



Exploring the Potentials of Using Smartphones in Enhancing Learning English at University: The Case of Algerian Second Year Master Students of English, Mostaganem University

Mustapha Boudjelal

boudjelal@hotmail.com

Mostaganem University, Mostaganem, Algeria

Orcid Id/URL: <https://orcid.org/0000-0003-4499-8733>

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Abstract

This research is a descriptive case study that investigates the status quo of mobile learning in Algerian EFL settings. It aims at examining the investment of smartphones' advantageous characteristics in enhancing English language learning processes. Thus, it attempts at evaluating second year master learners' of English understandings about mobile learning, gauging their perceptions about teachers' attitudes towards these devices, and most importantly, establishing a possible link between these two mentioned variables and learners' actual practices of using these mobile technologies in EFL classroom milieus. It adopts mixed method research approach to collect quantitative and qualitative data. To rigorously explore the afore-mentioned aims, a survey questionnaire was administered to 30 Algerian second year master students of English, specialized in Didactics and Applied Languages, Mostaganem University. The analysis of the collected data revealed that engaging in mobile learning in EFL classes is obstructed by various hindrances that can be summarized in learners' cursory understandings about mobile learning and its tools, which lead the learners to use their smartphones as means of communication and entertainment, neglecting their pedagogical potentials. In addition to this, the ineffective use of these devices was partly attributed to learners' negative perceptions about teachers' attitudes towards these devices.

Keywords:

mobile learning, smartphones, negative attitudes, teachers, learners

INTRODUCTION

A fact that cannot be denied is that technology has taken the lion's share as to individuals' daily and professional activities. This statement seems to suit well the field of teaching and learning English as a foreign language whereby different technological tools such as computers, video projectors, among others, are invested to enhance the targeted process. Nevertheless, technology has also created a digital divide that can be easily noticed among learners. Possessing computers by the minority of Algerian university learners of English is a befitting illustration of this digital divide in learning settings. Therefore, to mitigate these technological shortcomings in Algerian EFL settings, this article suggests mobile learning as a method of teaching English in EFL classes, given the fact that almost all Algerian learners possess mobile phones.

Indeed, the review of the literature on the significance of mobile phones in learning English as a second and foreign language is rich, as many studies were conducted investigating the roles of these mobile devices in enhancing the targeted process. However, most of them were attitudinal in nature since they focused on identifying learners' attitudes towards using mobile phones in English language learning. One may cite the study conducted by Sana Ababneh (2017) on Jordanian EFL students' attitudes towards using mobile phones in the process of learning English as a second language; Mohammad Abd Alhafeez Ali Ta'amneh's study (2021) which investigated students' perspectives about the use of smartphones in developing English language skills at Taibah University, Saudi Arabia; and Tahir Rasheed, Memona Rasheed, and Shahida Naz's (2019) descriptive study that explored Punjabi students' perceptions about the significance of smartphones in learning English as a second language. The three cited studies demonstrated that learners of English tend to develop positive attitudes towards using mobile phones to enhance English language learning.

It is true that attitudes play a leading role in affecting one's behaviour and action; nevertheless, these attitudes are partly monitored by one's cognition. That being said, our study, attempts to bridge this gap as it, in addition to gauging learners' attitudes, rigorously explores Algerian second master learners' of English understandings of mobile learning. It also covers their perceptions about teachers' attitudes towards using these devices inside the classroom. Most importantly, it attempts to find out whether or not a link may be identified between learners' understandings of mobile learning, their perceptions of teachers' attitudes towards using these devices in English language classes, and practices of using smartphones in the targeted milieu for learning ends. To explore these aims, this study puts the following research questions forward:

- 1- What understandings do Algerian second year master learners of English develop about mobile learning?
- 2- What are their perceptions about teachers' attitudes towards using smartphones in English language classes?
- 3- What are the effects of learners' understandings about mobile learning and their perceptions about teachers' attitudes towards using smartphones in classrooms on learners' practices of using these devices for learning ends?

To explore the previously mention research questions, this study puts the following hypotheses forward:

- 1- Algerian second year master learners of English are likely to develop cursory understandings about mobile learning.

- 2- They think that their teachers of English develop negative attitudes towards using smartphones in English language classes.
- 3- It may be suggested that both learners' cursory understandings about mobile learning and their perceptions about teachers' negative attitudes towards those devices partly obstruct them from effectively using smartphones in learning English as a foreign language.

LITERATURE REVIEW

Mobile learning

This definitional part aims at offering some understandings of mobile learning that question limiting this type of learning to cellphones only, and the main traits this mode of learning possesses and which can be invested in teaching English. Quinn (2000) defines it as: "*e-learning through mobile computational devices: Palms, Windows CE machines, even your digital cell phone*" (as cited in Sharples.M, et al., 2009). According to (UNESCO, 2013) mobile learning represents the use of various 'mobile technologies,' including information communication technologies, to support leaning practices in different places and times. More importantly, it is recognized as a field of study investigating the potentials of mobile devices in enhancing leaning processes (Batista, 2011).

Other definitions of mobile learning, such as the one advanced by Lan & Sie (2010), described it as a mode of learning that enables learners to access different materials regardless time and place via using different mobile technologies and Internet. Other scholars underscored the significance of mobile learning for teachers. For instance, Laurillard & Pachler (2007) argued that this type of learning is related to the digital scaffold that goes along with "investigative, communicative, collaborative, and productive learning tasks" and which takes place in different places and offers various settings whereby the teachers may instruct. Other understandings emphasised connectivity in mobile technologies which allows classmates and teachers to be in direct and instant contact with the learning environment (Yi et al., 2009).

Mobile Learning Traits

The use of mobile learning may be clearly noticed in higher education, given the various boons it affords for students and teachers as well. That being said, one may identify a link between Lave & Wenger's (1990) theory of situated learning and the debated mode of learning. Mobile devices, it may be suggested, allow for contextualized interactions with "the content of the course" and the other classmates. By the same token, it enables different ways of learning as learners may share knowledge via recording videos, taking notes, texting and sending e-mails (Gikas, J., & M. Grant, M., 2013). Nevertheless, the most important trait of mobile devices is the way they facilitate communication between the teacher and their learners. Lakeshore argues that students attributed the success of lessons' instructions to mobile devices which enabled them constant communication with both the teachers and their classmates via mobile phone applications such as Skype and Facebook (Gikas, J., & M. Grant, M. 2013).

Mobile learning has other salient characteristics such as ubiquity, size, privacy, interactivity, collaboration, and instant information retrieval. To begin with, ubiquity is a salient feature of mobile learning given the fact that it allows learning in different contexts. According to Cavus & Ibrahim (2009), this mode of learning transformed

classical learning practices into anytime and anywhere education. The size of mobile devices enables the learners to easily use them to perform learning tasks (Quinn, 2000). Most importantly, given the different learning styles, mobile technologies offer the possibility to blend between classroom and mobile learning practices to meet the needs and the learning styles of every student (Bonk & Graham, 2006). Privacy of learning is among the elements that learners, nowadays, are attached to. Mobile learning allows this privacy given the fact mobile technologies are being accessed individually and not collectively (Chidi, 2002). In line with these features, interactivity is enhanced in mobile learning, since learners are encouraged to be active and engage in different levels of interactivity (Cavus & Uzunboylu, 2009). Another feature of mobile learning is collaboration among students and their teachers (Uzunboylu, Cavus & Ercag, 2009; Virvou & Alepis, 2005). The last quality of mobile technology is that it allows instant access to information since learners need to find answers to certain questions in short times.

The significance mobile learning in enhancing improving learners' language learning was established along with several published studies. One may mention teaching short English lessons via emails using mobile phones (Thornton & Houser, 2005) and teaching Italian learners in Australia vocabulary lessons by means of sending them instructions via SMS (Levy & Kennedy, 2005). Discussing the significance of mobile learning in education necessitates tackling the contribution of this mode of learning to languages and English language in particular. Given various advantages of mobile devices in enhancing learning languages documented by scholars, the concept of "mobile-assisted language learning" (MALL) was introduced to the educational realm. It is argued that the genesis of MALL goes back to 2005, the time that marks US universities affording mobile devices to their learners (Chinnery, 2006). Nevertheless, it turned global in 2009 as the British Council devised language learning applications (Hockly, 2013, as cited in Trixie Mae Mengorio & Remart Dumlao, 2019).

Attitudes towards Smartphones in Classrooms

The potentials of smartphones to be used for pedagogical purposes necessitate mapping out teachers' and learners' attitudes towards them.

Negative attitudes

As to the use of mobile phones in classrooms, different attitudes may be identified. The opponents of its use highlighted the negative effects they may have on the learning process. Most of the time, mobile phones are criticized for causing distraction in classrooms. In other words learners, instead of focusing with the teacher, tend to check them every now and then, sometimes playing games instead of focusing on the lecture. This distraction also springs from continuous ringtones and texting practices (Machado, 2012). Despite the various boons that can be generated from using mobile phones in classrooms, most schools do not allow their use in classrooms, as they consider them a source of distraction (Seabra, 2013). Another negative aspect related to the use of cellphones in classrooms relates to allowing learners to cheat in tests and exams (Seabra, 2013). Seabra (2013) underscores the fact that distraction is mainly related to the teaching process, which means that students can be distracted even with traditional learning means such as pencil and paper. Therefore, to use mobile phones effectively in classrooms, she suggests using them along with certain rules that make them serve educational purposes

only, at least in educational settings. Machado (2012) shares this view arguing for the need to establish certain restrictions on using them in schools.

Positive attitudes

The advocates of mobile phones use in classrooms support their arguments referring to the different boons these devices generate. For instance, mobile phones tend to promote learning in different settings given the easiness of carrying them. In addition to the motivation for learning they generate, these devices are believed, via their various applications, to cater for learners' different learning styles (UNESCO, 2012). Other aspects of mobile phones that can be invested in learning processes, one mentions students' ability to use the keypad easily as they enable practicability (Batista, 2011). In addition to this, Tangney et al. (2010) outlines key qualities of these devices, focusing on the easiness of the handling them, their potentials of generating learners' engagement and collaboration. Most importantly, mobile phones may bridge the gap of the lack of mobile devices in schools, and as such can be used to enhance teaching activities that require technological devices. Ndafenongo (2011) illustrates the point referring to the use of video clips in mobile phones to support learners' participation, collaboration, concentration, and to develop learners' autonomy.

METHOD

Research design

This research is case study which attempts to shed light on Algerian second year master students' of English understandings of mobile learning, their perceptions of university teachers' of English attitudes towards using smartphones in classrooms, and how these two preceding variables impact their actual use of these mobile devices for English language learning ends. This case study is descriptive as the researcher's role is to portray students' use of smartphones without any intervention that might have affected the collected data and their analysis as well. According to Gil (2008), descriptive researches are used to present characteristics of a population, phenomenon, experience, or establish relations among variables. It took place at the University of Abd Elhamid Ibn Badis, Mostaganem Algeria during the academic year 2020-2021. To gather rich data, the researcher opted for mixed-method research paradigm, collecting and analysing data quantitatively and qualitatively.

Participants

Given the fact that this research is a case study whose findings are not generalizable, the researcher used random sampling technique, choosing 10 per cent of the whole population which stands for 30 Algerian master students of English enrolled in second year master Didactics and Applied Linguistics degree. These learners' age ranges between 22-25 years old. As to their gender, 20 out of 30 were female students. These participants were the source of the data gathered about their attitudes and their perceptions about their teachers' attitudes towards smartphone's use in English language classes.

Instrument

To explore the before-mentioned aims along with the proposed hypotheses, this study gathered data from a survey questionnaire that comprises both closed and open-ended

questions which enabled both quantitative and qualitative analysis modes. However, before its administration and for the sake of testing the efficiency and reliability of this research tool, a pilot study was conducted with 10 learners. That being said, after bringing certain modifications to the used research instrument responding to the feedback given by the learners, it was administered to the participants. The survey questionnaire comprises different sections such as :learners' mobile devices, learners' perceptions about teachers' attitudes towards cellphones, learners' uses of cellphones in classrooms, their understandings of mobile learning, and the difficulties of using cellphones for learning purposes.

Procedure

As to data collection procedures, the administration of the survey questionnaire was processed along two main stages: explaining the targets of this research instrument to the learners then distributing it to them in the classroom. The researcher was present to provide explanations to questions learners found difficult to understand. The time of administering the questionnaire was in a free time and not during lecture. The participants were given enough time to fill in the survey questionnaire and to give it back before leaving the classroom. The researcher collected 30 copies of the survey questionnaire and checked that all questions were answered. As to data analysis, learners' answers were grouped in different categories according to common traits. Open ended-questions whereby the learners provided explanation and definitions were processed qualitatively. However, closed –ended questions were transformed into statistical percentages.

FINDINGS

The findings of this case study are grouped in three sections. The first section tackles the first research question and its hypothesis with regard to learners' understandings of mobile learning. The second section deals with the second research question and its hypothesis, focusing on learners' perceptions' about teachers' attitudes towards using smartphones in educational settings. The third section explores the third research question and its hypothesis, investigating the impact of the previously-mentioned variables on learners' use of these devices for English learning purposes.

Section one: Learners' mobile devices and their understandings of mobile learning

As the name of this section indicates, it presents the findings about participants' mobile technologies and their types, learners' preferences of particular mobile devices and the reasons behind choosing smartphones over computers. The most important part within this section explores learners' understandings of mobile learning, addressing the first research hypothesis that states that Algerian master two students of English are likely to develop cursory understandings about mobile learning. The findings are presented in tables statistically and supported along with illustrations retrieved from the participants' answers to survey questionnaire's open-ended questions:

Learners' mobile devices and their preferences

Table 1 shows that most of the learners (68%) possess cellphones and/ or smartphones, which are most of the time used for communication and leisure and rarely for studies. However, the minority of them (24%) own computers. This suggests a digital divide that is likely to obstruct teaching subjects that require the use of ICTs. This lack of

computers in Algerian universities, we suggest, can be partly mitigated by the use of smartphones in EFL classrooms.

Table 1: *Learners' mobile devices*

Learners' mobile devices	Percentages
Ipads	8%
Computers	24%
Cellphones /Smartphones	68%

To deeply explore, learners' attitudes towards their mobile devices, they were asked whether or not they prefer using computers over cell phones and smartphones in their studies. The findings are represented in the pie-chart below:

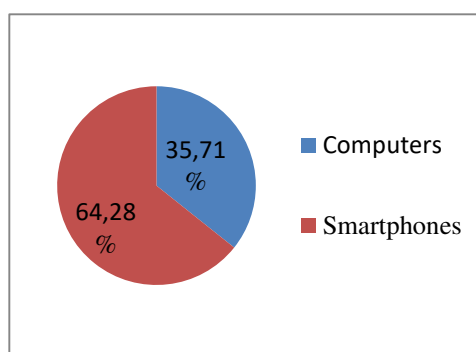


Fig.1. Learners' preferences

The second part of the question inquires about the reasons behind learners' preferences of particular mobile device. The table below introduces the findings of the before mentioned question:

Table 2: *Learners' reasons behind preferring smartphones*

Smartphones/cellphones' main features	Percentages
Easily carried	33, 33%
Easy to use	22, 22%
Small size	22, 22%
Needed device	22, 22%

The first category of learners, who prefer using cellphones and smartphones (33, 33%), focused on the easiness of carrying these devices, as claims one of the learners: *"because I can carry with me all the time"*. The second category of learners (22, 22%) emphasized the easiness of using cell-phones as indicated in the ensuing comment: *"it is easy to use."* Other learners (22, 22%) pointed as the size of these devices that enables them to be carried easily. A learner adds: *"because it has small size; I can take it with me everywhere and use it anytime."* The last category of answers (22, 22%) alluded to the helpful nature of cellphones as shows this statement: *"we need it everywhere"*.

As shown in the table below, the minority of learners who opted for computers as their preferences provided various reasons for their choices.

Table 3: *Learners' reasons behind preferring computers*

Computer's main features	Percentages
Comfort and the practicality	37, 5 %
Multitasking	25%
Battery power	12, 5%
Texts' size	12, 5%
Minimizing distraction	12, 5%

Most of the participants (37, 5%) underscored the usefulness, the comfort and the practicality of these devices in studies and doing research, which is clearly identified in the following statement by a learner: *"I prefer the computer; it is more comfortable and more practical."* Another learner adds: *"computer is a lot easier in doing research"*. An important percentage of answers (25%) supported the use of computers given the various activities, known as multitasking, learners may engage in at the same time. A learner suggests: *"I can search definitions while writing on a paper."* In the same line of thought, a learner claims: *"because the computer has more features than a cellphone"*. Some learners (12, 5%) favoured computers due to the battery power it allows for the completion of tasks, as stated in the following comment: *"I prefer computer because I don't have to charge it every two hours like I do with my phone"*. Other learners pointed at some negative features of using cellphones in studies and which computers may mitigate, namely the size of texts on computers that makes reading easier (12,5%). Computers, other learners claim (12, 5%), minimize distraction, a feature that is very often gelled to cellphones. A learner says: *"while using a cellphone, you may get distracted and focus on something else rather than your studies"*.

Learners' understandings of mobile devices and mobile learning

Participants' understandings of Mobile devices

This part of the first section investigates participants' knowledge about the mobile devices they possess, focusing on their understandings of cellphones, smartphones and the difference between these mobile devices. It compares the definitions provided by the learners to both cellphones and smartphones to dictionaries' definitions. This section presents the findings along with illustrations from participants' answers to the survey open-ended questions. It is important to note that all the participants claimed their mobile phones to be smartphones.

Understandings of Cellphones

To know whether or not learners are able to define cellphones correctly, the following dictionary definition was used as a back drop against which their understandings are judged. Dictionary.com defines cellphones as follows: *a wireless telephone using a system of low-powered radio transmitters, with each transmitter covering a distinct geographical area (cell), and computer equipment to switch a call from one area to another, thus enabling broad-scale portable phone service*. Analysing the collected data, it appears that the learners are able to define these devices as most of them underscored

their communicative aspects. A learner says: *"It is a very essential tool to communicate."* Another learner adds: *"a device that receives calls and makes calls."* Carrying the same communicative aspect, a learner provided the ensuing comment: *"traditional tool of communication."* Some learners focused on the activities these devices allow as clearly stated in the following statement: *"It is an object we use for texting and activities."* The same percentage of answers identified the entertaining feature of cellphones as a learner elaborates: *"it is a tool of communication and entertainment"*. Mobility was another feature that learner affiliated to cellphones as a learner states: *"it is a mobile phone."* Some learners identified the difference between cellphones and smartphones claiming: *A cellphone is used mostly for messages and calls and less features than smartphone.* However, a good percentage of answers unveil learners' confusing between the targeted mobile devices. This confusion is clear in the following statement by a learner: *'a smartphone that can do different things and also there are normal phones.'*

Understandings of Smartphones

Dictionary.com offers the following definition to smartphones: *"a device that combines a cell phone with a handheld computer, typically offering internet access, data storage, email capability, etc"*. Comparing participants' answers to the dictionary's definition, it becomes clear that they develop cursory understandings about smartphones, focusing on the communicative aspect of these devices and neglecting other salient traits. That being said, a considerable number of learners' answers as to the definitions of smartphones point at the communicative function of these devices, clearly outlined in the following comment: *"smart technology helps to communicate"*. The second category of answers focused on the various features enabled by these devices. A learner adds: *"a smartphone is much developed, it has multiple features"*. Some learners emphasized the developed nature of smartphones as suggests the following comment: *"a tool with developed technology."* Other answers identified the significance of these devices in connecting to Internet. A learner says: *"a millennial phone that provides network by accessing to Wi-Fi"*. The minority of learners mentioned the services smartphones allow such as taking pictures and readings e-books. A learner suggests: *"it is a smart device used in connecting to social media, taking photos, reading e-books"*. This suggests that learners are not aware of the pedagogical advantages of smartphones and mobile learning in general.

Understandings of Mobile learning

Using cellphones for learning purposes falls within mobile learning practices. In order to know learners' familiarity with this type of learning, they were asked to offer possible definitions to mobile learning. Analyzing the findings, it was found that the majority of the learners are not familiar with this concept. To gauge learners' understandings, a definition retrieved from Oxford Learners' Dictionaries was used: *"system of learning that uses mobile devices such as mobile phones, small computers that can be carried, etc. so that people can learn anywhere at any time"*. Analyzing the definitions offered by the learners, it was found that most of the learners affiliate this type of learning to mobile phones only, excluding other mobile devices such as tablets and small computers, among other mobile devices. A learner says: *"Mobile learning is to use your phone for learning purposes."* Another learner adds: *"Allowing the use of mobiles at all the times for learning purposes like dictionary, definitions, source of an article"*. Other broad definitions relate mobile learning to every learning mediated by technology, as indicated in the ensuing

comment: “*Mobile learning is imparting learning through technology.*” Reading the above-mentioned dictionary definition and the understandings provided by the participants, it becomes clear the master two students of English develop cursory understanding with regard to mobile learning. This, we suggest, is likely to affect their use of cellphones and smartphones for English language learning ends.

Section Two: Learners’ Perceptions about Teachers’ Attitudes towards Using Smartphones in Educational Settings

This section was designed to explore master two students’ of English perceptions about university teachers’ of English attitudes towards learners using smartphones and in English language classes for both pedagogical or distraction ends. That being said, it was hypothesized that learners’ perceptions about teachers’ attitudes towards these devices are rather negative, which are likely to limit the pedagogical use of the targeted mobile technologies in classrooms. To explore this objective further, Algerian educational institutions’ technological support, teachers’ attitudes towards using smartphones in classrooms and learners’ attitudes towards these devices are discussed below:

Educational Institutions

The first question targeted whether or not Algerian universities provide the learners with mobile technologies. The table below presents the findings:

Table 4: *Algerian universities and mobile technologies*

Affording mobile devices by Algerian universities	Percentages
Yes	29.41%
No	70.58%

The collection and the analysis of the data show that (70.58%) of the learners are not provided with mobile technologies at university. A learner comments: “*no, it does not provide us with any technology except for data show if you asked for it a week early.*” The minority of them (29.41%) claim they are provided with, as a learner says, “*a half – working data show*”.

Learners’ perceptions about teachers’ attitudes towards smartphones in classrooms

Allowing the use of smartphones in classrooms may reflect teachers’ attitudes towards them. We hypothesized in this study that learners think that their teachers of English develop negative attitudes towards these devices and as such forbid using them in educational settings. When collecting and analyzing the data, it was found that the second hypothesis is valid.

As shown in Table 5, the majority of the learners (76.47%) think their teachers develop negative attitudes towards using these devices in learning settings. The second part of the question delved into the possible reasons of teachers’ negative attitudes towards the use of smartphones in English language classes. The majority of learners think that the main reason is the risk of having the learners distracted from the lecture. A learner adds: “*May be they think we do not concentrate with them. Some strictly forbid it.*” Another learner suggests: “*Yes because cellphones cause distraction, and teachers*

do not like that". The second category of answers affiliates between using smartphones and cheating practices. Other learners argue that teachers think using these devices is a lack of respect and it is clear in the following comment: "*Well first is a sign of disrespect to the teacher and classmates*". The rest of the learners assume that these negative attitudes may be attributed to "*a conflict of generations*."

Table 5: *Learners' perceptions about teachers' attitudes*

Teachers' attitudes towards smartphones in English classes	Percentages
Negative attitudes	76.47%
Positive attitudes	23.53%

The following question attempted to know whether or not teachers' negative attitudes towards using smartphones lead them to forbid using them in English language classes. The collected data are presented in the table below:

Table 6: *Forbidding the use of smartphones in classrooms*

Allowing the use of smartphones in English classes	Percentages
Always	52.94%
Never	29.41%
Sometimes	17.64%

Most of the learners who were asked about their perceptions about (52.94%) believe that their teachers allow them to use their cellphones in classrooms. However, others (29.41%) argue they are not allowed to do so. The rest of the learners (17.64%) think that using these devices depends on the teachers; some teachers allow them while others do not.

Following this line of attitudes towards smartphones in classrooms, the learners were asked about whether or not their teachers support using these devices for language learning purposes by encouraging their use, giving them activities that necessitate using smartphones. The table below summarizes the findings:

Table 7: *Supporting the use of smartphones in EFL classrooms*

Supporting smartphones' use in English classes	yes	No
Encouraging the use mobile devices	35,30%	64,70%
Given the learners activities using mobile devices	41,18%	58,82%

The majority of learners (64, 70%) argue that their teachers do not encourage them to use smartphones for the appointed at purposes. Developing positive attitudes towards these devices by teachers can be interpreted in using these devices in classrooms. The learners were asked whether or not their teachers give them activities and ask them to use their smartphones. Most of the learners (58.82%) claim their teachers do not give them tasks of using their mobile devices. Those learners who claimed their teachers sometimes

invite them to use their smartphones (41.18%) mentioned the following activities given by their teachers: *searching for information, using dictionary, summarizing pages of a story, transcription of word, and translation.*

Learners' attitudes towards the use of smartphones in classrooms

The learners were asked whether or not smartphones should be allowed in classrooms. The findings of analyzing the data obtained from this question are presented below:

Table 8: *Attitude towards using smartphones in classrooms*

Learners' attitudes towards using cellphones in classrooms	Percentages
Positive attitudes	60%
Negative attitudes	40%

Analyzing the findings showed learners' positive attitudes (60%) towards using smartphones for pedagogical purposes. However, (40%) of the learners were against their use in educational settings. Both categories justified their answers differently. As an illustration, learners with positive attitudes find these devices important when looking for information about their lectures as the following learner suggests: *"Yes, to do research and looking for in formation"*. Another learner sees their significance in looking for new words and their meanings as he claims: *"Yes, because sometimes we need to do research and look for words that we don't understand them"*. Research, too, can be boosted via these devices, as outlined by the following comment: *"Yes because it would be helpful e.g. research"*. A learner thinks that these devices are useful in learning process; however, they need to be carefully used by the learners. He says: *"They have to be selective according to the different situations, because it is hard to monitor!"*

The learners with negative attitudes towards the use of smartphones in classrooms expressed different worries in relation to the impact of these devices on their learning processes. Most of the learners agreed on the fact that smartphones are distracting, as says the following comment: *"No, they should not allow its use because learners will chat and watch videos instead of using for academic purposes"*. Other learners see that educational settings are academic and these devices do not fit in such contexts as claimed the ensuing comment *"No, because teaching is academic"*. Other learners are not satisfied with the change these devices brought to communication practices among individuals as suggests this comment: *"No, cellphones already ruined our communication that we choose to send a text over talking in reality"*.

Section Three: Learners' Use of Smartphones in Classrooms

Reviewing the findings of the previous sections (section one /section two), it becomes vivid that Algerian second year master students of English develop cursory understandings about mobile devices and mobile learning as well. Under this review, it was found that these learners perceive their teachers' attitudes towards using cellphone in English language classes as negative. That being said, this section attempts to see whether or not these conceptual and cognitive variables partly hinder effective use of smartphones to learn English as a foreign language in Algerian universities. Learners' use of these devices will be judged in relation to inside and outside classroom settings, enhancement of reading and writing skills, smartphones' applications and their types.

Advantages and disadvantages of smartphones

The learners were asked to identify the positive aspects of smartphones in learning English as a foreign language. The findings are presented below:

Table 9: *Smartphone's advantages*

Advantages of smartphones	Percentages
Carrying research and seeking information	34.78%
Supporting learning	17.39%
Taking photos of hand-outs and lectures	13.09%
Fast information retrieval	8.69%
Facilitating and simplifying learning	8.69%
Translation practices	4.34%
Creativity	4.34%
Saving time	4.34%
Reading practices	4.34%

The majority of the learners (34.78%) underscore the significant role of these devices in carrying research and seeking information. A learner adds: *"You can use it check any new and unclear information."* Another learner suggests: *"It can help learners and foster their learning to add additional information or to illustrate"*. They also support learning as they allow downloading dictionaries, state other learners (17.39%). A learner says: *"Easy and quick especially when using the dictionary app"*. Given some Xeroxing issues, some learners (13.09%) rely on their smartphones to take photos of hand-outs and lectures. A learner puts the following comment forward: *"taking photos when there are no copies for the lesson"*. They also allow taking notes, say some learners: *"students can take notes on their phones"*. Other answers (8.69%) focused on the fast quality of these devices in information retrieval, as states the ensuing comment: *"Fast and helpful in some situations to explain information"*. By the same token, these devices tend to facilitate and simplify learning, suggest some learners (8.69%). Other answers highlighted these devices as allowing translation practices (4.34%), enhancing creativity (4.34%), saving time (4.34%), and enabling reading practices (4.34%).

Disadvantages of smartphones

The learners were asked to identify the negative aspects of smartphones. The table below introduces the findings:

Table 10: *Disadvantages of smartphones*

Disadvantages of cellphones	Percentages
Distraction	60%
Disrespect	16%
Chatting	12%
Cheating	8%
Wasting time	4%

Analysing the findings, it was found that most of the learners (60%) see smartphones as a cause of distraction. A learner adds: *"It may distract from learning"*

effectively if used inappropriately. Other learners (16%) see them as a source of disrespect. A learner highlights it suggesting: “*Some can use it for other purposes, take a picture of a teacher instead, students will share memes instead of paying attention*”. Some answers (12%) alluded to the fact that learners use these devices for chatting in the time of learning. Among the negative aspects is using these devices for cheating, say some learners (8%). The minority of learners (4%) think that smartphones may cause wasting time.

The difficulties of using smartphones for learning purposes

In this part, the learners were asked to identify the difficulties they have using their smartphones for English learning purposes. The findings are presented below:

Table 11: *Difficulties of using cellphones*

Difficulties of using smartphones	Percentages
Network connection	47, 05%
Information	17, 64%
Reading	11, 78%
Battery	5, 88%
Teachers	5, 88%
Distraction	5, 88%
Internet Notifications	5, 88%

Analysing the findings, it was found that the majority of the learners (47, 05%) have network connection issues when using their smartphones. A learner adds: “*Sometimes not getting access to Internet to look up some information.*” Another one comments: “*Sometimes I can’t find page web (page web unavailable)*”. Other difficulties emanate from research, (17, 64%) of the learners claim. A learner says: “*Sometimes I find difficult information and it is hard to get them*”. Some learners (11, 78%) complained about the difficulties of reading via the smartphones’ screens as suggests this comment: “*I don’t find difficulties, just my eyes hurt me*”. The rest of difficulties relate to the following reasons: dead battery (5, 88), teachers not allowing the use of smartphones (5, 88%), distraction issues (5,88%) and notifications that pop up on cell phone screen every now and then (5, 88%).

Smartphones and Internet connectivity

This parts aims at exploring learners’ use of Internet connection in their studies in classrooms. Internet allows them to further their research, and since most of them possess smartphones, one may suggest that these devices with Internet connection provide important pedagogical support for learners in EFL classes. The first question administered to the learners centered on whether or not they are connected to Internet via their smartphones in the classroom.

The findings suggest that most of the learners (64, 72%) are often connected to Internet when having lectures. However, (23, 52%) of them suggest they are always connected to Internet. The minority of them (11, 76%) claimed they are never connected to it. The next question inquired about the source of Internet connectivity (connection). The learners were asked to mention if their university provides it or they pay for it themselves. The phase of data analysis unveiled that the learners are not allowed access

Boudjelal: *Exploring the Potentials of Using Smartphones in Enhancing Learning English at University: The Case of Algerian Second Year Master Students of English, Mostaganem University*

to Internet inside the university. Asking the learners about the importance of Internet connection in classrooms, it was found that most of them believe it to be crucial to enhance their learning processes. Most of them seem to use it for their studies while others use it for entertainment such as chatting with friends. The rest of the learners use it to check previous posts while others connect to social media.

Table 12: *Internet connection*

Internet connection	Percentages
Always	64, 72%
Often	23, 52%
Never	11, 76%

Texting in the classroom

Texting is among the commonest practices among young individuals. The participants of this study were asked whether or not they text when being in classrooms. Texting is considered a distracting practice that prevents the learners from focusing on the lecture. The findings of the analysis of the question revealed that most of the learners do text (61, 53%) while having lectures and lessons. The reasons why they do so differ from one learner to another. Some of the learner justified their texting practices suggesting that they do so when the lecture is boring. A learner says: “*Sometimes the lesson is boring or takes too much time*”. Others text when some learners are looking for the room they study in. A learner adds: “*Only when it is urgent, for example when someone asks for the classroom we are studying in*”. Others do so in emergency cases as suggests this comment: “*Sometimes I have an important message I have to reply*”.

Reading skill and smartphones

Learning English as a foreign language also means developing the four skills. Following the same vista of pedagogical use of smartphones, the participants in this study were asked to identify their reading practices using these devices. The phase of data analysis shows that most of the learners (72, 72%) read using these devices. The table below illustrates the different types of these practices:

Table 13: *Learners' Reading Practices via Smartphones*

Reading practices via smartphones	Percentages
Lectures and lessons	21,73%
Novels	17,39%
Stories	8,69%
Articles	26,08%
E-books	21,73%
Dictionaries	4,34%

Looking at the data presented in the table, it becomes clear that learners do use smartphones to enhance their reading skills. Most of them (26, 08%) read articles using them. Other learners (21, 73%) access e-books which seem unavailable as hard copies. Reading lessons and lectures also figures among learners' reading practices (21, 73%). Reading practices are not limited to articles and e-books, but extend to reading novels Boudjelal: *Exploring the Potentials of Using Smartphones in Enhancing Learning English at University: The Case of Algerian Second Year Master Students of English, Mostaganem University*

(17, 39%) and short stories (8, 69%). The minority of learners (4, 34%) argue their reading practices to be limited to checking dictionaries.

Writing skill and Smartphones

As discussed above, the majority of the learners attempt to enhance their reading practices using their smartphones. However, the minority of them (30, 76%) claimed they use these devices to enhance their writing skills. The table below represents learners' different writing activities.

Table 14: *Learners' writing practices via smartphones*

Writing via smartphones	Percentages
Poems	11, 11%
Diaries	44, 44%
Quotes	11, 11%
Shopping	11, 11%
Random thoughts	11, 11%
Notes /lessons	11, 11%

Seeing the different writing activities and their percentages, it becomes clear that most of these writing practices are not for academic purposes. In here, it may be suggested that learners are not aware of the use of smartphones in enhancing the writing skills and tend to limit it to non-academic writing processes. Most of the learners (44, 44%) write diaries using smartphones. A learner adds: "*I write something happens to me when I 'm not well.*" Others (11, 11%) write about shopping activities as it is mentioned in the ensuing comment: "*I use it to remind me of things I want to buy*". Pedagogical activities may be affiliated with writing poems (11, 11%), quotes (11, 11%), and notes about lessons (11, 11%).

Smartphones and applications

Following the same line of the pedagogical advantages of smartphones in learning English, this part explores the different mobile applications learners have installed in their smartphones, with the focus being on educational applications. We attempt to see if learners are oriented towards leisure or learning using these devices.

Analyzing the different applications learners have installed in their smartphones and seeing the percentages attributed to every application, one may notice that the highest percentages are given to communication and entertainment applications. For instance, (10 .38%) of the learners mentioned Instagram while (9. 09%) of them mentioned Facebook. (7.79%) mentioned Snapchat while (6 .49%) mentioned Viber and Messenger. However, (10 .38%) of them mentioned dictionaries while (6 .49%) of them mentioned books, the rest of the learners mentioned entertainment applications such as Tiktok, Bubble, PUBG.

Table 15: *Smartphone's applications*

Communication and entertainment applications	Percentages
Instagram	10,38%
Facebook	9,09%

Snapchat	7,79%
Viber	6,49%
Messenger	6,49%
Learning applications	Percentages
Dictionaries	10,38%
Books	6,49%

Learning applications

The table above identifies the different learning applications learners have on their smartphones. Looking at the percentages, it seems clear that most of the learners (10.38%) have dictionaries applications installed.

Table 16: *Dictionaries' applications*

Dictionaries	Number	Percentage
Cambridge Dictionary	1	5.55%
Oxford Dictionary	4	22.22%
Merriam Webster	4	22.22%
Dict-box	2	11.11%
Anglais –Espagnole -Allemand	1	5.55%
English to Arabic	2	11.11%
Advanced Learners' Dictionary	2	11.11%
English /English Dictionary	2	11.11%

The above table identifies the types of dictionaries learners have in their smartphones. It is clear that most of the learners (22.22%) opt for Oxford and Merriam Webster dictionaries (22.22%). Other learners have translation dictionaries installed in their smartphones (11.11%).

DISCUSSION

Analyzing the findings of the different sections of this study, it becomes clear that mobile learning is not fully invested in Algerian EFL classrooms to meet some pedagogical needs, despite the various boons smartphones generate, previously documented in the review of the literature section. To begin with, the digital divide in Algerian EFL classes is noticeable as most of the learners cannot afford computers (Laptop). However, a great majority of them possess cellphones and smartphones. This digital divide certainly hinders effective teaching/learning processes that necessitate the use of ICTs. Fortunately, learners' preferences have changed with the development of technology. Now, most of the learners prefer smartphones over computers as learning devices due to their practicability. These changes, we assume, are not taken into account as Algerian university teachers of English tend to believe that the use of smartphones is limited to communication and leisure.

Among the shortcomings that impeach the adoption of mobile learning in Algerian EFL classes is the scarcity of mobile devices, since Algerian universities do not provide enough mobile devices and limit them to video projectors only. More importantly, an effective use of smartphones for pedagogical purposes requires developing knowledge

about of the various traits these devices and their educational potentials. Despite the fact that Algerian master two students of English do not have difficulties distinguishing between cellphones and smartphones, most of them tend to limit the latter to communication and leisure, disregarding the pedagogical advantages of these devices. Carrying the same line of thought, it was found that most of the learners are not aware of mobile learning as a new mode of learning, as they constrain it to cellphones only. That being said, the drawn conclusions from the findings of the first section confirm the first hypothesis of the study which suggests that these learners develop cursory understandings about mobile learning. In relation to this, one may suggest that learners' use of smartphones and cellphones for learning purposes is partly affected by the previous highlighted misconceptions, not disregarding other variables that emanate from other sources.

The second section of this study confirms some of the previous studies conducted on learners' attitudes towards cellphones and smartphone's use in educational milieus and which argued that learners of English develop positive attitudes towards using these devices for language learning ends.. In this regard, one may cite Sana' Ababneh (2017) on Jordanian EFL students' attitudes towards using mobile phones in the process of learning English as a second language; Mohammad Abd Alhafeez Ali Ta'amneh's study (2021) which investigated students' perspectives about the use of smartphones in developing English language skills at Taibah University, Saudi Arabia; and Tahir Rasheed, Memona Rasheed, and Shahida Naz's (2019) descriptive study that explored Punjabi students' perceptions about the significance of smartphones in learning English as a second language. Nevertheless, given the fact that attitudes emanate from individual's cognition, it was mandatory for the researcher to explore both second year master students' attitudes towards using these devices in classrooms and their perceptions about teachers' attitudes as well. On the one hand, learners develop certain positive attitudes towards using smartphones in classrooms for pedagogical purposes due to the learning features they possess, especially when looking for information and doing research. However, it was discovered that learners do not use them for pedagogical /learning purposes when being outside classroom settings. They rather use them to access social media platforms, namely Facebook and Instagram. Here, too, one may highlight ineffective use of these mobile technologies. As learners' perceptions about teachers' attitudes towards the use of smartphones in English classes, they think that their teachers develop negative attitudes towards using smartphones and cellphones for learning purposes in English language classes. That being said, the second hypothesis of this study is also confirmed. This might be among the reasons which lead the teachers to discourage their use for pedagogical purposes. They also suggest that teachers' negative attitudes towards the use of cellphones in classrooms spring from their potentials of distracting the whole learning process.

Indeed, the previously mentioned variable discussed in section one and two partly lead to ineffective use of smartphones and cellphones for English learning purposes. Section three reflected on Algerian master two students' use of these devices for learning purposes. Reviewing the findings of each part within this section, it becomes clear that these learners do not invest the potentials and advantages of these devices to enhance English language learning. That being said, one may attribute these shortcomings to lack of Internet connectivity in classrooms and limiting the use of these devices to leisure and entertainment such as texting while being in the classroom. In addition to this, though

some learners use their cellphones to improve reading and writing skills, this use is random and unguided which, we believe, falls along with pleasure rather than academic purposes. For instance, as to learners' writing practices, it was found that learners write about non-pedagogical purposes such as writing diaries and shopping activities. Carrying the same line of thought, the learners have different mobile applications installed in their smartphones; nevertheless, most of them are communication and entertainment applications, namely Instagram and Facebook. That being said, both learners' cursory understandings about mobile learning and their perceptions about teachers' negative attitudes towards using these devices for learning purposes take part in the ineffective use of smartphones and cellphones for pedagogical purposes, confirming the third hypothesis of the study.

CONCLUSION

With the advent of technology and the emergence of new devices, the process of teaching/learning English as a foreign language may take miscellaneous forms. Nowadays, most of the learners prefer to carry smartphones rather than computers (Laptops) to the classroom. However, other learners are unable to afford computers due to a clear digital divide teachers can easily notice among the learners. Thus, using smartphones for pedagogical purposes would enable mitigating this unbalanced distribution of technology. This descriptive case study revealed various shortcomings which impeach effective use of smartphones for English learning purposes. That being said, an experimental study which takes into account developing learners' understandings about mobile technologies and their significance in the targeted process followed by an evaluation of their practices of using smartphones for learning purposes may yield useful results. Other studies may also investigate the role of training teachers to effectively use mobile devices in EFL classes which, we believe, will mitigate their negative attitudes towards using these particular mobile technologies in English language teaching and learning practices.

REFERENCES

- Ababneh, S. (2017). Using Mobile Phones in Learning English: The Case of Jordan. *Journal of Education and Human Development*, 6(4), 120-128.
- Batista, S. C. F. (2011). *M-Learn Mat: Pedagogical Model for M-Learning Activities in Mathematics*. (Doctoral thesis in Informatics in Education), Federal University of Rio Grande do Sul (UFRGS), Porto Alegre, RS, Brazil.
- Bonk, C. J. & Graham, C. R. (2006). *Handbook of blended learning: global perspectives, local designs*. San Francisco, CA: Pfeiffer Publishing.
- Cavus, N. & Uzunboylu, H. (2009). Improving critical thinking skills in mobile learning. *Procedia - Social and Behavioral Sciences*, 1(1), 434-438.
- Cavus, N. & Ibrahim, D. (2009). M-learning: an experiment in using SMS to support learning new English language words. *British Journal of Educational Technology*, 40(1), 78-91.
- Chidi, G. A. (2002). AT&T wireless launches mobile web service in US. *Wireless IT World*. Retrieved June 08, 2022, from <http://www.itworld.com/020416attwireless>
- Chinnery, G. M. (2006). Going to the MALL: Mobile assisted language learning. *Language Learning & Technology*, 10(1), 9-16.
- Dictionary.com*. Retrieved from <https://www.dictionary.com/browse/cellphone>.
- Dictioanry.com*. Retrieved from <https://www.dictionary.Com/browse/smartphone>.

- Gikas, J. & Grant, M. (2013). Mobile computing devices in higher education: Student perspectives on learning with cellphones, smartphones & social media. *The Internet and Higher Education* 19, 18–26.
- Gil, A.C. (2008). *How to design research projects*. São Paulo: Atlas.
- Lan, Y. F., & Sie, Y. S. (2010). Using RSS to support mobile learning based on media richness theory. *Computers & Education*, 55(2), 723- 732.
- Laurillard, D. & Pachler, N. (2007) Pedagogical forms of mobile learning: framing research questions, In N. Pachler (Ed.), *Mobile learning: towards a research agenda* (pp. 33-54) London: WLE Centre, IOE.
- Lave, J. & E. Wenger (1990). *Situated learning, legitimate peripheral participation*. Cambridge University Press.
- Levy, M., & Kennedy, C. (2005). Learning Italian via mobile SMS. In Kukulska-Hulme, A. & J. Traxler (Eds.), *Mobile learning: A handbook for educators and trainers* (pp. 76-83). London: Taylor and Francis.
- Machado, J.L.A. (2012). *Cell phone at school: what to do?* (October 03, 2013). Retrieved from <http://cmais.com.br/educacao/celular-na-escola-o-que>.
- Mengorio, T.M, & Dumlaio, R. (2019). The Effect of Integrating Mobile Application in Language Learning: An Experimental Study. *Journal of English Teaching*, 5 (1), 50-62.
- Oxford dictionary*. Retrieved from [https://www.oxfordlearner'sdictionaries.com/definition/English/mobile-learning?q=mobile learning](https://www.oxfordlearner'sdictionaries.com/definition/English/mobile-learning?q=mobile%20learning).
- Naz, S., Rasheed, M., & Rasheed, T. (2019, March 7-9). *The Role of Smartphones in Learning English: A Study of Learners' Perspectives*. Paper presented at International Conference in Humanities, London, UK.
- Ndafenongo, G. (2011). *An investigation into how cell phones can be used in the teaching of Mathematics using Vitalmaths video clips: a case study of 2 schools in Grahamstown, South Africa*. Thesis, degree of Master of Education, Rhodes University (Faculty of Education), Grahams town, South Africa.
- Quinn, C. (2000, Fall). *M Learning: mobile, wireless, In-Your-Pocket Learning*. Line Zine. Retrieved May 11, 2022, from <[http:// www/linezine.com /2.1/features/Cqmmwiyp.htm](http://www.linezine.com/2.1/features/Cqmmwiyp.htm)>
- Seabra, C. (2013, October 1st). *The cell phone in the classroom*. Retrieved from <http://cseabra.wordpress.com/2013/03/03/o-celular-na-sala-de-aula/>.
- Sharples, M., Arnedillo-Sanchez, I., Milrad, M., & Vavoula., G. (2009). Mobile Learning Small devices, big issues, In S. Ludvigsen, N. Balacheff, T. de Jong, A. Lazonder, and S. Barnes (eds.) *Technology-enhanced learning: Principles and products*, Dordrecht: Springer.
- Ta'amneh, M. (2021). The Use of Smartphones in Learning English Language Skills: A Study of University Students' Perspectives. *International Journal of Applied Linguistics & English Literature, IJALEL* 10(1), 1-8.
- Tangney, B., et al. (2010, October). *MobiMaths: An approach to utilising smartphones in teaching mathematics*. Proceedings of the World Conference on Mobile and Contextual Learning (mLearn2010), Valletta, Malta, 9, 9-16.
- Thornton, P., & Houser, C. (2005). Using mobile phones in English education in Japan. *Journal of Computer Assisted Learning*, 21, 217-228.
- UNESCO (2012). *Turning on Mobile Learning in Latin America: Illustrative Initiatives and Policy Implications*. [Working Paper Series on Mobile Learning]. Paris, France. Retrieved October 05, 2013, from <http://unesdoc.unesco.org/images/0021/002160/216080e.pdf>.

- UNESCO (2013). *Policy guidelines for mobile learning [Guidelines]*. Paris, France. Retrieved October 04, 2013, from <http://unesdoc.unesco.org/images/0021/002196/219641e.pdf>.
- Uzunboyly, H., Cavus, N. & Ercag, E. (2009). Using mobile learning to increase environmental awareness. *Computers & Education*, 52(2), 381-389.
- Virvou, M., & Alepis, E. (2005). Mobile educational features in authoring tools for personalized tutoring. *Computers & Education*, 44, 53-68.
- Yi, C. C., Liao, W. P., Huang, C. F. & Hwang, I. H. (2009). Acceptance of mobile learning: a respecification and validation of information system success. *In Proceedings of World Academy of Science, Engineering and Technology*, 41 2070-37-40.