Participants (about 70%), also, express their appreciation to send and receive learning material from their teachers and classmates, using their mobile.

Also, the findings to S5Q8, showed a high percentage (62%) of students who approve that the use of mobile technology can augment their motivation, yet a significant number (19 students) indicate their neutralization. As far S5Q9 is concerned, around forty eight percent of respondents express their willingness to participate more in classroom tasks if they were allowed to employ mobile devices. Also, as seen in the table S5Q10, a large number of students agree with the idea that mobile phones are a good tool to keep in touch with teachers, administration, as well as their classmates.

Teachers' Attitudes towards Students Motivation to Learn Language Through Mobile Devices.

In this subcategory, participants (teachers) were asked to identify their attitude concerning whether they believe that MALL will rise students motivation to learn language.

Table 18: Teachers' Perceptions towards Students Motivation.

Q/P	N.P	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Strongly Agree	Total
S5Q1	**N.P**	1	2	3	0	0	1	7
Percentage	**%**	14,29	28,57	42,86	0,00	0,00	14,29	100
S5Q2	**N.P**	4	0	0	3	0	0	7
Percentage	%	57,14	0,00	0,00	42,86	0,00	0,00	100
S5Q3	**N.P**	3	1	3	0	0	0	7
Percentage	%	42,86	14,29	42,86	0,00	0,00	0,00	100
S5Q4	**N.P**	1	3	0	2	0	1	7
Percentage	%	14,29	42,86	0,00	28,57	0,00	14,29	100
S5Q5	**N.P**	3	1	2	0	1	0	7
Percentage	%	42,86	14,29	28,57	0,00	14,29	0,00	100

Note. Q/P: questions and participants**; S5: s**ection **(5); Q:** question; **N.P:** number of participants.

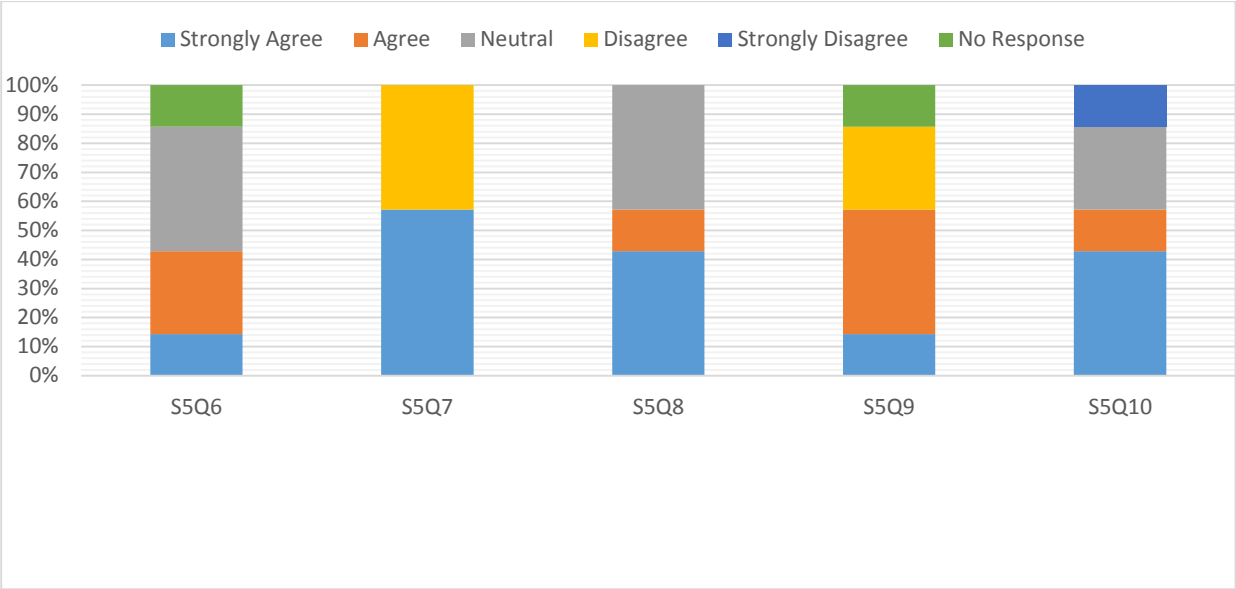
S5Q6: I think students will learn more if they could use their mobile devices

S5Q7: I would appreciate to send my students learning material to their mobile phone through internet, Bluetooth…)

S5Q8: I think students will be motivated if they could use their mobile devices

S5Q9: I think students will participate more if they could use mobile devices

S5Q10: I think that mobile devices are good tools to keep in touch with my students outside classroom.



Graph 16: Teachers' Perceptions towards Students Motivation.

In this set of items, teachers were asked to respond to five questions. The main objective of this set is to measure teachers' attitude towards students, whether or not they believe that students motivation will be increased in case they were allowed to use their mobile devices for language learning. Noting that, the same questions were answered by students.

As is shown by the graph, about forty four percent of teachers who respond to whether they believe that mobile learning can promote students motivation take a neutral point of view. Similarly, another forty four percent of teachers believe that students will learn more if they could use their mobile technology devices for learning purposes. For S5Q7 a high percentage of teachers, about fifty seven percent, who showed that they would appreciate to send their students learning material to their mobile phones, however, the rest forty two percent disagreed to do so. With regard to S5Q8, about half responses believed that students will be motivated if they can use mobile devices for language learning, however, a significant percentage (42%) of responses chose neither agree nor disagree. With regard to S5Q9, teachers who said that they believe that students will participate more if they can use mobile devices represents about fifty six percent, still about twenty eight percent of teachers who disagreed. The responses to S5Q9 show that about fifty six of teachers approve the idea that mobile devices can bring them in touch with their students outside classroom.

Conclusion

This study survey EFL teachers' and students' attitudes towards mobile assisted language learning at Mohamed kheider University-Biskra. In this chapter, the results of participants were analyzed according to five main questions: teachers' and students' frequency of general use of mobile phones in daily tasks such as socializing, entertainment, and educational purposes. Also, the results of participants about their readiness to adapt mobile learning. Third, the use of mobile devices inside classroom. Fourth, the main challenges facing mobile learning. Finally, students' as well as teachers' attitudes towards MALL and its potential to handle teaching language skills such as listening, speaking, reading, writing, and vocabulary.

Discussion of the Results

In this chapter, the statistical findings of data analysis are discussed in the following way:

1) Students/teacher general use of mobile phones in daily tasks.
2) Students/teachers' readiness to adapt mobile education
3) students/teachers' attitude toward the use of Mobile devices inside classroom
4) Students/teachers' attitudes towards the challenges impacting the use of mobile learning
5) Students/teachers' attitude toward learning/teaching (listening, speaking, writing, reading, and vocabulary), and their motivation about implementing MALL.

Students/teacher general use of mobile phones in daily tasks.

The first section of both teachers and students' questionnaires aim to find out participants frequency and tendencies toward the use of mobile phones. This section was subdivided into three secondary subsections: the use of mobile phone for socializing, the use of mobile phone for entertainment and personal management, and the use mobile phone for educational purposes.

The results indicates that the use of mobile phone for socializing purposes is very frequent among both students and teachers. Student's usage of mobile phones includes making calls, sending messages, browsing social networks. However, teachers' usage of mobile phones is devoted mainly to making calls and sending messages. In addition, the use of mobile phones for educational purposes was reported by both students and teachers.

Students/teachers' readiness to adapt Mobile-assisted language learning.

The results of section two indicate that the majority of students 90% and teachers 56% show their readiness to adapt mobile assisted language learning. On the other hand, the results obtained from teachers' questionnaire (question 2, section 5) reveals that teacher, however their positive attitude toward MALL, have a negative attitude toward the possibility of applying MALL in their context of teaching. This is a result, as they justify, of lack of infrastructure such as internet access outside and inside classes and large classes, 50 students per class. In other words, teachers reveal positive attitude toward the effectiveness of MALL as an approach of teaching and learning foreign languages, but expressed a slightly negative attitude toward the

possibility of applying such approach in their context of teaching. This is not to say that they completely refuse the deployment of MALL in the context of Biskra University, but, as they said, more time and preparation is needed.

Student/teachers' attitude toward the use of mobile devices inside classroom.

As the results indicated earlier (**Graph 3. 9**), most students show their positive attitude toward the integration of mobile devices inside classroom. Students show that mobile devices can enhance classroom collaboration 62%, and student-student; teacher-student interaction 73%. By contrast, teachers seem to have a negative attitude toward the potential of mobile learning to augment classroom interaction (28%). Further, both students 67% and teachers 57% believe that mobile devices should be allowed inside classroom. On the other hand, only one teacher (28%) support the encouragement of mobile devices. In other words, teachers wanted to say that they have no problem with students using their mobile devices inside classroom, however the encouragement of mobile learning is still early.

Students/teachers' attitudes toward the challenges impacting MALL.

As is illustrated (**Graph 3. 11**), the most cited challenges, perceived by EFL students and teachers Biskra university, that might impact the integration of MALL include:

First, the cost. "Cost is one of the biggest drawbacks in using mobile learning" (Masrom and Ismail, 2010). As shown by the table, (**Table 3. 11**) 50% of students and 57% of teachers perceive the expensiveness of mobile devices as one of the challenges that might affect mobile assisted language learning in their case. Likewise, the cost of internet access was reported by 37% of students and around 57% of teachers. However significant, the challenge posed by cost may not continue for long, as the Algerian local mobile industry such as Condor ^{tm} has already made its way into the Algerian mobile market. Also, the competition among mobile manufacturing is in constant increase; as a consequence, the decrease of mobile devices is promised. With regards to internet access, this is no longer a challenge, since modern smart phones have the ability to connect through Wi-Fi.

Second, "there is a distraction factor with mobile phones" (UNESCO, 2012). About 53% of students and all teachers' participants 100%, in this study, believe that mobile devices might not be controlled inside classroom. The inability of teachers to control mobile devices inside classroom can be attributed to various factors, among them: large classes, cultural and

intellectual awareness of students. Teachers of foreign language at Mohamed Kheider University are teaching large classes, so for teachers to move inside class and to check whether students are using mobile phones for learning or for no learning purposes is somehow hard to achieve. Also, the lack of students' awareness concerning constructive use of mobile devices for learning purposes might pave the way for distraction as well.

Third, the results shown in (**Table 3. 11)** indicated that about 46% of students and 85% of teachers believed of the inequity of mobile devices ownership as a significant challenge of implementing MALL. According UNESCO (2012) " The fact that there is no equitable access of phones (ownership versus access, types of handsets, usage abilities based on affordability, etc.) makes using mobiles in formal education based on a bring-your-own-technology (BYOT) model very challenging. (p. 12). Thus, the ownership of varied mobile devices can affect MALL implementation. For instance, if some students own smart phones and other own just simple mobile phone teacher may find difficulty in distributing the same application for all students. But, since a high percentage of students 83% and teachers 85% show their inclination to use their mobile devices, this seems no longer a challenge facing MALL application.

Fourth, about 58% of students who mark the item' teachers will not accept it' as a potential impact facing MALL integration. Nevertheless, five out of seven teachers, most surprisingly, did not perceive this as a real challenge. Students' perception of teachers' reluctance to allow mobile devices inside classroom may stem from students' unawareness of their teachers' real attitude toward mobile assisted language learning.

Students/teachers attitude toward learning/teaching (listening, speaking, writing, reading, and vocabulary).

According to Beatty (2013) "The receptive skills of listening and reading are a more natural fit to the small screens and headphones of many mobile learning devices, particularly mobile phones, but there are also opportunities for students to practice their speaking and writing" (p.6). The findings of this study indicate both students and teachers' positive attitude toward the potential of mobile devices to leverage listening, speaking reading, and vocabulary activities. However, the majority of both participants were skeptical about the potential of mobile phone to handle writing activities. The suspicion of students and teachers toward the

possibility of delivering writing activities on mobile phones might be attributed to technical constrained such as small screens and keypads.

Second part of section five of the questionnaires was designed to investigate students' attitude toward their motivation to use mobile devices as a learning tool. The results of the finding indicated that more than half students 62% believe that they feel motivated when using their mobile phones. This finding correspond also to the qualitative results obtained from question (1) of section three. In this question, students stated that they feel comfortable and enjoy learning when they use their mobile phones for educational objectives.

Correspondingly, around 56% of teachers, likewise, believe that students' motivation will increase if they could use their mobile devices. In addition, a great number of students 81% as well as teachers 56% believe that mobile phones are a good tool to keep in touch with one another. To date, thanks to mobile technology, teachers can reach their students not only inside classroom, but also outside classroom. This can be accomplished through mobile phones basic function such as calls and texting, as well as social networks and emails.

General Conclusion

In this study, we surveyed both students' and teachers' attitude toward Mobile-assisted language learning (MALL). Mobile devices, these smart technology are invading every aspect of our lives, including education. Further we investigate participants' perception about the potential of MALL in teaching learning language skills and tried to prove that its use will create a flexible setting for students to learn and teacher to teach.

In line with Sharples, Taylor, and Vavoula (2007) who claimed that" Every era of technology has, to some extent, formed education in its own image" (p. 221), Beatty (2010), following the history of technology, asserts that the 1960s was the age of the mainframe computers, the 1980s was the age of the PCs, the 1990s was the age of the internet, and the twenty first century is the age of mobile devices. In other words, society as well as education are "going mobile" (Chinnery, 2006). Thus, both language teachers as well as learners need to evaluate and examined the value of today's technology (mobile devices) and its contribution to language teaching.

By the same token, Kukulska-Hulme (2013a) states that "While traditional skills of reading, writing, listening, and speaking remain the foundation stones of language learning, the new century calls for greater learner autonomy, flexible use of new tools, and sophisticated use of social networks to keep up with the pace of change." Consequently, "A smart learner in the 21st-century is one who adapts a lifelong learning attitude, recognizes that effective global cross-cultural communication is a strong driving force for language learning, and uses technology to enhance their language learning potential." Thus, both the language teacher and the language learner have to build a close rapport with technology in general and mobile technology in particular. Moreover, mobile devices (smart phones) are the promising future of language learning since (Traxler, 2007) these devices are making language learning more personalized, authentic, as well as situated.

However significant mobile devices as learning materials, their use is still marginalized, if not totally banned. Consequently, this study aim to find out both EFL students and teachers attitude toward the use of mobile devices inside classroom and their perception about the potential of MALL as an approach to teaching foreign language skills. Correspondingly, this study uses as its sample both EFL teachers and students at Mohamed Kheider University-Biskra. The instrument used for collecting data from participants is the questionnaire. The

questionnaires opted to answer questions related to teachers as well as students' attitude toward mobile assisted language learning (MALL); points of divergent as well as convergent between teacher and students regarding the effectiveness of MALL, and the potentiality of implementing MALL at Mohamed Kheider University.

The finding of this study revealed that both students as well as teachers had positive attitude toward mobile assisted language learning. Likewise, both show a general agreement on the potential of MALL as a promising approach to learning foreign languages. Listening, speaking, reading, and vocabulary were identified as the most appropriate skills that can be taught through mobile devices such as mobile phones. By contrast, both participants were uncertain on the potential of MALL to enhancing academic writings. The latter is not surprisingly since most critics focus on the small screen and keypads as most challenging of mobile-assisted language learning to handle activities such as writing.

Moreover, students have shown their willingness and preparedness to adapt mobile assisted language learning. But, teachers still perceive the process of mainstreaming MALL is not appropriate for the time being. In other words, teachers believed that their context of teaching is not yet ripe for conventionalizing MALL; more time, training, and pedagogical infrastructures were among the acknowledged needs that highlighted by most teachers. This is not to deny the fact that teachers have a positive attitude toward MALL as a promising approach of teaching/learning foreign languages. Furthermore, the majority of students and teachers showed their inclination to adapt their own mobile devices for learning/teaching rather than obtaining these devices from their institution.

Pedagogical Implications

The findings of this study suggest a common positive attitude among EFL students and teachers toward mobile assisted language learning as an effective approach of language teaching. And, although participants show their positive attitude toward the possibility of practicing language activities such as listening, speaking, reading and vocabulary. The majority of them show their reservation toward the possibility of delivering writing activities on mobile phones. To better understand if MALL can handle writing activities, more experimental research can be conducted.

The results indicted also that both students and teachers show their willingness to adapt their own mobile devices for language learning rather than using mobile devices provided by

their institution. With regard to this finding, the implication of mobile devices for formal learning at Mohamed Kheider University might adapt the Bring Your Own Devices (BYOD) model. However, this seems challenging (UNESCO, 2012 p. 12), as most participants complaint about the expansiveness of internet access. Alternatively, the Shared Cost Provided Devices (SCPD) model (Tsinakos, 2013) is best suited for such situation. In this model, teachers and students might use their own mobile devices for learning, while the institution provide them with other facilities such as Internet access.

Among the secondary findings of this study is the significant neutral attitudes expressed by both students and teachers in some sections of the questionnaire. This indicate that these participants were not aware of certain MALL activities, as MALL is not integrated in their curriculum of teaching/learning. Consequently, there is a need to rise both students and teachers awareness of the effectiveness and the innovation that MALL has brought to language learning. This can be accomplished through training sessions from experts and organizing seminars to further students and teachers' awareness of what is MALL and what are the appropriate ways of implementing it.

Limitation of Study

This study examines current EFL students and teachers' attitude toward the effectiveness of mobile assisted language learning. In this study a number of limitation can be identified. First, the setting. The participants of this study are EFL teachers and students of the university of Mohamed Kheider-Biskra. This means that any generalization to this findings can only be made in this setting. Second, the sample (students). With regard to students, the sample of this study consisted mainly of undergraduate students -Master one students. Third, the instrument. All the data gathered and presented are a finding of only one instrument-the questionnaire. Although the questionnaire has been considered as a suitable instrument for survey research, other instruments such as interview and classroom observation would be a good support for questionnaire to better understand the problem under investigation; however, due to time constraints these instruments were not used.

Suggestion for Future Research

This study surveyed the current attitudes of both EFL students and teachers about mobile assisted language learning. Based on the finding as well as the limitation of this study other researchers can further explore as well as investigate mobile assisted language learning in other

universities and with other participants. Also, in order to gain an in-depth understanding of MALL in Algeria, further research can be conducted with participants in high and middle schools. Moreover, since this study focused only on participants attitudes, other research, using experimental method, can be conducted as well.

Recommendations

After surveying students and teachers attitude toward the effectiveness of mobile assisted language learning, a number of recommendation can be suggest:

Although mainstreaming MALL is not yet possible, thinking about it is timely.

Teachers can use mobile devices for teaching activities including listening, speaking, reading, and vocabulary.

Rising students and teachers awareness about the effectiveness of MALL is required

Teachers should allow the use of mobile devices inside classroom as far as it is used for learning activities.

Authorizing internet access inside as well as outside classrooms is urgent

A collaboration between higher education institutions and local mobile technology industry such as Condor™ would be beneficial.

Also, a collaboration between higher education institutions and local wireless technologies (Mobilis, Ooredoo, Djezzy) would be beneficial, too.

Bibliography

Abbasi, M., & Masoud, H. (2013). *The impact/s of Using Mobile Phone on English Language Vocabulary Retention*. International Research Journal of Applied and Basic Sciences, *4*(3), 541-547.

Bashar, A. (2012). Teachers' Attitudes in the Workplace: Myth and/ or Reality? *Revue des esince Humaines*, 7-21.

Beatty, K. (2010). *Teaching and Researching Computer-Assisted Language Learning* (2nd ed.). Harlow: Pearson Education Limited.

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

Belanger, Y. (2005, June). *Duke University iPod first year experience final evaluation report*. Ducke University. Retrieved from http://cit.duke.edu/pdf/reports/ipod_initiative_04_05.pdf

Brown, T. (2003). The role of m-learning in the future of e-learning in Africa? Paper presented at the 21st. *ICDE World Conference.* Hong Kong.

Burston, J. (2013). Mobile-assisted language learning: A selected annotated bibliography of implementation studies 1994–2012. *Language Learning & Technology, 17* (3), 157–225.

Callum, M. K., & Jeffrey, L. (2010). Resistence to the Inclusion of Mobile tools in the Classroom: The Impact of Attitudes and Variables on the Adoption of Mobile Learning. In R. Guy (Ed.), *Mobile Learning: Pilot Projects and Initiatives* (pp. 143-166). California: Informing Science Press.

Chaka, C. (2009a). From Classical Mobile Learning to Mobile Web 2.0 Learning. In R. Guy (Ed.), *The Evolution of Mobile Teaching and Learning* (pp. 79-102). California: Infonning Science Press.

_____ (2009b). Portable Handheld Language Learning: From CALL, MALL to PALL. In *Handbook of Research on E-Learning Methodologies for Language Acquisition* (pp. 539-553). Hershey: Information science reference.

Chaka, C., & Ngesi, N. (2010). Mobile Writing: Using SMSes to Write Short Paragraphs in English. In G. Retta (Ed.), *Mobile Learning: Pilot Projects and Initiatives* (pp. 185-199). California: Informing Science Press.

Cheon, J., Lee, S., Crooks, S. M., & Song, J. (2012). An investigation of mobile learning readiness in higher education based on the theory of planned behavior. *Computers & Education, 59*, 1054–1064.

Cheung, S. (2012). A study on the use of mobile devices for distance learning. In S. Cheung (Ed.), *Hybrid Learning: Lecture Notes in Computer Science* (pp. 89-98). Berlin: Berlin Heidelberg: Springer.

Chinnery, G. M. (2006). Emerging Technologies Going to the MALL: Mobile Asssisted Language Learning. *Language Learning & Technology, 10*(1), 9-16.

Crompton, H. (2013a). A Historical Overview of M-learning : Toward Learner-Centred Education. In Z. L. Berge, & L. Y. Muilenburg (Eds.), Handbook of Mobile Learning (pp. 3-14). New York: Routledge.

_____ (2013b). Mobile Learning: New Approach, New Theory . In Z. L. Berge, & L. Y. Muilenburg (Eds.), *Handbook of Mobile Learning* (pp. 47-57). New York: Routledge.

Dashtestani, R. (2013). EFL teachers' and students' perspectives on the use of electronic dictionaries for learning English. *CALL-EJ, 14*(2), 51-65.

Dörnyei, Z., & Taguchi, T. (2010). *Questionnaires in second language research : construction, administration, and processing* (2nd ed.). New York: Routledge.

Evans, C. (2008). The effectiveness of m-learning in the form of podcast revision lectures in higher education. *Computers & Education*, 491–498.

FeiYanga, Y., JuChaoa, C., & Changa, C.-K. (2013). Mobile Assisted Language Learning: Overview of Literature from 2008 to 2012. *Proceedings of the 21st International Conference on Computers in Education ICCE 2013* (pp. 715-720). Bali, Indonesia: Uhamka Press. Retrieved from http://www.google.dz/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact

=8&ved=0CCEQFjAA&url=http%3A%2F%2F140.115.135.84%2Fuploaded%2Ffilemanager%2F3d3ac956-b87f-4e23-8332-eff8376f0caa.pdf&ei=wgY_Vfz3CcL4atibgMAL&usg=AFQjCNEwd2BoTtbkPlWtCbOHj0t24xtDlA&b

Georgiev, T., Georgieva, E., & Smrikarov, A. (2004). M-Learning - a New Stage of E-Learning. *Proceedings of the 5th international conference on Computer systems and technologies*, (pp. 1-5).

Goodyear, D. (2008, December 22). *The New Yorker*. Retrieved January 12, 2015, from I ♥ Novels: http://www.newyorker.com/magazine/2008/12/22/i-%E2%99%A5-novels

Grabe, W., & L. Stoller, F. (2013). *Teaching and Researching Reading.* New York: Routledge.

Guy, R. (2010). Mobile Learning Defined. In R. Guy (Ed.), *Mobile Learning: Pilot Projects and Initiatives* (pp. 1-7). California: Informing Science Press.

Huang, L.-L. (2011). EFL learners' reading on mobile phones. *the Jalt Call Journal , 7*(1), 61–78.

Hubbard, P. (2009). A general introduction. In P. Hubbard (Ed.), *Computer Assisted Language Learning: Critical Concepts in Linguistics, Volume 1: Foundations of CALL* (pp. 1-20). New York: Routledge.

Isaacs, S. (2012). *Turning on Mobile Learning in Africa and the Middle East.* Paris: United Nations Educational.

Kadirire, J. (2009). Mobile Learning DeMystified. In R. Guy (Ed.), *The Evolution of Mobile Teaching and Learning* (pp. 15-55). California: Informing Science Press.

Keegan, D. (2005.). The Incorporation of Mobile Learning into Mainstream Education and Training. *Proceedings of mLearn2005-4th World Conference of mLearning*, (pp. 25-28). Cape Town, South Africa. Retrieved from http://www.mlearn.org.za/CD/papers/keegan1.pdf

Kenning, M.-M. (2007). *ICT and Language From Print to the Mobile Phone.* New York: Palgave Macmillan.

Kukulska-Hulme, A. (2005). *Mobile Learning A Handbook for Educators and Trainers.* London: Routledge.

_____(2013a). Mobile-Assisted Language Learning. In C. A. Chapelle (Ed.), *The Encyclopedia of Applied Linguistics* (pp. 3701-3709). New York: Wiley-Blackwell.

_____(2013b). *Re-skilling language learners for a mobile world.* Retrieved from http://www.tirfonline.org/english-in-the-workforce/mobile-assisted-language-learning/

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

Kumaravadivelu, B. (2003). *Beyond methods : macrostrategies for language teaching.* Mary Jane Peluso.

Laouris, Y., & Eteokleous, N. (2005). We Need an Educational Relevent Difinition of mobile Learning . *Paper presented at the 4th World Conference on mLearning* . Cape Town, South Africa.

Lee, D. (2009, October 28). *Mobile novels switch on S Africa*. Retrieved January 14, 2015, from BBC World Service: http://news.bbc.co.uk/2/hi/technology/8329537.stm

Levinson, P. (2004). *Cellphone: The Story of the World's Most Mobile Medium and How It Has Transformed Everything.* New York: Palgrave Macmillan.

Levy, M., & Kennedy, C. (2005). Learning Italian via mobile SMS. In A. Kukulska-Hulme, & J. Traxler (Eds.), *Mobile Learning A handbook for educators and trainers* (pp. 76-83). London: Routledge.

Low, L., & O'Connell, M. (2006). Learner-centric design of digital mobile learning. *Proceedings of the OLT Conference*, (pp. 71–82).

Masrom, M., & Ismail, Z. (2010). Benefits and Barriers to the Use of Mobile Learning in Education: Review of Literature. In G. Retta (Ed.), *Mobile Learning: Pilot Projects and Initiatives* (pp. 9-26). California: Informing Science Press.

Naismith, L., Lonsdale, P., Vavoula, G., & Sharples, M. (2004). *Literature Review in Mobile Technologies and Learning REPORT 11:*. Futurelab.

O'Malley, C., Vavoula, G., J.P, G., J, a., M, S., & P, L. (2003). *Guidlines for Learning/Teaching/Tutoring in a Mobile Environment.* Retrieved from http://www.mobilearn.org/download/results/guidelines.pdf

Oyinloye O, G. (2009). Assessing the Need for Mobile Communication Mediated Instructional Strategy in the Teaching of Writing Skills. *International Journal of Soft Computing*, 39-44.

Pachler, N., Bachmair, B., & Cook, J. (2010). *Mobile Learning Structures, Agency, Practices.* New York: Springer Science+Business Media.

Palalas, A. A. (2012). *Design Guidelines for a Mobile-Enabled Language Learning System Supporting the Development of ESP Listening Skills(Unpublished doctoral dissertation).* Retrieved from https://dt.athabascau.ca/jspui/handle/10791/17

Pegrum, M. (2014). *Mobile Learning: Languages, Literacies and Cultures.* New York: Palgrave Macmillan.

Pollara, P. (2011). *Mobile Learning in Higher Education: A Glimps and Comparision of Student and Faculty Readiness, Attitudes and Perception (Unpublished Doctoral Dissertation).* Retrieved from http://etd.lsu.edu/docs/available/etd-11042011-105812/unrestricted/PollaraFinalDissertation.pdf

Quinn, C. (2000). *mLearning: mobile, wireless, In-Your-Pocket Learning*. Retrieved January 1, 2015, from LiNE Zine. Fall: http://www.linezine.com/2.1/features/cqmmwiyp.htm

_____ (2012). *The Mobile Academy mLearning for Higher Education.* San Francisco: Jossey-Bass.

Reed, M. (2014). *Rapid rises in international connectivity and mobile broadband drive data growth in Africa.* Informa Telecoms & Media.

Richards, J. C., & Schmidt, R. (2010). *Longman Dictionary of Language Teaching and Applied Linguistics* (4th ed.). Edinburgh: Pearson Education Limited.

Roy, D. (2013). Cell Phone Novel A New Genre of Literature. *LANGUAGE IN INDIA, 12*(3), 81-95. Retrieved from http://www.languageinindia.com/march2012/cellphonenoveldhananjoyfinal.pdf

Sharples, M., Taylor, J., & Vavoula, G. (2007). A theory of Learning for the Mobile ...……..Age. In R. Andrew and C. Haythornthwaite (eds) The Sage Handbook of …….Elearning Research. London: Sage; pp. 221-247.

Sharples, M., & Roy, P. (2014). Mobile Learning. In K. R. Sawyer (Ed.), *The Cambridge Handbook of the Learning Sciences* (pp. 501-521). New York: Cambridge University Press. Retrieved from personal pages: http://www.open.ac.uk/personalpages/mike.sharples/documents/Preprint_Sharples_Pea_Mobile_Learning.pdf

Shimane, S. W., & Shimane, S. S. (2013). Reading and Grammar Learning Through Mobile Phones. *Language Learning & Technology*, 117-134.

Shinagawa, S. (2012). Adapting the iPhone for Language Teaching and Learning. In F. Zhang (Ed.), *Computer-Enhanced and Mobile-Assisted Language Learning: Emerging Issues and Trends* (pp. 188-201). Hershey: Information Science Reference.

Stockwell, G., & Hubbard, P. (2013). *Some emerging principles for mobile-assisted language learning.* Retrieved January 12, 2015, from Monterey, CA: The International Research Foundation for English Language Education: http://www.tirfonline.org/english-in-the-workforce/mobile-assisted-language-learning

Tai, Y., & Ting, Y.-L. (2011). *the jalt call Journal*(7), 3–18.

Tayebinik, M., & Puteh, M. (2012). Mobile Learning to Support Teaching English as a Second Language. *Journal of Education and Practice, 3*(7), 56-62.

Traxler, J. (2007). Defining, Discussing and Evaluating Mobile Learning: the moving finger writes and having writ . . . . *The International Review of Research in Open and Distance Learning, 8*(2).

Traxler, J. (2009). Current State of Mobile Learning. In M. Ally (Ed.), *Mobile Learning: Transforming the Delivery of Education and Training* (pp. 9-24). Edmonton: Athabasca University Press.

Trinder, J. (2005). Mobile technologies and systems. In A. Kukulska-Hulme, & J. Traxler (Eds.), *Mobile Learning A Handbook for Educators and Trainers* (pp. 7-24). Oxon: Routledge.

Trinder, J., Magill, J., & Scott, R. (2005). Expect the unexpected Practicalities and problems of a PDA project. In A. Kukulska-Hulme, & J. Traxler (Eds.), *Mobile Learning A Handbook for Educators and Trainers* (pp. 92-98). Oxon: Routledge.

Tsinakos, A. (2013). State of Mobile Learning Around the World. In A. Tsinakos, & M. Ally (Eds.), *Global Mobile Learning Implementations and Trends* (pp. 4-44). China Central Radio & TV University Press.

Turner, N. (2012, March 21). *What is MLearning?* . Retrieved from Aurion Learning Blog : https://aurionlearning.wordpress.com/2012/03/21/what-is-mlearning/

UNESCO. (2011). *UNESCO Mobile Learning Week Report.* Paris: UNESCO.

Viberg, O., & Grönlund, Å. (2012). Mobile Assisted Language Learning: A Literature Review. *Proceedings of the 11th International Conference on Mobile and Contextual Learning*, (pp. 9-16). Helsinki. Retrieved January 24, 2015, from http://ceur-ws.org/Vol-955/

Warschauer, M., & Healey, D. (1998). Computers and language learning: an overview. *Language Teaching, 31*(02), 57-71. doi:10.1017/S0261444800012970

WebJapan. (2004, March 10,). *Novels Delivered to Your Phone*. Retrieved from Web Japan: http://web-japan.org/trends/lifestyle/lif040310.html

Winters, N. (2006). What is mobile learning? In M. Sharples (Ed.), *Big Issues in Mobile Learning: Report of a workshop by the Kaleidoscope Network of Excellence Mobile Learning Initiative.* Nottingham: University of Nottingham.

Young, L. (2011). Systemic functional linguistics. In J. Simpson (Ed.), *The Routledge Handbook of Applied Linguistics* (pp. 625-637). New York: Routledge.

Zhu, Q., Guo, W., & Hu, Y. (2012). *Mobile learning in higher education: Students' acceptance of mobile learning in three top Chinese universities(Unpuplished Bachelor's Thesis).* Retrieved from www.diva-portal.org/smash/get/diva2:536882/FULLTEXT01.pdf

Appendix 1

Questionnaire for the Students

Fellow Students,

I am a student at Biskra University preparing my MA thesis. The objective of this research is to survey both EFL students' and teachers' attitude concerning *Mobile-Assisted Language Learning for better understanding this issue in Biskra context.

***Mobile-Assisted Language Learning is used in this research to mean learning language with the assistance (help) of mobile devices (i.e. Mobile phones, Mp3, Mp4 players, IPad, Tablet…).**

I ***hereby*** request you kindly to answer sincerely, because your answer will determine the success of this investigation.

Thank you

Participants' demographic information

Please **fill in** the appropriate choices that best fit your situation.

1. Age: [ ]
2. Gender: Male [ ] Female [ ]
3. Do you have mobile devices? Yes- [ ] No - [ ]
4. If you answer **"yes"**what mobile devices do you have?

[ ] Mobile phone

[ ] Smart phone

[ ] Digital media players (mp3/4 players, iPod…)

[ ] Other ***(specify, please)*.....**

Section (1): frequency of daily uses of mobile devices

Please circle ***circle (O)*** the appropriate choice that best fits your attitude

I use my mobile devices to…	**Always**	**Frequently**	**Sometimes**	**Seldom**	**Never**
Make calls	1	2	3	4	5
Send messages	1	2	3	4	5

Social networking (Facebook….)	1	2	3	4	5
Listening purposes	1	2	3	4	5
Video watching purposes	1	2	3	4	5
Playing games	1	2	3	4	5
Setting alarm clock	1	2	3	4	5
Access the internet	1	2	3	4	5
Taking notes	1	2	3	4	5
Reading (PDFs, notes, …)	1	2	3	4	5
Translating (use it as electronic dictionary)	1	2	3	4	5
Recording	1	2	3	4	5
Educational purposes	1	2	3	4	5

Section (2): students' readiness for mobile learning.

Please **circle (O)** the appropriate choice that best fits your attitude

Students readiness to use mobile devices for learning purposes	**Strongly agree**	**Agree**	**Neutral**	**Disagree**	**Strongly disagree**
I am ready to use mobile devices for learning purposes.	1	2	3	4	5
I need training to use mobile devices for learning purposes.	1	2	3	4	5
I can afford the payment of internet access for learning purposes	1	2	3	4	5
I can afford the payment of texting (i.e., SMS) for learning purposes	1	2	3	4	5
I want to use my own mobile devices for learning purposes	1	2	3	4	5
I want the administration to provide me with mobile devices for learning purposes	1	2	3	4	5

Section (3): using mobile devices inside classroom

The aim of this section is to investigate your attitudes toward the use of mobile devices inside classroom. Do read the following statement carefully before you give your feedback.

Please circle ***circle (O)*** the appropriate choice that best fits your attitude

I think that…	**Strongly agree**	**Agree**	**Neutral**	**Disagree**	**Strongly disagree**
Mobile devices can used for learning purposes inside classroom	1	2	3	4	5
Mobile devices can enhance collaboration inside classroom	1	2	3	4	5
The use of mobile devices inside classroom enhance interaction	1	2	3	4	5
Mobile devices should be allowed as a learning material	1	2	3	4	5
Mobile devices should be encouraged inside classroom	1	2	3	4	5
Mobile devices are more suitable material than printed material	1	2	3	4	5
The use of mobile devices inside classroom is better than computer	1	2	3	4	5
Mobile devices can be used as a supplementary to printed material	1	2	3	4	5
Mobile devices are a tool for distraction inside classroom	1	2	3	4	5

2. What do you think of using mobile devices for learning purposes inside classroom?

……

……

…….....

Section (4): factors impacting Students' use of the Mobile Devices for Learning Purposes.

1. Please ***tick*** (√) the appropriate options that you think affect the way of your learning with mobile devices (You may tick more than one).

[ ] I do not think that Mobile devices is useful for learning/teaching purposes.

[ ] mobile devices are too expensive.

[ ] mobile devices small screen and small keypad.

[ ] mobile devices cannot be controlled inside classroom.

[ ] the internet access is too expensive.

[ ] students have different technology mobile devices.

[ ] teacher will not accept it.

[ ] I lack the training to use mobile devices for learning purpose.

Section (5): Students' Attitude toward mobile assisted language learning.

Please circle ***circle (O)*** the appropriate choice that best fits your attitude

	Strongly agree	**agree**	**Neutral**	**Disagree**	**Strongly Disagree**
I think that mobile devices are good tool for listening activities	1	2	3	4	5
I think that mobile devices are good tool for writing activities	1	2	3	4	5
I think that mobile devices are good tool for speaking activities	1	2	3	4	5
I think that mobile devices are good tool for reading activities	1	2	3	4	5
I think that mobile devices are good tool for vocabulary activities	1	2	3	4	5
I think I will learn more if I could use my mobile devices	1	2	3	4	5

I would appreciate to send my classmates and teacher learning material to their mobile phone through internet, Bluetooth…	1	2	3	4	5
I think I will be motivated if I could use my mobile devices.	1	2	3	4	5
I think I will participate more if I could use mobile devices	1	2	3	4	5
I think that mobile devices are good tools to keep in touch with my students outside classroom.	1	2	3	4	5

Thank you for your assistance.

Appendix 2

Questionnaire for the Teachers

Sir/Madam,

I am a student at Biskra University preparing my MA thesis. The objective of this research is to survey both EFL students' and teachers' attitude concerning *Mobile-Assisted Language Learning for better understanding this issue in Biskra context. Just bear in mind that your answer will be used for research purpose no more.

***Mobile-Assisted Language Learning is used in this research to mean learning language with the assistance (help) of mobile devices (i.e. Mobile phones, Mp3, Mp4 players, IPad, Tablet…).**

I hereby request you kindly to answer sincerely, because your answer will determine the success of this investigation.

Thank you

Background information

Please **tick** (√) the appropriate choices that best fit your situation.

1. Age: 20-25 [ ] 26-30 [ ] 31-35 [ ] 36-40 [ ] 40-45 [ ] 45+ [ ]

2. Male [ ] Female [ ]

3. Years of teaching experience:

Less than 01 year [ ] 1-5 [ ] 6-10 [ ] 11-15 [ ] 16+ [ ]

3. Do you have mobile devices? Yes- [ ] No - [ ] For how long? .....

4. If you answer **"yes"** what mobile devices do you have?

[ ] Mobile phone

[ ] Smart phone

[ ] Digital media players (mp3/4 players, iPod…)

[ ] Other

Section (1). Frequency of daily uses of mobile devices.

Please circle ***circle (O)*** the choice that fits your attitude.

I use my mobile devices to…	**Always**	**Frequently**	**Sometimes**	**Seldom**	**Never**

Make calls	1	2	3	4	5
Send messages	1	2	3	4	5
Social networking (Facebook….)	1	2	3	4	5
Listening purposes	1	2	3	4	5
Video watching purposes	1	2	3	4	5
Playing games	1	2	3	4	5
Setting alarm clock	1	2	3	4	5
Access the internet	1	2	3	4	5
Taking notes	1	2	3	4	5
Reading (PDFs, notes, …)	1	2	3	4	5
Translating (use it as electronic dictionary)	1	2	3	4	5
Recording	1	2	3	4	5
Educational purposes	1	2	3	4	5

Section (2) Teachers' readiness to adapt mobile education learning.

Please circle ***circle (O)*** the appropriate choice that best fits your attitude

Students readiness to use mobile devices for learning purposes	**Strongly agree**	**Agree**	**Neutral**	**Disagree**	**Strongly disagree**
I am ready to use mobile devices for learning purposes.	1	2	3	4	5
I need training to use mobile devices for learning purposes.	1	2	3	4	5
I can afford the payment of internet access for learning purposes	1	2	3	4	5
I can afford the payment of SMS for learning purposes	1	2	3	4	5
I want to use my own mobile devices for learning purposes	1	2	3	4	5

I want the administration to provide me with mobile devices for learning purposes	1	2	3	4	5

Section (3). The use of mobile devices inside classroom

The aim of this section is to investigate your attitudes toward the use of mobile devices inside classroom. Do read the following statement carefully before you give your feedback.
Please circle ***circle (O)*** the appropriate choice that best fits your attitude in each statement.

I think that…	**Strongly agree**	**Agree**	**Neutral**	**Disagree**	**Strongly disagree**
Mobile devices can used for learning purposes inside classroom	1	2	3	4	5
Mobile devices can enhance collaboration inside classroom	1	2	3	4	5
The use of mobile devices inside classroom enhance interaction	1	2	3	4	5
Mobile devices should be allowed as a learning material	1	2	3	4	5
Mobile devices should be encouraged inside classroom	1	2	3	4	5
Mobile devices are more suitable material than printed material	1	2	3	4	5
The use of mobile devices inside classroom is better than computer	1	2	3	4	5

Mobile devices can be used as a supplementary to printed material	1	2	3	4	5
Mobile devices are a tool for distraction inside classroom	1	2	3	4	5

3. 2. Do you allow the use of mobile devices inside classroom?

Yes [ ] No [ ]

In either case do please say

why…….....

……

……

…….

3. 3 if you observe a student using his/her mobile device inside classroom, what is your immediate reaction?

……

……

……

……

3. 4 what do you think your students are doing with their mobile devices inside classroom?

……

……

……

……

5. Factors impacting Teachers' use of the mobile devices for learning purposes

1. Please ***tick*** (√) the appropriate options that you think affect the way of your learning with mobile devices (You may tick more than one).

[ ] I do not think that Mobile devices is useful for learning/teaching purposes

[ ] mobile devices are too expansive

[ ] mobile devices small screen and small keypad

[ ] mobile devices cannot be controlled inside classroom

[ ] the internet access is too expansive

[ ] students have different mobile devices

[ ] teacher will not accept it

[ ] I lack the training to use mobile devices for learning purposes

Section (5) Teachers' Attitude toward mobile assisted language learning_____

Please circle ***circle (O)*** the appropriate choice that best fits your attitude

	Strongly agree	**Agree**	**Neutral**	**Disagree**	**Strongly disagree**
I think that mobile devices are good tool for listening activities	1	2	3	4	5
I think that mobile devices are good tool for writing activities	1	2	3	4	5
I think that mobile devices are good tool for speaking activities	1	2	3	4	5
I think that mobile devices are good tool for reading activities	1	2	3	4	5
I think that mobile devices are good tool for vocabulary activities	1	2	3	4	5
I think students will learn more if they could use their mobile devices	1	2	3	4	5
I would appreciate to send my students learning materialto their mobile phone through internet, Bluetooth…	1	2	3	4	5
I think students will be motivated if they could use their mobile devices.	1	2	3	4	5
I think students will participate more if they could use mobile devices	1	2	3	4	5

I think that mobile devices are good tools to keep in touch with my students outside classroom.	1	2	3	4	5

5.2 Personal comments: Do please feel free to include your evaluation/ comments as far as the questionnaire is concerned.

.....

.....

.....

.....

.....

.....

Thank you for your cooperation

ملخص

يهدف هذا البحث الى سبر اغوار مواقف واتجاهات كل من اساتذة وطلبة اللغة الانجليزية بجامعة محمد خيضر-بسكرة حول امكانية توظيف الادوات التكنولوجية المحمولة كوسيلة لتعليم وتعلم اللغة وسط القسم. اعتمدة هذه الدراسة على الفرضية القائلة بان استعمال الادوات التكنولوجية المحمولة لاغرا ض تعليمية قد يساعد على تحسين وتسهيل عملية التعليم بشكل عام و خبرات اللغة بشكل خاص. اعتمدنا لاختبار صحة هذه الفرضية على الاسبيان كوسيلة لجمع المعطيات الكمية منه و الاسمية. خلال عملية البحث قمنا بتوزيع وثيقة الاستبيان بشكل عشوائي على 90 طالب و طالبة لغة انجليزية سنة اولى ماستر اما بالنسبة للاساتذة فكان عدد اجمالهم 7 اساتذة لغة انجليزية. فيما يخص النتائج المتحصل عليها من خلال هذا البحث يمكن القول ان كل من اساتذة وطلبة اللغة اظهروا مواقف ايجابية حول امكانية توظيف الادوات التكنولوجية المحمولة كوسيلة لتعليم وتعلم اللغة لكن معظم الاساتذة اشارو الى ان تطبيق هذه التنولوجيا وسط الاقسام الجزائرية لايزال بعيد البعد عن التطبيق

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