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The use of Smartphone as a Learning Tool Among 2nd year EFL Students at Tlemcen University: What is There and What is Missing?

Extended Essay Submitted to the Department of English as a partial fulfilment for the requirements of the Master's Degree in English "Language Studies".

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Dedications

I dedicate this work to my precious family:

First of all, to the person who supported me in my whole life until I reached this stage, to my beloved MOTHER.

Then, to my brothers and sister and to all my family, special thanks for those who have faith on me.

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Dedications

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Abstract

Smartphone is now considered to be the most popular technology in all over the world specially for learners who are attracted to such smart devices more than others. At first glance, this seems to be a distraction and waste of time. However, it can also help students to develop more creative pedagogy to reinforce subject matter content and serve as useful tool. Smartphone provides various opportunities for both teachers and students to flexibly interact inside EFL classrooms. The purpose of our study is to investigate if 2nd year EFL students at Tlemcen university consider and aware enough how to use these devices effectively as a learning tool which could support their educational needs and matters. The data were gathered through the use of two data instruments; interview with EFL teachers and questionnaire for second year students at the English department. The obtained results have shown that students believe that mobile technology could be used as learning tool. New technologies like smartphone provide new methods and various learning style in language classrooms.

Table of contents

Chapter two: Research Design, Procedures, and Future Directions

List of Pie-charts

List of tables

List of Acronyms and Abbreviations

AOSP: Android Open Source Project.

App: Application.

CPU: Central Processing Unit.

DDR: Double Data Rate.

EFL: English as Foreign Language.

GB: Gigabyte.

GPU: Graphics Processing Unit.

ICT: Information Communication Technology.

L2: Second Language.

LCD: Liquid Crystal Display.

LP: Low Power.

LED: Light Emitting Diode.

M-Learning: Mobile Learning.

OS: Operation System.

PC: Personal Computer.

RAM: Random Access Memory.

SoC: System-on-a-chip.

TV: Television.

General Introduction

General introduction

The world witnessed a great movement over the last half-century, this movement have been spread under the name of globalization, and simply it refers to the tendency of international trades, investments information technology and outsourced manufacturing to weave the economies of diverse countries together, in business and finance, it primarily refers to the economic integration of global market.

Technology has also been a major reason for the growth in globalization advancement in information technology, which has increased the ability to communicate internationally, and made it easier and faster than ever. The process of globalization helped in accelerating the world integration and increases the knowledge with quickening flows of information and communication. People now can access more information from all over the world via small devices such as smartphones through different applications.

Learning a foreign language in the age of globalization and knowledge has been developed by the integration of new technologies in the learning and teaching process, in the 21st century teachers and learners took many advantages of different solutions that technology offered in language classrooms. Nowadays people spend most of their time online on social networks chatting with friends, make research and gathering information by using their smartphones at home or outside and even at classrooms as students.

The aim of this study is to explore if 2nd year EFL students at the department of English use their smartphones for learning purposes. Besides, the reasons as well as the contribution in the learning process.

The researchers set up two main questions formulated as follows:

• Do 2nd year EFL students at the university of Tlemcen make use of smartphones for learning purposes?

• Can smartphones be taken as a reliable tool for learning?

These questions have further, helped the researchers to construct two-distinction hypotheses coined as follows:

1. Searching on the Internet to get more data about their courses, to snap a picture of the day's homework assignment, taking note and recording lectures, and using dictionaries are seem to be among the uses of smartphones.
2. Smartphone can be a reliable tool depending on the use of it.

In order to confirm or disconfirm the mentioned hypotheses the researchers selected the case study of 2nd year EFL students and EFL teachers at Tlemcen university in the department of English. The researchers work with two research instruments: student's questionnaire and teacher's interview.

The research is divided into two main chapters. The first one concerned with the literature review which includes the definitions of some concepts such as information communication technology, mobile learning smartphone and learning. While the second chapter presents the research, design used in this work, procedures, and future directions. first of all, it describes the research methodology, setting, the sample from which data and research instruments used in gathering information. In addition, it contains the analysis of the gathered data and it gives the discussion and interpretation of the results. Finally, it offers some suggestions and recommendations for both teachers and students.

To sum up the research will further attempt to explore if the sample taken will confirm the given hypotheses and also to come up with the effective methods of using smartphones in classrooms within learning purposes for better results for both teachers and students.

Chapter One: Literature Review
Definition of the Main Concepts

Chapter one: Literature Review & Definition of the Main Concepts

1.1. Introduction

Smartphone has a great importance in learning a foreign or second language, it is not only limited to facilitate the contact but also to the need of knowledge in order to build a new different one. In this chapter, the researchers aim at defining the main concept related to mobile learning and smartphone in the first part, the investigators will tackle brief definition of information communication technology, mobile learning and smartphone. then, they will introduce smartphone's components, its applications as well as its advantages and disadvantages. However, in the second part, the researchers will introduce the psychological effect of smartphone finally, they provide an explanation about the role of smartphone in the learning process.

1.2. Information Communication Technology

The acronym ICT stand for Information Communication and Technology. ICT play an increasingly important role in communication and learning. Information Communication and Technology used to transmit, store, create, share or exchange information. This broad definition of ICT includes computers, internet and electronic delivery systems such as Radio, Television, Projectors, among other that are widely used in today's education field. As well as in the everyday life, for example it enables people to communication in real time with others as if they were living next door and create global village. Margaret (1946 P34/42) stated that

> *"ICT (Information Communication Technology or technologies) is an umbrella term that includes any communication device or application encompassing: Radio, Television, Cellular phone, Computer and network (…) ICT in education, health care, or libraries, the term is somewhat more common outside of the United State"*

There are numerous ICT tools that can be used inside English foreign learners' classroom, however there is discrimination when moving from one institution to another because it depends on the availability of ICTs as well as student's need and

the method used by the teacher. moreover, there are teachers who allows the use of smartphones and tablets as learning device inside the classroom.

Toomey (2002 P3) also provide a definition of ICT:

> *"ICT generally relates to those technologies that are used for accessing, gathering, manipulating and presenting or communicating information, the technologies could include hard ware (e.g. computers and other advice): software applications and connectivity (e.g. access to the internet local networking infrastructure and video conferencing)".*

1.2.1. Information definition:

The concept information has different meanings in different contexts. Information data that has been converted into a more useful and intelligible form, it helps human beings in their decision-making process for example time table, report card, printed documents and report. According to Margaret Rouse (2005) information is stimuli that has meaning in some context for it receiver, when information is entered into and stored into a computer, it is generally referred to as data, after processing output data can again be perceived as information. Furthermore, when information is used for understanding or doing something, it is known as knowledge.

Human brains organized the information and evaluate it to produce useful knowledge. Moreover, information is needed to keep the system up to date and also to know about the rules, regulation and laws of society. Information can be encoded into various forms for transmission and interpretation for example it may be encoded into a sequence of signs or transmitted via a sequence of signals.

1.2.2. Communication definition

The term communication is widely recognized as it is very difficult to define since it has been used differently by different scholars among them Lustig and Koester (2003:13) stated that:

"*communication is symbolic, interpretive, transactional, contextual process in which people create shared meanings.*" in other words, communication is a set of symbols which create different meanings used by a speech community. Moreover, communication is considered as tool to express and interpret the speaker's thoughts, opinions and feelings. On the other hand, Carey (1989:23) who explained that communication is the process of using symbols that help to generate, repair and transform information and facts into words and gestures.

Communication can be categorized into different types summarized as follows:

1. Extra-personal communication: it is between human being and non-human being. while human interact with other species.

2. Intra-personal communication: it appears inside human being at this level the sender is organs and the receiver is the brain

3. Inter-personal communication: It is an exchange of information between human beings it can be formal and informal which is depends to different factors such as relation and psyche- feeling.

4. Organizational communication: it is a type of communication within an organization and it is often a component to effective management in a work place environment.

5. Mass communication: It is an exchange of information on a large reach to wide range of information of participant through mass media. It is usually understood to relate book, newspaper, magazine as well as radio, television, film and internet.

According to Shannon (1948) a general communication system consists of five parts:

❖ A source 'S', which generates the message to be received at the destination.

❖ A transmitter 'T', which turn the message generated at the source into signal to be transmitted in the cases in which the information is encoded, encoding is also implemented by this system.

❖ A channel 'CH', that is the medium used to transmit the signal from the transmitter to the receiver.

❖ A received 'R', which reconstruct the message from the signal.

❖ A destination 'D', which receives the message.

1.2.3. Technology definition

Technology refers to the collection of techniques, skills, methods and processes used in scientific investigation or in the production of goods and services. technology is widely used to accomplish various tasks in life thus it comes in different forms such as communication, learning, manufacturing, securing data and business.

Brian Arthur in his book 2009 the nature of technology defined the term technology as

> *"the first and most basic one is a technology is a means to fulfil a human purpose, as a means a technology may be a method or process or device or it may be complicated or it may be material or it may be nonmaterial which ever it is, it is always a means to carry out a human purpose".*

(Brian Arthur 2009 the nature of technology. P28). in other words, technology is applied in almost everything to simplify our daily lives.

Read Bain (1937:860) stated that *"technology includes all tools, machines, utensils, weapons, instruments, housing, clothing, communicating and transporting devices and the skills by which we produce and use them".*

1.3. What is Meant by Mobile Learning?

The integration of mobile in the learning process has led to many attempts to define this concept. Mobile learning is also known as m-learning refer to digital learning assets which includes any form of content or media made available on personal device. Many definitions consider mobile learning as an extension of electronic learning, for instance Quinn 2000 defines m-learning as e-learning through

devices that are mobile, similarly m-learning is often defined as a point at which e-learning and mobile computing intersect to provide a learning experience based on the anytime, anywhere concept.

There are several benefits of mobile learning can be summarizing as follow:

➢ Support distance learning anytime and anywhere access to internet.

➢ Enhance student-centred learning.

➢ Personalized learning and support differentiation of student needs.

➢ Reduce cultural and communication barriers between faculty and student.

1.4. Smartphones definition

Smartphone is small device that contains advanced and developed functions beyond making phone calls and sending-receiving text messages, they have typically a touch screen, interface, an operating system in addition a system of internet access to download different applications.

Smartphone is in essence, a handheld computer device with a touch screen interface, which alleviates the constraints of the home or the office (Oxford dictionaries, com,2015).

Litchfield 2010 offered definition of smartphone as a phone that runs an open operating system and is permanently connected to the internet. Since smartphone have wide range functionality, they required advanced software similar to computer operating system the smartphones software handles phone calls, runs application likewise providing configuration option for the users to synchronic data with their computers and update their smartphones software.

1.5. Smartphones Components

With the huge number of smartphones available today, it's all a game of different designs, features, cameras, display quality, performance, battery life and numerous other things that consumers are looking for. However, what goes on beneath these mobile computing machines is equally important, and it's still important to know the basic layers of hardware that help the device to function. So how does these devices function and what are its main components?

Perhaps the most obvious components of a modern smartphone are its display, and while every detail is shown on the outside, it is actually an internal component of the device. Display technologies in smartphones of today come in two main types:

- Those based on LCDs (IPS technology and its variations)
- Those based on LEDs (AMOLED or Super AMOLED and its variations)

Batteries of phones normally use lithium-ion technology that are either removable or non-removable in mobile devices. With these batteries, which an important component of a smartphone, the owners will not have to worry about 'calibration' or 'testing' issues that were plagued with nickel-based cells. Still, this does not mean that current-generation batteries are not filled with their own issues, and users have to be very careful when handling and using volatile components like these. The SoC is perhaps the most important component present in a smartphone, and some users might confuse it as being the processor of the device. However, it is far more than that; the SoC not only comprises up of the smartphone's CPU, but GPU, LTE modem, display processor, video processor, and other bits of silicon that turn it into a functional 'system' in a phone.

No smartphone can function without the use of RAM (Random Access Memory) and memory (system storage). First, the RAM; most mobile devices are shipped with LPDDR3 or LPDDR4, while some high-end smartphones are shipped with LPDDR4X RAM. 'LP' stands for 'Low-Power,' and it reduces the total voltage of these chips, making them highly efficient and giving mobile phones the extended battery life. As for internal storage, it exists as the flash memory, ranging from 32GB, and can go all the way up to 256GB on some phones. Naturally, as the requirements of users start to rapidly increase based on the amount of storage that they use, phone manufacturers will exponentially increase the amount of RAM present in smartphones. Since smartphones are just phones at the end of the day, they need communication components to receive and send text messages and calls. That's where modems come in, and every SoC manufacturer has their own brand of modems, and this includes Qualcomm, Samsung, Huawei and several others.

All smartphones come with a rear-facing and front-shooting camera. A smartphone comprises up of three main parts:

- ➢ The sensor (which detects light).
- ➢ The lens (the component in which light comes through).
- ➢ The image processor.

While the megapixels on the smartphone are still an important part of the camera, it carries less importance than it did a while back. Instead, the primary limiting factor is the camera sensor of the phone and how sensitive it is when light passes through the lens. There are five main sensors in a smartphone that allow it to give you that functionality of a 'touch-enabled smart device'. The names of all these sensors and their importance have been detailed below:

•Accelerometer: Used by applications to detect the orientation of the device and its movements, as well as allow features like shaking the phone to change music.

•Gyroscope: Works with the Accelerometer to detect the rotation of your phone, for features like tilting phone to play racing games or to watch a movie.

•Digital Compass: Helps the phone to find the North direction, for map/navigation purposes.

•Ambient Light Sensor: This sensor is automatically able to set the screen brightness based on the surrounding light and helps conserve battery life. This would also explain why your smartphone's brightness is reduced in low-light environments, so it helps to reduce the strain on your eyes.

•Proximity Sensor: During a call, if the device is brought near your ears, it automatically locks the screen to prevent unwanted touch commands.

1.6.   Some helpful applications for Students

Nowadays with the amazing growth of technology, there's almost an application for everything, and this can make student life easier, cheaper, safer and more fun. Whether they want help with taking notes, revising, waking up on time or keeping fit, these following examples are for some applications in which students may use.

Just a few years ago, students attending lectures would have to spend the entire time scribbling wildly on notepads, in order not to miss any vital bit of information. Then along came technology, and now, lecture capture applications are a reality. Although the recording of lectures has been common practice within universities for a while, lecture capture apps allow you to record and listen back to classes without having to spend extra money on expensive recording equipment.

Sound Note is a popular lecture captures application for, acting as a notepad and audio recorder, so the student can store an entire lecture in both visual and audio form. If it's a whiteboard and student want to capture it. In addition to that, Office Lens is another application which allows users to photograph a whiteboard, convert it to a PDF, Word or PowerPoint file and store all the data via One Drive – a virtual storage space – or a local storage disk in their devices for catch-up and revision purposes. Other than Sound Note, one of the most popular lecture capture applications – *keeping it simple with the name* – is Lecture Capture, but *Notes Plus* and *Audio Memos Free – The Voice Recorder* are also of good quality applications.

The revision applications are in big business this century, and it seems technology has achieved what people never thought possible: making revision fun. *Study Blue*, a student's application, which uses their course information to create a selection of card, sets for related revision. The students can also make their own flashcards and test themselves. Another useful revision application is *GoConqr*, which offers resources to create revision charts, mind maps, flash cards, notes and quizzes, as well as the ability to connect and collaborate with friends, classmates or students from around the world. There are also student applications now available for exams which are used by many graduate schools as part of the admissions process. **BenchPrep** uses social networking-style functionality, which allows users to connect with other test-takers and peruse revision materials with quizzes, notes and more

Organization is key for success and wellbeing at university, and student planner applications are becoming increasingly popular. As well as saving on paper, many student planner applications also send reminders and alerts straight to your phone or device. Popular student planner applications include *Timetable* (In android devices), an application featuring a sharp and clean interface which you can map your timetable

onto with ease. For more familiar-looking planner applications for students, consider those with a more traditional spreadsheet-style layout, such as *My Class Schedule* or *Class Timetable.* call, by now, and this technology is becoming even more easy-access as computer companies integrate quality cameras into their products and internet connection speeds get faster. As the overall technology improves, so too do the versions available on smaller devices. Using FaceTime on an iPhone has become as easy as making a call, while Skyping on a tablet makes it brilliantly possible to cook dinner/browse the web/compose a text while talking to your parents back home. Other video call applications include *Fring* and *Tango.* For tips on how to conduct a successful Skype interview (for a job, internship or admissions interview).

If someone happen to be a persistent snoozer who always wakes up about 20 minutes too late for lectures, then "*Alarmy: Sleep If You Can*" is the application for anyone who can't wake up easily. *Alarmy* is an alarm application which requires users to complete small tasks before the alarm turns itself off. Not only will this mean you're alert and raring to go, *Alarmy* also can offer a service of the latest weather update so the user can decide whether to arm himself with an umbrella before leaving home. Meanwhile *Sleep Cycle* aims to correct its users' sleeping pattern by waking them up during their lightest sleep phase. The application does this by monitoring both movement and the time the user went to sleep. This means the users should wake up feeling less groggy in the mornings, and they might also get an extra 10 minutes of breakfast time.

In addition to the applications mentioned previously, there are some other helpful applications such as:

✓ Oxford English Dictionary – to look up words on the go (free with advertisements or paid with no advertisements).

✓ Dictionary.com Dictionary & Thesaurus – dictionary and word-finder for those on a budget; also works offline.

✓ Dropbox for mobile – access and edit documents, upload photos and play your own videos anywhere.

✓ Penultimate – a handwriting app made by Evernote, allowing users to write with a digital pen and upload the work to any device.

- ✓ Skout – a friend-finder app helping students meet new people in their locality.
- ✓ Socrative – student app for quizzing and assessment.

1.7. Advantages of smartphones in learning

The technology used in smartphones is getting really advanced day by day, this is why smartphones are being more and more widely used and becoming increasingly popular. In this respect, Kevin Kimberlin Chairman of spencer Trask says that "no other technology has impacted us like mobile phone it is the fastest manmade phenomenon ever"

Since smartphone is becoming inseparable device for students, smartphone-based learning is an important tool in developing new ideas in languages classes and creating new methods of learning. Smartphones bring numerous advantages for the language learners, they can be summarized as follows:

1. Smartphones provide the ability to get quick answers.
2. The audio and video capabilities of smartphones can bring learning to life within the classroom.
3. The use of smartphones helps students to connect with other students from all over the world, hence expending their learning world.
4. The use of smartphones allows for social learning; Smartphones can allow students to work in groups on projects, the students can move toward a common goal.
5. Smartphones can be used as memory aid; students can document their lessons by taking pictures or videos to enhance retention.
6. Learning with smartphones can also be more interactive and fun.
7. Smartphones can be used as paper and pencil; students can use their smartphones for taking down notes, and even for saving reminders.
8. Smartphones can supplement laptops, tablets and others learning technology.
9. Students can shorten the time in collecting data by using their smartphones.
10. Getting the access to the internet in easy way by connecting to a wireless access point.
11. Students can improve themselves with the help of their smartphones.

1.8.   Disadvantages of smartphones in learning

Now most people rely on smartphones for work and learning because life is so busy and everyone is trying to finish his needs in a short time. However, it is obviously that every technology has its own advantages and disadvantages. Today students have come to a point where the idea of living without smartphones seems impossible because this pocket computer allow them to text and interact on social networking sites such as Facebook, twitter and vibe besides checking their e-mails and playing games online inside their classroom this so extremely distracting for the student because they are not paying attention and makes them lose focus and get more interested in the phone more than in the topic of the lecture, moreover this can be also distracting for others students around them when the teacher stop the lecture and ask the student to turn off his the phone thus this distraction for the entire class.

In addition, student can use smartphones for cheating during exams this could be through the use of text exchanges with other students or simply using the Internet to find answers easily.

It is common knowledge that all smartphones have the ability to take videos and pictures this means that student can easily at any time record anything that goes on in the classroom and uploaded in any site where the video sharing is allowed such as YouTube and Facebook. Thus, it will be an invasion of teacher's and student's privacy.

To conclude, smartphones are owned by the great majority of students and they offer amazing capabilities to students and teacher equally. There are many great tools at the fingertips of students to enhance the teaching and learning process, but at the same time, the very same tools could represent enormous distractions and have negative impact on students. Smartphones are great in itself, but how they are used in classrooms settings should be thought and designed carefully in order to achieve positive results at all times.

1.9.   The psychological effects of smartphones

The development of technology has changed the human's life, using computers, tablets and smartphones have become an important part of everyday life as far as people have their daily activities, dealing with smartphones is one of the most important and inevitable activity at the point that the first thing everyone do at the early morning is checking their smartphones. It is common knowledge that smartphone offers several conveniences in life but every user should be aware of the negative effects of this smart device. The most concerning aspect is smartphone addiction according to Young 1999 smartphones addiction is phenomenon that pertains to uncontrollability of smartphone use and people with this problem encounter social psychological and health problems.

Now most of people find it difficult to stay without smartphone, because this small device gives the ability to communicate with everyone in all over the world, access the internet and browse the web and provide entertainment, such as listening to music, watching videos and movies and playing games. However, the problem is how people figure out if they are addicted or not, because it is not easy to identify the line between the need to use smartphone and be addicted to it is very thin. But there's some symptoms that are concerned with smartphones addiction. The user of this device should be aware of the famous one which known as "Phantom Smartphone Vibration" and so many people have experienced it when the human body becomes conditioned to expect sort of smartphone interaction at the point that people imagine the sensation of vibration.

Because smartphones have internet access, many of the common problems and compulsive behaviours attached to internet use, can now be found with smartphones use. Weinstein and Lejoyeux characterize some problematic internet use as the "***excessive or poorly controlled preoccupations, urges or behaviours regarding internet use that lead to impairment or distress"*** (Weinstein and Lejoyeux, 2010 P.277). This new age of smartphones with internet capabilities has led to much research in the area of smartphones addiction a new word has surfaced in the English language which describes this smartphone dependency called ***Nomophobia*** is abbreviated from no mobile phone phobia and describes the anxiety of losing the

smartphone or the fear of being out mobile phone contact (Emanuel et al, 2015. P292). Furthermore, according to Choi et.al. 2014 the overusing of smartphone can lead to many psychological consequences the includes imbalance of real life relationships, sleep, education and work; some problems occur with verbal memory and attention; high social isolation; and low wellbeing and increased stress, aggression and hostility.

Smartphone addiction is defined as *"excessive use of smartphones that interferes with daily lives of the users"* (Lee et al, 2014). In other words, smartphones addiction disrupts stable life routines. It could be categorized as behavioural addiction (Toa et.al 2010) explains that behavioural addiction occurs when the individual finds it difficult to control the frequency with which they partake in previously harmless behaviours such as shopping, exercise and work.

The overusing of smartphones can often be symptomatic of many problems such as stress, anxiety, depression and lowliness.

Taylor (2012 P113) defined stress as *"A negative emotional experience accompanied by predictable biochemical, cognitive and behavioural changes that are directed either toward altering the stressful event or accommodating to it effect"*. in other word, stress refer to the negative feelings experienced by the individual.

According to Thomee et. al. 2011. Smartphones have increasingly been integrated into people's professional lives as well as social, this may create a demand to be available or reachable of time and space.

Technostress in a new term in the English language which describe stress that one can suffer as result of overusing technology, furthermore technostress is defined by Weil & Rosen (1997 P05) as *"any negative effect on human attitudes, thought, behaviours and psychology that directly or indirectly result from technology"*.

Anxiety is defined by Freud as an emotional state which includes feelings of tension, nervousness, apprehension and worry, these feelings are accompanied by physiological arousal in the body (Spielberg. 2013) individuals who are dependent upon this form of communication to stay close to friends and family can sometimes devote too much attention to message replies or the luck of when an immediate

response is not received, this can lead to negative feeling of isolation and in turn increased anxiety about being ostracised from their inner circle (Lu, et al, 2011). According to Nataro 2015 for many, it is difficult to strike the balance between feeling cut off from the real world when lost in the online domain and separation anxiety when the phone is not in your hand.

Heavy smartphone use can increase depression which is defined by the Encyclopaedia Britannica 2014 as an emotional state marked by feelings of low self-worth, guilt and an inability to enjoy life, in addition, psychiatrist Dr. Paul Bester believes that excessive exposure to smartphone screen is contributing to mental illnesses like depression. According to Thomee et al, 2011 poor sleep has emerged as relevant health problem in technological advanced societies, because sleeping is a biological mechanism related to mood regulation. Smartphone addiction has negative impact on the user's social life causes problems with human relationships. Addiction to social media, texting can extend to the point where virtual online friend become more important than real life relationships and it can lead to poor communication, dishonesty in relationship, conflict and social isolation.

1.10. The preferable smartphone's operating system for students

The growth of smartphone usage among students has become a great issue, with the different operating systems for these smart-devices, one of the most widely spread is well known as Android OS (Android Operating System) from google corporation.

Android is a mobile operating system developed by Google, basically designed   for touchscreen mobile devices such as smartphones and tablets. In addition, Google has further developed Android TV for televisions, Android Auto for cars, and Wear OS for wrist watches, each with a specialized user interface. Variants of Android are also used on game consoles, digital cameras, PCs and other electronics. Initially developed by Android company, which Google bought in 2005, Android was unveiled in 2007, with the first commercial Android device launched in September 2008. The operating system has since gone through multiple major

releases, with the current version being 8.1 "Oreo", released in December 2017. The core Android source code is known as Android Open Source Project (AOSP).

Android is also associated with a suite of proprietary software developed by Google, including core apps for services such as Gmail and Google Search, as well as the application store and digital distribution platform Google Play, and associated development platform. These apps are licensed by manufacturers of Android devices certified under standards imposed by Google, but AOSP has been used as the basis of competing Android ecosystems, such as Amazon.com's Fire OS, which utilize its own equivalents to these Google Mobile Services. Android has been the best-selling OS worldwide on smartphones since 2011 and on tablets since 2013. As of May 2017, it has over two billion monthly active users, the largest installed base of any operating system, and as of 2017, the Google Play store features over 3.5 million applications. Smartphones users prefers the easiest operating system, and for Android, this condition is from its remarkable features, easy to use, fast and effective, sharing applications and other contents without obstacles or conditions and terms, that's why Android become the preferable operating system for all users in general and for students specially.

1.11. Smartphone and learning

Over the past few years there has been growing interest in how smartphones should be used as a learning tool specially for foreign language learners. Chappelle (2001 P01) in her book Computer Application in second language acquisition explained that ***"in the 21st century everyday language use is so related to technology that learning technology has become a fact of life with important applications for all applied linguists"***.

There are many applications designed for students which are very beneficial for them, their main goal is to organize courses and better interact with teachers such as: Note Taking and Cloud Service which allows the student to transfer his notes into study materials. In addition to that, the learner can also use his device in so many ways to facilitate his studies, and improve his learning process through the use of his

device in smart methods, for example when the student attends a conference he should take notes as much as possible, however, the speaker might be so fast in presenting and giving the information, if the student will write down that notes for sure he will take much longer time than the smart method of taking note, it's just a matter of getting out the smartphone from the pocket, open the camera application, choosing well the frame of the blackboard, and then clicking the button to take the picture, in this way, the students who assisted the conference, will make sure to take everything that has been written in the blackboard or if there was a display by Data-show and store the picture in their smartphones which allows them to check them out later on.

Moreover, recording videos is also and effective method to repeat a whole session in anytime that student want, and in some universities this method is not allowed by some teachers, recording audio is a solution and is another very effective way to re-listen for a whole explanation at home, there are many possibilities in order to not miss anything valuable that has been mention in the classroom, and a better example is if the human eye blink, the phone camera will not even blink.

Herrington 2009 explained how smartphones were used to collet videos or images and audio data for creating digital narratives or stories for use as curriculum resources. As for as using some typical ways to save students' lessons to benefit them outside their classrooms, there are other beneficial usage from their smart devices inside the classrooms. Dictionaries applications are one of the most recommended applications in play store (Android) or app store (apple store), because of its speed in searching the word in the database and suggesting the synonyms and even giving the right spelling in audio these services ordinary dictionaries cannot offer at all. According to Freeman (2012), Smartphone help to fill the gap of the still existing digital divide. Smartphones serve as the easiest and the most inexpensive way to connect to the internet. This allows students to have access to information and facilitate communications with others. This has been shown to provide a better classroom.

Google it is a term that become widely spread between people and so for learners is popular and an inevitable, students nowadays rely a lot on getting information from the internet more than books, and the smart devices inside their pockets, whenever need to look for something they will directly open the browser in the smartphone or tablet which must be already connected to the internet and then search in the web of whatever the students want to know, it's a fast way to get the information and easy to have access to the global network that all people share their pieces of knowledge.

1.12. Conclusion

The literature review summarizes the role of smartphone in the EFL courses, smartphone might introduce new things in the learning process, and this requires the effective use of this small device as a learning tool inside language classroom. thus, the use of smartphone leads to new pedagogical changes, which create new pedagogical roles, this chapter has been intended to introduce the effect of the use of smartphone on the learning of second/foreign language classroom.

Moreover, this chapter focus on the impact of using smartphone in learning English language in which the students might use some effective applications to improve themselves.

The following chapter will describe the case study, the research instruments that are used by researchers, presenting the main research findings drawn from each tool, as well as, their analysis and discussion and after their interpretation in relation to the research questions and hypothesis formulated before.

Chapter Two: Research Design, Procedures, and Future Directions.

Chapter two: Research Design, Procedures, and Future Directions

2.1 Introduction

In the learning process, the integration of technology device such as smartphones is considered as a conceptual revolution and an innovative practical tool in foreign language classrooms. However, the presence of smartphones in language classrooms is fragmentary and gradual most of times even totally absent. First of all, this chapter provides an overview about the use of smartphones and its important role at Tlemcen university, at the English department. then, it describes the practical part of the research work primary, it shows the methodology used in the investigation and followed by a full description of the data collection. Moreover, it represents the research instrument which include student's questionnaire and teacher's interview. Finally, it concludes with the discussion and interpretation of the main results beside some suggestion and recommendation.

2.2. Research methodology

The first chapter presented the theoretical part related to the studied topic while the second chapter present the practical one .in this chapter, the research methodology is presented in details including the main reason behind the use of the case study.

The present research work is a case study which took place within the department of English at the university of Tlemcen involving EFL teachers and second year EFL students of Tlemcen university. Yin (1994:13) defined a case study as ***"an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident and relies on multiple sources of evidence"***. Thus, the aim of this research is understanding the importance of smartphone in EFL classrooms, using both qualitative and quantitative approaches which help to gather more reliable and valid results.

2.3. Sample

Sample the participants in this research were a combination of 2nd year EFL students and teachers of English; this part is devoted for the description of the informant.

2.3.1. Teacher's profile

In this study the sampling included teachers from the English Department at the University of Tlemcen, four (4) teachers from language studies who responded to: semi-structured interview. The main aim of dealing with EFL teachers is to give their points of view concerning the use of smartphones in EFL classrooms.

2.3.2. Student's profile

This study concerns second year EFL students, they were studying English as foreign language at the University of Tlemcen for two years. For this study forty (40) students were chosen randomly for the aim of this study, all of them Arabic natives and Baccalaureates holders and their ages range from 18 to 24. The selection of such population was based on the consideration that second EFL students are considered to be experienced a mixed of learning techniques.

2.4. Data Collection

Data collection is one of the most important stage in conducting a research and it is perceived as a hard task. There different data collection instrument, however in this work the researchers work with only with two instruments; a questionnaire that was addressed to the EFL learners and a semi- structured interview with EFL teachers. The purpose of using more than one instrument of research is to gather different information from many sources and study the problem from different perspectives.

2.4.1. Questionnaire

Questionnaire is an instrument used for data collection including list of questions related to one topic, for instance Richard (2005:60) defines the questionnaire as the following:

> *"Questionnaire one of the most common instruments used, they are relatively easy to prepare they can be used with large numbers of subjects and they obtain information that is relatively easy to tabulate and analyse, they can also be used to elicit information about many different kinds of issues such as language use, communication difficulties, preferred learning styles, preferred classroom activities and attitudes and beliefs".*

According to Dörnyeib (2009 P9) there are several advantages concerning the use of the questionnaire among them:

- ➢ Collect huge amount of information in less time
- ➢ Not time consuming
- ➢ Data collection can be fast and relatively straight forward
- ➢ cost - effectiveness
- ➢ it can be successfully used with a variety of people in a variety situation targeting a variety of topics

The student questionnaire is organized by using three kind of questions which are:

1. Close ended questions:

For example: Do you have smartphone with internet access?

Yes ☐   No ☐

2. Open question:

For example: mention some applications you frequently use?

3. Mixed questions

For example: Does your teacher allow you to use your smartphone for learning during the lecture? Yes ☐   No ☐

Why?..

2.4.2. Semi- Structured Interview

The interview is one of the data collection instrument use between the interviewer and the interviewee (s), in order to obtain deeper understanding of specific topic, Kval (1996:14) defines the interview as:

"an interchange between two or more people on a topic of mutual interest, sees the centrality of human interaction for knowledge production, and emphasizes the social situationless of research data".

For collecting the data semi-structured interview has been used as an instrument tool, this type of interview is flexible because it allows more interaction between the interviewee and provides richer results. As Nunan (1992:149) states that *"because of it is flexibility, the semi-structured interview has found favour with many researchers."* The use of such type of interview allows more discussions between the investigator and the interviewee.

The semi-structured interviews are favoured by many researchers as well as for the informants it gives them the chance to prepare the answers, and the freedom to change rather than fixed questions. According to Karin Klenke (2016:131) states that **"an interview protocol than developed around a list of topics without fixed wording or fixed ordering of questions."**

2.5. Data analysis

the process of data analysis and data interpretation will deal with the analysis of the gathered data from the two-research instrument used as well as the relationship between the result and the raised hypothesis, this involves the combination of both quantitative and qualitative methods to reflect on the research questions and objectives, and to ensure, later on, validity and reliability of findings. The concept of validity involves whether the researchers really observes what should be observed; whereas, reliability is always referred to as the degree between the natural situation of the investigation and data that the researchers recorded or obtained from the instruments used (semi-structured interview, the questionnaire). This is indeed, preceded by summarising the main results of the pilot study.
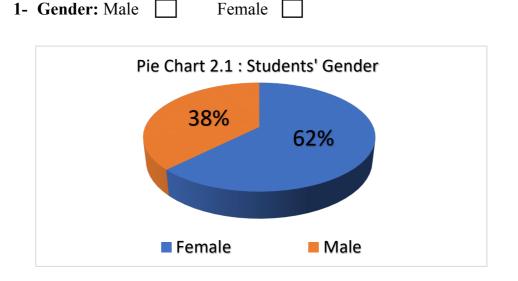
2.6. Analysis of Students' questionnaire

This questionnaire is semi structured questionnaire consisting of twelve (12) questions, which are arranged in logical way. They are either closed questions require from the students to choose "yes" or "no" answers, or to select the appropriate answer from a set of choices or open questions requiring from them to give their own answer with justification.
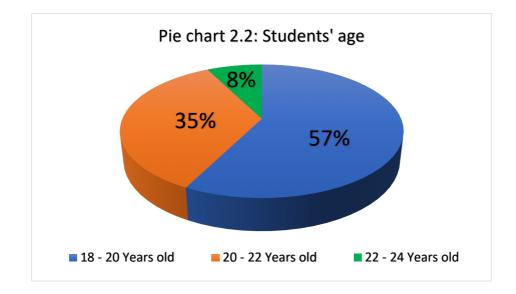
Rubric one is devoted to student's background information, the students are asked to specify their gender, age and evaluate their level in English, in rubric two questions are asked to know about smartphone and applications while the third rubric questions are asked to know about student's attitudes toward learning using smartphones, the last rubric is about the use of smartphone in classroom.

The forty (40) EFL students who responded to the questionnaire were taken from different groups of second year license degree at Abou Bakr Belkaid university of Tlemcen.

Rubric one: Background information

1- Gender: Male ☐   Female ☐

Pie Chart 2.1 : Students' Gender
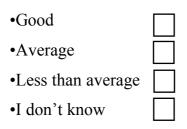
Female 62%

Male 38%

This question is asked to know the gender of the students participating in this research work, this pie chart reveal that female students are more than male. In fact; the examiners have recorded 15 (37,5%) male and 25 (62,5%) female subjects. This add nothing to the work except that girls are numerous than boys in the classroom.

2. Age: …

Pie chart 2.2: Students' age

8%

35%

57%

■ 18 - 20 Years old   ■ 20 - 22 Years old   ■ 22 - 24 Years old

     This question is asked to look at the different age groups of the students in order to know if they are mature enough to be aware about the use of smartphones. the results show that there are three age groups. The first group includes 23 (57.5%) students who are between 18 and 20 years old   student who have 18 have never repeated the year and some others who probably repeated one year in the previous cycle or even the current one. Second age group include 14 (35%) students who are between 21 and 23 years old, they have repeated two or three years, whereas, the last group includes 3 (7.5 %) students two aged 24 years old and the other 26 who have maybe changed their field of study after finishing one or repeated many years, we may have deduced that most of them are mature enough, thus conscious about their learning needs.
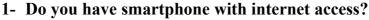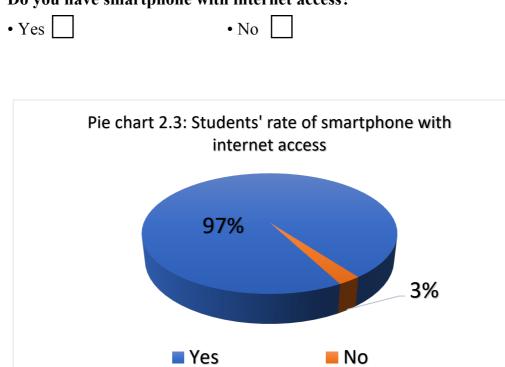
2- Your level of English:
    •Good

    •Average

    •Less than average

    •I don't know

Table 2.1: Students' level of English

Level	Subject	Percentage (%)
Good	12	30%
Average	23	57.5%
Less than average	0	00.00%
I don't know	5	12.5%
Total	40	100%

The aim of this question is to know the student's level of English, we can notice that the highest percentage of Students is 57.5% claims that their level in English is average, some others 30% show that they are good in English, others 12% of students say that they don't know their level at all. While, no one say that their level is less than average.

Rubric 2: Smartphone and applications

1- **Do you have smartphone with internet access?**

   • Yes ☐   • No ☐

Pie chart 2.3: Students' rate of smartphone with internet access

97%   3%

■ Yes   ■ No

This question seeks to investigates whether students own a smartphone with internet access, the pie chart above shows that 39 (97.5%) students have smartphone with internet, while 1 (2.5%) student have not. This data indicate that all the participants own smartphones, only one student mentioned that he/she have not smartphone with internet access.

2- Which operating system do you prefer?

- Android ☐
- iOS ☐
- Windows Phone ☐
- Blackberry OS ☐

Table 2.2: Preferable operating system for students

Options	Subjects	Percentage (%)
Android	36	90%
iOS	4	10%
Windows Phone	00	00.00%
Blackberry OS	00	00.00%
Total	40	100%

This question attempts to know which operating system that students prefer for their smartphones, the results shows that 36 (90%) students prefer the Android OS (Operating System), in addition, 4 (10%) students like the Apple iOS, while no one uses neither Windows Phone nor Blackberry OS.

3- Mention Some applications you frequently use.
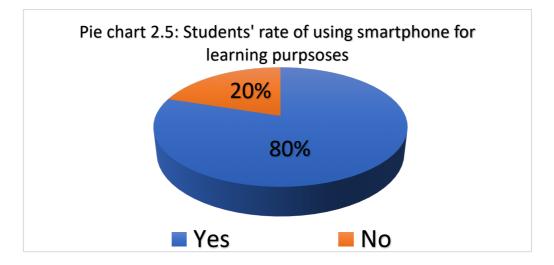
Pie chart 2.4: Students' applications usage in general

20%	37%
43%	

■ Social media   ■ Dictionariers   ■ Other applications

     The aim behind this question is know which applications are most useful by students, the pie chart indicates that 15 (37.5%) respondents use of social media applications (Facebook, Twitter, Instagram, Snapchat …) and 17 (42.5%) students use dictionaries applications, and some others 8 (20%) students use other different applications and websites.

Rubric 3: Smartphone and learning

1- Do you use your smartphone for learning purposes?

Pie chart 2.5: Students' rate of using smartphone for learning purpsoses

20%	
80%	

■ Yes   ■ No

The main aim of this question is to investigate whether the students use their smartphone for learning purposes or just for the need of communication and entertainment, the results show that 32 (80%) students use their smartphone for learning purposes, while the rest of them 8 (20%) use their devices for entertainments and gamification and other personal needs.

2- How often do you use your smartphone to study or recap your lessons?

Pie Chart 2.6: Pattern usage of smartphone for recapping lectures

This question was asked to figure out whether the students uses their smart devices to recap their lessons, the majority of them 21 (53%) they use their smartphone for this purpose, while 17 (42%) of students they using it daily in their classrooms and even at home, however 2 (5%) they have never used their smartphones to recap their lessons.
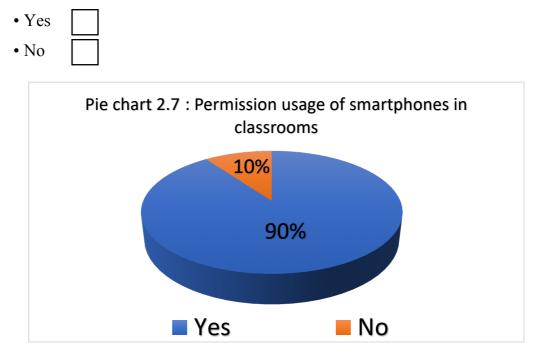
3- Which of the following learning resources would you be interested in accessing your smartphones?

- Power point slides ☐
- Audio recording ☐
- Videos ☐
- Pdf ☐
- E-books ☐
- Dictionaries ☐

Table 2.3: Student's rate of accessible electronic information resources.

Options	Subjects	Percentage (%)
Power Point Slides	7	17.5%
Audio recording	8	20%
Videos	10	25%
Pdf	8	20%
E-Books	2	5%
Dictionaries	5	12.5%
Total	40	100%

Through this question, the researchers attempt to know the rate of using accessible electronic resources for students, the results show that 10 (25%) participants have access to videos, while others 16 (40%) students uses audio recordings and Pdf through their smartphones, in addition 7 (17.5%) of students browse PowerPoint slides, and 5 (12.5%) of students they only check electronic dictionaries, the rest 2 (5%) students read E-Books in their smartphones.
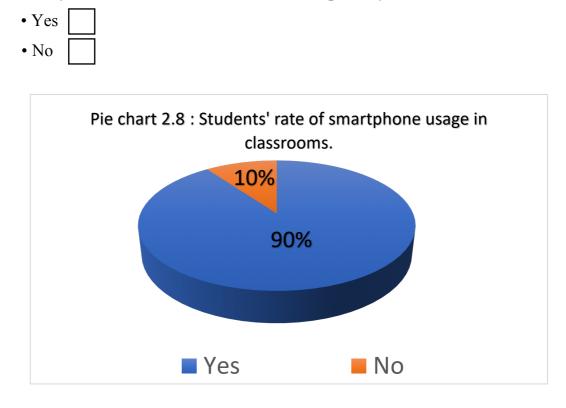
4- Does your teacher allow you to use your smartphone for learning during the lecture?

• Yes ☐
• No ☐

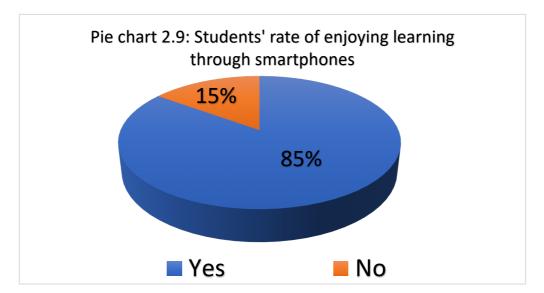Pie chart 2.7 : Permission usage of smartphones in classrooms

The aim for this question is to know whether the teachers allow students to use their smartphone during lectures for learning needs, the pie chart above indicate that the highest percentage 36 (90%) students prove that yes, they are allowed to use their devices. However, 4 (10%) students claim that they are not allowed.

Rubric 4: Smartphones in classrooms

1- Have you worked in classroom with smartphone yet?

- Yes ☐
- No ☐

Pie chart 2.8 : Students' rate of smartphone usage in classrooms.
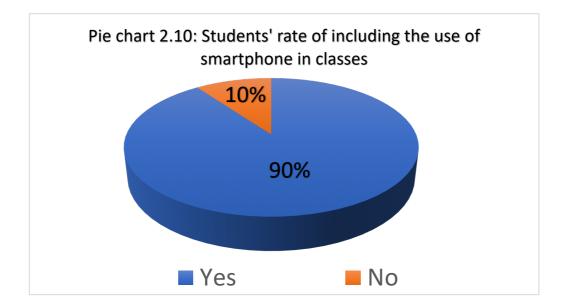
10%

90%

■ Yes   ■ No

The reason behind asking this question is to know the rate of smartphone usage during lectures in classrooms, the results shows that the majority 36 (90%) of students works with their smartphones inside classrooms, while the rest 4 (10%) students claimed that they haven't work with smartphones yet.

2- Do you Enjoy learning using smartphone inside the classroom?

Pie chart 2.9: Students' rate of enjoying learning through smartphones

15%

85%

■ Yes   ■ No

The question above was asked to figure out whether students enjoy using their smartphones or not, the results showed that most of them 36 (85%) do really enjoy using them, because they found it easy to access and very effective, in addition shorten the time when it comes in searching through the web or looking for definitions of terms in dictionaries, while the rest 6 (15%) do not enjoy and they found smartphones as needless tool.
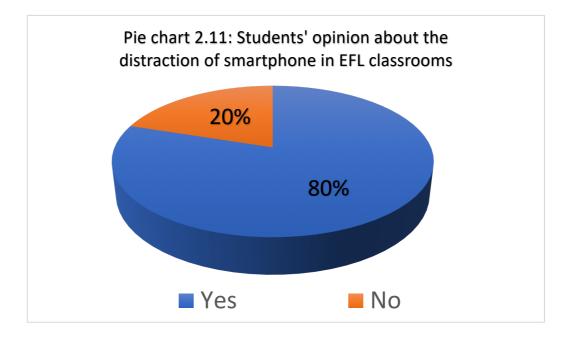
3- Which is better, classes with smartphones or without?

Pie chart 2.10: Students' rate of including the use of smartphone in classes
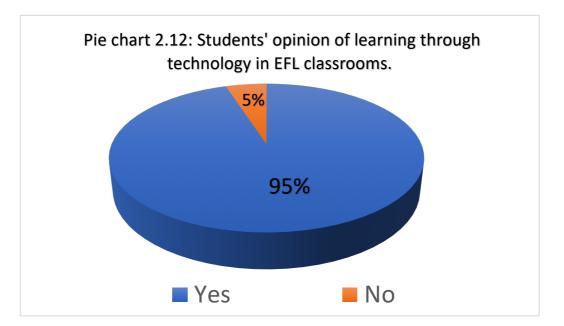
10%

90%

■ Yes   ■ No

This question attempts to discover whether students prefer classes with smartphones or without, the results above proved that most of the participants 36 (90%) prefer using their smartphones in classes, however 4 (10%) students see that is needless and prefer to avoid using them.

4- Do you think smartphone causes distraction during lectures?

- Yes ☐
- No ☐

Pie chart 2.11: Students' opinion about the distraction of smartphone in EFL classrooms

20%

80%

■ Yes ■ No

The aim behind this question is to clarify if really smartphone causes distraction in classes or not, the results shows that the majority of the participants 32 (80%) think that smartphones does not causes any kind of distraction, however the rest of them 8 (20%) claims that smartphones causes distraction inside classrooms.

5- Do you think you have learned from using Technology in EFL classrooms?

Pie chart 2.12: Students' opinion of learning through technology in EFL classrooms.

5%

95%

■ Yes   ■ No

This question was asked to discover if students have learned by using technology in their lectures, the extreme majority of the participants 38 (95%) think that is true and they have learned a lot from including this new method in their classes, while 2 (5%) claimed that they didn't learn by using it technology in their classrooms.

2.7. Analysis of teacher's interview

The teachers' interview mainly included questions that aimed to reveal whether students' can consider smartphone as reliable tool for learning and a trustable source for electronic information, in addition to the kinds of uses inside classrooms, the answers of the four teachers were as follows:

Item one: According to you what is the main aim of using technology in EFL classroom?

Teacher one: the use of technology helps both teachers and learners, now in digital world we are no longer use classical ways to teach, we are trying to develop new method and modern way in the teaching process. So, technology helps with the image and the access to information, moreover it makes things easier.

Teacher two: the use of technology in EFL classrooms will help educators to be more familiar with the significant role it plays in the teaching and learning process, it also helps teachers to have more dynamic classrooms.

Teacher three: The main aim of using technology in classes is to facilitate the learning process through new methods and to make the students up to date to what is going on in the digital world concerning the learning process.

Teacher four: For me I guess the role of using technology is to look for different way to deliver the message for the learners easily and get the student's attention through the different available devices.

Item two: From your previous observation during lectures, can the student use smartphone as reliable learning tool? What are the reasons?

Teacher one: Yes of course, and they do. When I ask my students to bring dictionaries, some of them they accept but others prefer to use dictionaries applications in their smartphones. In the beginning I didn't accept, but I have seen that they are more comfortable using their smartphones rather than bring dictionaries so I have to follow and give them possibilities.

Teacher two: No, I've noticed that students when uses their smartphone, it will be only for chatting in social media such Facebook and Viber.

Teacher three: From my previous experiences, students when they use their smartphones they be more creative and their work were more opened to world's perspectives, and my answer will be yes, they can take the smartphone as reliable tool as long as they choose well the content.

Teacher four: Actually, it depends on their usage, a smart student will use his mobile in smart way, when he searches in the web he must filter the findings and compare between many sources then take only what he feel it suits the topic, some students they just take anything they found it first without any filtering and this may affect the honesty of their answers.

Item three: Would you allow and encourage students to use smartphones in classroom for learning purposes? State why?

Teacher one: yes of course we have to develop and change because there are other ways to teach.

Teacher two: Yes, if they are aware about the necessity and the utility of using this device, I would allow my students to use their smartphones.

Teacher three: I would certainly allow my students to use their smart devices for learning purposes of course, because I feel like I need to develop my methods in teaching taking into consideration the material available nowadays.

Teacher four: If I have to be honest, I am not comfortable when my students uses their smartphones during my lectures, because I think it's a kind of distraction but their needs is priority than my fears, so I would like be familiar and allow them to use it.

Item four: do you think that the use of smartphone could be beneficial for EFL learners? State why?

Teacher one: yes of course, but it depends on how they are going to use it. If u just want to use the method and students will be lazy this is not good at all however, if you are going to guide them from the beginning I think it will be beneficial for them

Teacher two: I don't think the use of smartphone could be beneficial for EFL learners except for dictionaries, because the teacher will offer almost everything about the given lecture.

Teacher three: yes, I think that smartphones shorten the time and present the information in a fashionable way, it is beneficial specially for EFL learners.

Teacher four: EFL learners need to practice their skills in any way, and smartphones could be the solution through chatting and speaking to natives, so in my opinion these devices will be beneficial if the use were good enough.

Item five: do students seem motivated during the use of smartphone in learning?

Teacher one: yes, it is part of them, students are more comfortable because through this device they can use dictionaries, read articles and even revise their lectures so they can check and read any things with their smartphones.

Teacher two: Some of them yes, they seem motivated when they use their smartphones.

Teacher three: in unconscious action, students pick up their smartphones whenever I ask them for a meaning of any unknown word, then the first of them who get the answer tries hard to get the teacher's attention to be the first one who participate, for me this a sign of motivation when they use their smartphones.

Teacher four: Sometimes yes, especially when it comes in searching for what they need in a short time, their mobiles were savers for them.

Item six: Have you ever faced any distraction inside the classroom when a student used his or her smartphone? Mentions some if yes.

Teacher one: Yes, many times, this why I said you have to guide them, because they are always connected to social media and other websites.

Teacher two: Actually, I've never faced any distraction inside the classroom concerning the use of smartphones.

Teacher three: the only distraction that I have faced and I still face is when the mobiles rings at the same time when I speak, I feel it like an annoying interrupting, however my frequent asking of making the mobiles in silent mode was a solution.

Teacher four: rarely, and all the students know that they pick up their mobiles only they need it, otherwise they are prohibited to use it in non-learning purposes.

Item seven: We noticed that teachers ask students to turn off their smartphone before every exam, why?

Teacher one: Many and not all the students try to cheat during the exams.

Teacher two: Obviously some of them will use their mobile phones for cheating.

Teacher three: I could not allow the students the get seduced by their smartphones and get the answers from external sources or through the internet, that's why as teacher we should exclude the use of smartphones in exams.

Teacher four: Students nowadays tries to get marks without testing their minds' abilities, cheating by smartphone is strong reason to ban this technology in exams.

2.8. Discussion and interpretation of the main results:

This section attempts to interpret and summarizes the main findings of this investigation, the major results that are collected from each research instruments will be discussed in relation to the previous raised hypothesis the teacher's interview and the student's questionnaire have helped the researchers to gather a large amount of data concerning the use of smartphone as learning tool in EFL classrooms, the main aim was to know the degree of integrating smartphones in learning a second language, and how it could help the students to support their educational matters, and this is preceded by mentioning two hypothesis developed by the researchers and thus accept or reject them.

The main results which emerged from the evaluation of the first hypothesis, i.e. smartphone will help students to search on the web and get more information about their courses, the main findings related to the EFL student's questionnaire which revealed that the use of smartphone will help them and facilitate the learning process through its developed applications and variable uses. In this respect, the results obtained from the student's questionnaire confirm the first hypothesis.

The second hypothesis was that student can take smartphone as reliable tool in learning, the results of teacher's interview revealed the close relationship between students and the use of smartphones, EFL teachers assert that this smart device is a great tool and it can help learners to create new methods in learning with it diverse usage, they see that if smartphones used appropriately, students can benefit from it, so this confirms the second hypothesis.

To conclude, it is important to point that the main findings of both research instruments confirms the researchers' hypothesis.

2.9. Suggestions and recommendations:

Based on this work, researchers would like to suggest and recommend some applications that may help students use their smartphones in proper way and implementing these smart devices in the learning process as a new method for the sake of making both teaching and learning more sophisticated and fun. And these are some of the suggestions:

- ➢ Allow and encourage students to use their smartphones during lectures for learning purposes and avoid browsing in needless sites such as social media.

- ➢ Suggest for the students some useful applications especially the educational ones which can helps them discovering new knowledge.

- ➢ Ask students to look for the meaning of difficult words in online dictionaries so they will shorten the time more than searching looking in ordinary dictionaries.

- ➢ Make brainstorming visible via a projected image with *Polleverywhere.com* (website) and *Wallwisher.com*. Using these two sites really is too simple. Although *Wallwisher* (application) requires an internet connection,

- ➢ Allow students to video or audio record teacher's assignment instructions, and this will help them repeat or revise the lecture later on at home.

- ➢ Send students reminders in-class/after-class through *ClassParrot* and *Remind 101* (applications and websites).

- ➢ Write with applications such as *My Writing Spot* and *Evernote*.

- ➢ Monitoring students during the time of using different applications in the classrooms and suggest some educational sites.

There are several more ways by which both students and teachers can creatively use mobile technology in the classroom. Again, technology is powerful and its benefits go beyond just making teachers' work efficient. It can increase productivity and help teachers achieve greater results in their work, and these are some of recommendations given by researchers:

- ➢ The use of "QR" Codes or Quick response codes are a great way to use mobile technology in the classroom. Links to further resources, complex diagrams and images, solutions to tasks could be coded and made available to students, just with simple preparation via data-show and then students have to scan the QR code so they will access the

content easily, in addition the presence of students will be marked automatically in the database of the application given by teacher.

➢ Researchers recommend online discussion forums, even outside classrooms, students can access some forums where they can meet virtually and discuss about different topics in order to understand more concepts and increase their grammar skills and vocabulary.

➢ Creating videos is an alternative way than ask students to write a 2000-word essay after researching on a topic, where several of them would simply copy and paste paragraphs without necessarily understanding the content, teachers could ask students to research and create a 5 minute or less video or audio recording of what they had researched about.

➢ Students need to use their smartphones only when they are in the need of it and avoid using it for a non-learning purposing in the classrooms.

➢ Students have to be smart while choosing the content they find on the network and look only in trusted resources.

➢ Manage the timing well and make a time for every activity in order to organize the learning process through the use of technology

2.10 Conclusion

This chapter is devoted for the analysis of the teacher's interview and the student's questionnaire in Tlemcen university, concerning the use of smartphone as learning tool in EFL classrooms. furthermore, through the analysis of teacher's interview and student's questionnaire, the researchers found that both teachers and learners are aware about the necessity of using smartphone inside L2 classrooms in order to develop student's abilities and believe in their potentials.

In this chapter, the researchers have also attempt to discuss and interpret the finding of the current study with the main objective, being to answer the two main research questions and test the validity of the research hypothesis.

General Conclusion

General Conclusion

Researchers and scholars talk about the need to integrate new technologies into foreign language teaching and learning. This research was carried out to investigate the use of smartphone and its advantages in EFL classrooms.

To conduct this investigation, researchers have asked two research questions:

1. Do EFL students at Tlemcen university make use of smartphone for learning purposes?

2. Can smartphone be taken as a reliable tool in learning?

In order to answer the above questions, two hypotheses were proposed:

1. Searching on the Internet to get more data about their courses, to snap a picture of the day's homework assignment, taking note and recording lectures, and using dictionaries are seem to be among the uses of smartphones.

2. Smartphone can be a reliable tool depending on the use of it.

The investigation is directed through a case study method on a sample of forty 40 students and four EFL teachers at the English department of Tlemcen university. This survey contains two chapters, the first chapter was titled " literature review: definition of the main concepts". It addresses to the reader many important elements including definition of ICT, mobile learning, smartphone as well as its advantages and disadvantages, the psychological effect of smartphone and the use of smartphone in learning.

The second chapter is empirical, it is divides into two parts. The first part summarizes the definitions of research instruments used to collect data. First the student's questionnaire to second year. Second, the interview with EFL teachers. Additionally, this part introduces the data analysis and interpretation to confirm or disconfirm the given hypothesis leading to this study. concerning the second part of this chapter, the researchers try to give some suggestions and recommendations to increase teachers and students' awareness about the several advantages that smartphone offered to EFL learners.

Forty EFL students of second year and four EFL teachers participated in the investigation. The students were given a questionnaire and the interview was done with EFL teachers.

The analysis of the student's questionnaire shows that 80% of the students use their smartphone for learning purposes. Moreover, most answers of the participants confirm the first hypothesis which states that students use their smartphones to search on the internet to get more information about their lectures, reading articles, taking notes and using electronic dictionaries. The interview with teachers also confirms that smartphone can be used as reliable tool in learning if they know how to benefit from mobile technology, according to them, there are other new methods in teaching and learning process.

To sum up, it is necessary to mention that this thesis is conducted to investigate the use of smartphone in EFL classrooms, however the topic is very vast and pave the way for future research work.

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Appendices

Appendix A: Students' Questionnaire

Students' questionnaire

Dear students:

You are kindly requested to express your opinion about the use of smartphones as learning tool inside EFL classrooms, please answer each of the following questions as honesty as possible because your answers are very important for the validity of our research and please try to give your full attention and interest.

Any information obtained will be kept confidentially.

Rubric 1: Background information

1- Gender: Male ☐   Female ☐

2- Age: ....

3- Your level of English:
- Good ☐
- Average ☐
- Less than ☐
- I don't know ☐

• Rubric 2: Smartphone and applications

1- Do you have smartphone with internet access?
   • Yes ☐   • No ☐

2- Which operating system do you prefer?

- Android (Google) ☐
- iOS (Apple) ☐
- Windows Phone (Microsoft) ☐
- Blackberry OS (Blackberry) ☐

3- Mention some applications you frequently use:

....

....

• **Rubric 3: Smartphone and learning**

1- Do you use your smartphone for learning purposes?

• Yes ☐   • No ☐

- If yes, please specify

....

....

2- How often do you use your smartphone to study or recap your lessons?

- Always ☐
- Sometimes ☐
- Never ☐

3- Which of the following learning resources would you be interested in accessing your smartphone? (You can choose more than one answer)

- Power point slides ☐
- Audio recording ☐
- Videos ☐
- Pdf ☐
- E-books ☐
- Dictionaries ☐

4- Does your teacher allow you to use your smartphone for learning during the lecture?   • Yes ☐   • No ☐

Why?

....

....

.

• **Rubric 4: Smartphones in classrooms:**

1- Have you worked in classroom with smartphone yet?

• Yes ☐   • No ☐

If no, why?

....

....

2- Do you Enjoy learning using smartphone inside the classroom?

• Yes ☐   • No ☐

3- Which is better, classes with smartphones or without?

....

....

4- Do you think smartphone causes distraction during lectures?

• Yes ☐   • No ☐

5- Do you think you have learned from using Technology in EFL classrooms?

....

....

Thank you for your collaboration

Appendix B: Teachers' Interview

The teachers' interview

Dear teachers,

We are preparing a research about the use of smartphones in the learning process with EFL classrooms and we will be so grateful if you could answer the following questions to help us in the accomplishment of our research.

1. According to you, what is the main aim of using technology in EFL classrooms?

2. From your previous observation during lectures, can the student use smartphone as learning tool? What are the reasons?

3. Would you allow and encourage students to use smartphones in classroom for learning purposes? State why?

4. Do you think that the use of smartphones could be beneficial for EFL learners? State why?

5. Do student seems motivated during the use of smartphone in learning?

6. Have you ever faced any distraction inside the classroom when a student used his/her smartphone? Mention some if yes.

7. We noticed that teachers ask students to turn off their smartphones in advance before every exam, why?

Thank you for your collaboration!

Summary

This research aims at investigating EFL learners' attitudes towards the use of smartphones for learning purposes, in addition to teachers' perspective and the acceptance of using mobile technology in the learning process, especially in the 21st century. This investigation takes place at Tlemcen university, the sample populations includes 40 students from second year "Licence". The main findings of this work reveal that EFL learners support learning through these smart-devices because teaching process requires applying new methods using the available developed technologies in order feed students' needs and attract their attention.

Key words:

EFL-Learners, attitudes, smartphones, smart-devices, mobile technology.

الملخص

الهدف من هذه الدراسة هو التعرف على موقف طلبة اللغة الإنجليزية حول استعمال الهواتف الذكية لأهداف تعليمية، بالإضافة إلى وجهة نظر وقبول الأساتذة لاستعمال تكنولوجيا الهواتف في المجال التعليمي، خاصة في القرن الواحد والعشرين. تم انجاز هذا البحث في جامعة تلمسان على عينة من الطلبة تضمنت أربعون طالبا ينتمون إلى السنة الثانية "ليسانس". النتائج الرئيسية للبحث اظهرت مدى تشجيع الطلبة للتعليم عن طريق هذه الأجهزة الذكية لأن المجال التعليمي يتطلب تطبيق طرق جديدة واستغلال التطور التكنولوجي المتاح من أجل تلبية احتياجات الطلبة ولفت انتباههم.

الكلمات المفتاحية:

متعلمي اللغة الانجليزية كلغة اجنبية، مواقف، الهواتف الذكية، الأجهزة الذكية، تكنولوجيا الهاتف.

Le résumé

Le but de cette étude c'est de savoir l'opinion des étudiants de langue anglaise sur l'utilisation des smart phones pour des objectifs éducatifs de plus l'avis et l'accord des professeurs sur l'utilisation de cette technologie dans le domaine de l'éducation plus précisément dans le 21eme siècle la réalisation de cette recherche s'est effectuée à l'université de Tlemcen avec un échantillon de quarante étudiants de la deuxième année licence les résultats principaux de la recherche ont montrés que les étudiants soutiennent l'idée d'étudier à l'aide des outils technologiques puisque le domaine de l'éducation demande l'utilisation de ces nouveaux outils en utilisant le développement technologique pour capter l'attention des étudiants et assurer leur besoin.

Les mots clés : Les apprenants de la langue anglaise comme langue étrangère, Positions, Smart phones, Outils technologiques, La technologie du téléphone.