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**Investigating the Influence of Mobile Devices Utility on Learner
Autonomy in an EFL Context; The Case Study of Second Year
Master Students of Didactics and Applied Languages**

*An Extended Essay Submitted in Partial Fulfilment of the Requirement for a
Master's Degree in Didactics and Applied Languages*

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Dedications

I dedicate this work to:

*My beloved grandmother-may she rest in
peace;*

My mother and father who have always been a constant source of inspiration.

*Without their love and support, this research would not have been made
possible;*

*To my dearest sisters Rahmouna and Nadjat and my brother Abdelkarim for their love, care
and support*

To my auntie Fatima and my English middle school teacher Soumiya

*To my precious lifelong friends Bochra, Nihad, Maroua and Noah for supporting me and
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Abstract

Mobile-based learning is witnessing a rapid expansion inspired by contemporary technology in the current globalised world. Hence, many information communications technology tools are utilised for learning and teaching. Now, this is regarded as a new field of educational technology. The present study attempts to explore the concept of learner autonomy and the attitudes of EFL learners and teachers towards the effectiveness of using mobile-assisted techniques in enhancing autonomous language learning. For this purpose, the researcher used two main research instruments: a questionnaire and an interview. The analysis of these research tools showed that most master two students of Didactics and Applied Languages had a positive attitude and were willing to take responsibility for their learning. Overall, this study aims to discover to which extent the EFL context at Belhadj Bouchaib University is willing and ready to adopt mobile technology to enhance autonomy in language learning. Similarly, it attempts to find out how accepting is the EFL context to follow the globalised world in its race for technology-based education.

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List of Abbreviations and Acronyms

ADSL: Asymmetric Digital Subscriber Line

AVA: Audio Visual Aids

BBC: British Broadcasting Cooperation

CALL: Computer Assisted Language Learning

CBA: Competency Based Approach

CD-ROMS: Compact Disk Read Only Memories

COVID-19: Coronavirus Disease 2019

CPU: Central Processing Unit

EFL: English as a Foreign Language

E-learning: Electronic Learning

E-tutorials: Electronic Tutorials

ICT: Information Communications and Technology

iOS: iPhone Operating System

L3: License Three

MALL: Mobile Assisted Language Learning

macOS: Mac Operating System

PC: Personal Computer

RAM: Random Access Memory

SLA: Second Language Acquisition

List of Abbreviations and Acronyms

SMS: Short Message Service

UNESCO: United Nations Educational, Scientific and Cultural Organization

USB: Universal Serial Bus

Vlogs: Video Blog

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General Introduction

General Introduction

In the current globalized world, learning has been given brand new features due to the advancements in technology and the need to cultivate more autonomous learners that can learn more efficiently and effectively. Furthermore, people are opting to learn English throughout the world because it promises greater returns in terms of access to knowledge domains and contacts with others. Therefore, modern society is not only requiring the mastery of language but also lifelong learning. This is the purpose behind introducing the notion of learner autonomy in the educational context. That being said, ICT resources such as mobile devices contribute a greater role in providing flexibility in learning for English language students and help them control their learning process more easily.

With the outbreak of the COVID-19, autonomy in learning and mobile technology have been proven to be more useful if not necessary for the teaching and learning process. Algerian English learners are no different. Since the shift in the teaching paradigm from teacher-centeredness to student-centeredness, many solutions have been offered to make their learning more motivational and inspiring. However, fostering learners' autonomy via mobile devices constitutes how much learners are aware of their responsibilities towards their learning and how these mobile technologies should serve the purposes of education. The present investigation is carried out under two research questions:

- a. What is the learner's attitude towards Mobile-based learning?
- b. How does the use of mobile devices influence learner autonomy?

To answer the research questions, two hypotheses are formulated:

1. Learners have a positive attitude towards mobile-based learning.
2. The use of mobile devices assists in enhancing language learning autonomy.

This study aims to investigate whether students have a positive attitude towards mobile-based language learning and if mobile devices can enhance learner autonomy.

General Introduction

This dissertation is made up of three chapters: chapter one focus on the learner autonomy and ICT in the EFL context and covers; autonomy and learning, autonomy term in the literature, stages of autonomy, autonomy in language education, learner autonomy, autonomy inside and outside the classroom, learner autonomy and new technologies, information and communication technology, the use of ICT in language education, the use of ICT in learning the English language, the ICT tools used in teaching and learning English. Commonly used mobile devices in English language learning and online learning. The research instruments of this study are questionnaire and interview, questionnaire addressed to students and interview addressed to teachers in order to obtain data.

The second chapter presents the methodology used to conduct the study, a mixed model: quantitative and qualitative. An online questionnaire was used to examine autonomy in learning master two students of English didactics and applied languages at Belhadj Bouchaib University. An interview was also conducted with master's degree teachers to test the reliability of the hypotheses. This chapter also focuses on the mobile devices that help students enhance their autonomy. Therefore, this chapter focuses on research design, the sample and tools used to conduct the research, the data collection procedure and its analysis.

The third and final chapter is considered the most significant in this research study, as data were examined quantitatively and qualitatively, beginning with the students' questionnaire and progressing through teachers' interviews, in order to defend the hypotheses established, which are linked to students' attitudes towards mobile-based learning along with their influence on learner autonomy. Furthermore, the discussion and interpretation of the main results in this chapter provide recommendations and suggestions for both teachers and students.

Chapter One:

Learner Autonomy and ICT in the EFL Context

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Chapter one: Learner Autonomy and ICT in the EFL Context

1.1 Introduction

Modern tendencies in EFL teaching and learning reveal the researchers' interest in enhancing the students' learning process. Since the shift in the teaching paradigm from teacher-centeredness to student-centeredness, many solutions have been offered to make learning motivational and inspiring. This led the researchers to conclude that making the students responsible for their learning calls for technological advancements in language education. The first part of the present chapter examines the concept of learner autonomy, its definitions and theories, and stages of autonomy along with autonomy and new technologies. The second part focuses on the technological advancements of Information Communication and Technology in particularly mobile devices that may help students develop autonomy and take full control of their English language learning process.

1.2 Autonomy and Learning

Learning is a continuous process that gives people a sense of accomplishment and improvement. It is an accumulation of experiences that can make people master their craft (Dickinson, 1987). Thus, they should do most of the learning independently and not wait for the teacher to reprimand them. That's where learner autonomy can help learners self-direct their pursuit of knowledge. Furthermore, autonomy in learning involves a change in one's behaviour, skills, and attitude and it is the result of experience. In this respect, Brown (2001) maintains that providing students with a sense of 'ownership' for their learning help encourage their intrinsic motivation. As learners, autonomy can only be achieved by controlling their learning and not shying away from making their own choices and risk-taking.

However, the yearning to learn before all else comes from within (Hadi, 2012). Learners must figure out the importance of learning and take responsibility for the choices

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they make. They should not constantly wait for the teacher's approval of what they do or say. On top of that, responsible learners as stated by Scharle & Szabo (2000), are self-aware that making progress in learning requires making efforts. Autonomy entails moving the focus from teaching to learning and personalised learning (McClaskey, 2018). Therefore, learners have to take an active part in decision-making about their learning and enhance their autonomy by controlling their education process.

1.2.1 Autonomy Term in Literature

There is no general agreement about a clear definition for autonomy within education and various branches of knowledge. This lack of consensus is due to the versatile use of the term Autonomy, being brought up in many fields and explored from different angles. According to the Oxford English dictionary (2021), this term is derived from the ancient Greek words' autos meaning "self," nomos meaning "rule," and autos-nomos refer to someone or something which lives by their own rule. The beginning of autonomy as a conception of self-mastery can be traced back to ancient Greek politics and moral philosophy.

Nearly 2400 years ago, the Greek philosophers Aristotle, Plato, and Socrates explored political philosophy and concluded that the most ideal form of government regime is when every man can self-govern himself (Gonzalez, 2012). Back then individuals lived in a self-governing state, where no citizen is subjected to any kind of authority but rather had self-directed freedom and independence in controlling their own lives. In a similar vein, Kant (1724-1804), the "inventor" of moral autonomy asserts that autonomy is the morally right one command, or the power to think and make individual decisions through daily life (Sensen, 2013). Throughout the Enlightenment period and the French revolution in the late sixteenth and seventeenth century, autonomy was commonly used in a political environment (Berka et

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al., 2000). Subsequently, the word was used in correlation to the individuals' right to self-command or self-administration.

Thus, it can be acknowledged that autonomy in education is correlated to self-directed studies, taking charge of one's learning and claiming responsibility for that learning. This means that ownership of learning stands for the power and duty that learners insert in the learning journey.

1.2.2 Emergence of Autonomy in Language Education

Henri Holec's report was the first research in 1979 to introduce "learner autonomy" into the language education debate. His focus was on adult language learning and their responsibility for planning, implementing, and evaluating their learning (Little, 2007). The educational guru Holec (1981) first coined the concept 'learner autonomy' as:

To say of a learner that he is autonomous is that he is capable of taking charge of his learning and nothing more...to take charge of one's learning is to bear responsibility for all the decisions concerning all aspects of this learning. (p. 3).

For Holec to become autonomous, a learner is alleged to master certain standards to be independent, thereby controlling his education. According to Hadi (2012), some of the crucial requirements the learner needs in order to reach that outcome are:

- First, having the ability to own his learning.
- Second, determine the goals and content of learning.
- Third, choosing the adequate techniques, methods, and materials for learning on his own.
- Fourth, monitoring the learning procedure by himself.
- Finally, assessing what has been acquired.

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According to Holec (1981), the learners cannot achieve independence in decision-making within acquiring knowledge until they become aware that they are in charge for their learning, which is the first step towards autonomy. This can only be attained through the learner's engagement in the learning process.

In the beginning, learner autonomy meant learners are independent. However, during the 1990s, the term shifted from learners doing things by themselves to doing things for themselves. Moreover, due to the stretch of learner-centred approach theories impact in education, more and more national curricula incorporated learner autonomy (Often disguised as: 'independent learning', 'critical thinking') (Little, 2007). Since then, the learning autonomy concept has been growing in foreign language teaching and learning, and now it is spreading to be naturally fit in distance learning.

1.2.3 Definition of Learner Autonomy

Based on Holec's universally acknowledged account of learning autonomy, it is understood that it means to a large extent the learner's responsibility towards his learning. Nevertheless, learner autonomy remained elusive, which led to more academic discussions concerned with restating its' apprehension.

Benson (2001) was one of the researchers who did not see eye to eye with Holec's views on learner autonomy, claiming that the cognitive skills essential in managing one's learning are not considered. Little (1991) also perceives this in Holec's definition and proclaims that independent and critical thinkers are autonomous learners who enjoy the process of self-learning. Benson (2001) consolidates with Little's (1991) definition and recognises the significant new aspect that Little adds that did not exist in previous definitions of autonomy in learning, which is the vital psychological aspect Holec neglected. This ignored side of autonomy focuses on the cognitive and self-management in the learning process. It also describes that the learner will develop and grow his autonomy as a result of

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his never-ending effort to understand the “Why”, the “What” and the “How” of his learning. Furthermore, Dickinson's (1987) perspective on learner autonomy entails decision-making in learning. He adds that the learner's responsibility relies on making and taking decisions which is what autonomy is all about.

A more elaborated definition of learner autonomy is also put forward by Cotterall & Crabbe (1999), that considers it as: "the product of an interactive process in which the teacher gradually enlarges the scope of her learners' autonomy by gradually allowing them more control of the process and content of their learning" (p. 46). Cotterall & Crabbe's definition of learner autonomy seems to be the most suitable for the purposes that are dealt with in this dissertation. The fact that the learner autonomy movement does not automatically instigate that the learner will know how to learn and possess the ability to set learning goals and organise their learning activity alone. If they already have the ability, they need to execute and develop it; if they don't, they need to develop it. In either case, the learners' autonomy is in the teachers' hands as it is in the learners' hands. Little (2007) also explains this notion as:

Learner autonomy entails a shift from 'directed teaching' to 'self-instructed learning'; but the ability to take charge of one's learning is 'not inborn but must be acquired either by "natural" means or (as most often happens) by formal learning, i.e., in a systematic, deliberate way. (p. 14).

Learner autonomy is still an open and debatable subject in language education. Additionally, defining this notion can be tricky to blurt out. Little (2007) asserts that a learner's psychology greatly affects autonomy in the process and the content of learning. Furthermore, different degrees of autonomy mean the behaviour of autonomous learners can change depending on their age and how far they have progressed with their learning. Before being an autonomous learner, the human being has passed through stages in which he has

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developed his biological autonomy first as a human being and in the later stage he develops his autonomy as a learner.

1.2.4 Stages of Autonomy

There is a general agreement in the literature that learners go through phases or a journey to become independent, more motivated and focused on learning. In the late 1990s, several scholars alleged that autonomy is a matter of stages that the learner undergoes in acquiring knowledge. One of the prominent models that dissect these learner autonomy levels is Nunan's model (1997 as cited in Benson, 2006), which involves five stages of autonomy in the learning procedure. They are classified as follows:

Awareness: In this stage, learners start identifying the main goals of each lesson, and recognising the content of the learning materials that the teacher inside the classroom uses.

Involvement: Students are more involved in their learning process. They have more opportunities to choose their own goals and decide their learning path to improve their level.

Intervention: This stage refers to students' ability to select and decide the activities practiced inside the classroom. They can also be involved in choosing the content of the learning program.

Creation: Students can set their own learning goals. They take the initiative role and responsibility for their learning achievement.

Transcendence: Students can be described as autonomous learners in the last stage. They can study outside formal settings effectively, and improve their learning without guidance or help.

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1.2.5 Autonomy inside and outside the Classroom

In most cases, teachers are considered the only source of knowledge inside the classroom. Based on that, failure or success of the learning process seems to depend largely on the teacher, whereas the learners will be the only passive recipient of knowledge. On the contrary, autonomy inside and outside the classroom considers students as collaborators in the learning process and provides many opportunities for them to share responsibility, be engaged, and take the initiative role for their learning.

Nevertheless, students cannot be completely out of teachers' control, and teachers cannot go beyond the existing educational system. The teacher is still the main source of learning materials. The syllabus is still an important document to guide students to learn. Therefore, creating a real autonomous classroom can only happen by fostering a truly learner-centered philosophy in education. Where both the teacher and learner share the responsibility for the learner process.

Inside the classroom, the teacher promotes autonomy by enhancing learners' curiosity and intrinsic motivation to own their learning. However, outside the classroom, the struggle of fostering autonomy remains an issue. Learners' autonomy starts at the educational institutions, where they pick up curiosity, interest, motivation to learn and the responsibility for their learning. At home, students have the freedom and the opportunity to make decisions for their learning process. Thus, promoting autonomy in learners should be more than just providing students with homework but also by sharing with them the knowledge and tools to become more autonomous.

1.2.6 Autonomy and New Technologies

Currently, e-learning is a necessity for learners since it provides a setting where they are more autonomous. Along with the tremendous influence that the new technologies have

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on people's lives nowadays. Using technology and achieving autonomy are linked. As Motteram (1997) points out, there is a long association between autonomy and new learning technologies. These new technologies provide the practical means whereby learners process information in meaningful ways and become independent learners. Therefore, many educators promote using technology in learning to stimulate students' intrinsic motivation. Teachers can also opt for being technologically friendly by encouraging students to use technology for their academic process, developing their effective learning strategies, and acquiring autonomy step by step (Condrat, 2014). Therefore, the teacher is required to gradually diminish his presence in the students' learning process. Nonetheless, the impact of the teacher on learners remains significant since he is the first to set an example to follow and inspire them to learn.

Learning has been given a brand-new facet in the twenty-first century due to the advancement of technology. Learners, therefore, can employ their different approaches of learning, rather than merely relying on the traditional teacher-centered and "one size fits all" approaches (Lan, 2018). These rigid approaches usually fail to identify and aid all learners' differences and consequently do not cultivate autonomy in them. Using technology promotes autonomy since different learning resources and materials are easily accessed as the internet is one of these most broadly available sources, for it could help students learn the language at their momentum and access authentic materials. However, some reports indicate that technology may constrain the learners' autonomy and discourage them from being more autonomous. It has been shown that unrestricted use of technology, without proper guidance and control from teachers, would hinder students' responsibility for their learning (Kamilah, 2017, p. 115). Therefore, it is essential to learn the beliefs of English language teachers regarding the student's use of technology and to which direction it leads. Many scholars have

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provided abundant evidence showing that technology is powerful enough to improve learner autonomy and enhance students' motivation, skills and language competencies.

1.3 Information and Communication Technology and Education

Since the beginning of the twenty-first century, technology has become woven into everyday life. This automatically led to many forms of technological enhancements in language learning, from audio and video recordings to World Wide Web resources. Today, the improved access to Information and Communication Technology (ICT) has expanded its application in language study. The integration of ICT has almost become a moral imperative; for teachers to improve delivery, and for learners to enhance their learning. The definition of the term ICT carries out a vast and flexible meaning, hence, everything digital is part of ICT. Beyond that, this huge umbrella term has no universal definition, but it generally refers to all Devices, Networking components, Applications, and Systems that facilitate interaction with the digital world (Pratt, 2020). Occasionally, ICT is used interchangeably with 'IT' or 'Information Technology'.

Dettoni & Persico (2010) layout the definition of ICT as "technology that has applications pertaining to the dissemination of information and the communication of individuals and organisations across time and/or space" (p. 38). In other words, ICT covers all components related to computers and digital technologies. These components include data, internet access, cloud computing, software, hardware, and communication technology. Moreover, ICT encompasses combinations and applications of those components. However, even though some components of ICT have existed for decades (such as computers), but the list of ICT components continues to grow. According to Benghalem (2018), ICT involves both computers and networks (such as the internet) along with any equipment or interconnected system or subsystem of equipment that is used in accessing, creating, storing,

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processing, transmitting, converting, duplicating, or receiving of data or electronic information (in a digital form).

Table 1.1 Pratt’s Main ICT Components Adapted and Improved (2020)

Components of ICT include	
Software	<p>A set of instructions, data or programs used to operate a computer or a device to execute specific tasks. Examples:</p> <p><u>Internet browser</u>: Firefox, Google Chrome and Internet Explorer.</p> <p><u>Operating system</u>: Android, iOS, Linux, macOS and Windows.</p> <p><u>Word processor</u>: Microsoft Word.</p> <p><u>Presentation</u>: PowerPoint.</p>
Hardware	<p>The physical components of an analogue or digital computer or a device. They are categorised as either internal or external components.</p> <p><u>Internal Hardware</u>: Components necessary for the proper functioning of the computer or the device. Examples: Motherboard, CPU, RAM, Hard drive...etc.</p> <p><u>External Hardware</u>: Components attached to the computer or the device to add or enhance functionality. Examples: Mouse, Keyboard, Monitor, Speakers, USB flash drive...etc.</p>
Data	<p>Digital data represent other forms of data using specific machine language systems that can be interpreted by various technologies.</p> <p>The name “Digital” is given to all devices that store and process data in the form of ‘digits’ (numbers). These digits are known as ‘Binary’ and represented by the numbers 1 and 0. Example:</p>

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	The word ' Hello ' is stored as the binary combination of 0100100001100101011011000110110001101111
Clouds Computing	The delivery of computing services; including servers, storage, databases, networking, software, analytics and intelligence over the internet (the cloud). These services offer faster innovation and flexible resources. Examples: Google Cloud, Microsoft 365.
Internet Access	The ability of individuals and organisations to connect to the internet via computers or any other devices; and to have access to services such as emails or the World Wide Web. This can only be done by the computers or devices being linked to a dial-up, ADSL or cable broadband access. Example: Algérie Télécom.
Communications Technology	The transfer of messages (information) among people and/or machines through the use of technology. Examples: Social Media Platforms, Emails, SMS, Blogs, Vlogs, Live Video, Conferencing Technology...etc.

ICT is the short form of the three basic terms Information Communications and Technology. However, with the world becoming more and more digital with time, the definition of ICT is constantly evolving. Each technological shift, each new software or hardware, new and fast changes occur to the meaning of ICT (Benghalem, 2018). In general, the affordance of ICT can be in its' potential to represent information in multimodal, dynamic, and interactive ways and to support synchronous or asynchronous communication.

The representation of data in a meaningful way is called information (the 'I' in ICT). Thus, manipulation of information happens by representing it in terms of discrete symbols. Some devices can handle massive amounts of information by processing, organising and structuring that data and therefore enabling the decision-making process (Benghalem, 2018).

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The term Communication refers to the transmission of data from one device or system to another (the 'C' in ICT). This process usually happens over a distance and via a medium of communication (networks of sending and receiving equipment, wires and satellite links), which enables the exchange of any electronic information (Benghalem, 2018). Technology refers to methods, systems and devices (the 'T' in ICT), which are a result of scientific knowledge and are being used for practical purposes.

Many countries in the developing world, including the underdeveloped countries, came to realise the potential of ICT. Therefore, huge investments and plans are made on bringing various ICT equipment and resources into education. Some countries, inspired by a humanistic vision of education based on human rights and social justice, are even applying one laptop for every student backed by the UNESCO policy (Kozma & Vota, 2014). Today, ICT holds a powerful place, with the world being connected by the internet, ICT can allow access to knowledge anywhere and anytime. On top of that, ICT provides equal opportunities for networking and communications, which permits anyone to have the ability to share and participate in lifelong learning. UNESCO (2015) affirms that the remarkable advances in ICT and its knowledge made it essential for every boy and girl, man and woman, to be familiar with ICT. The world around has drastically changed thanks to ICT. Now, anyone in the world can have a mobile device that processes more data and communicates a significant amount digital information than ever before, all in the blink of an eye and with a simple screen touch.

1.4 ICT in Language Education

Over the last three decades, education has been experiencing a significant increase in ICT use. This development of ICT in education has consequently triggered many changes at the level of the teaching and learning process (Pombo et al, 2016, p. 2). Furthermore, numerous international organisations and academic communities worldwide, support and

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give recommendations towards promoting the use of ICT as a step forward in rising students' autonomous work. Nowadays, depending on ICT resources has become critically important for education because they offer an opportunity for innovation in contents, methods and pedagogy. Both educators and students need to learn more about ICT and how to use it to be able to respond critically and creatively to complex problems with viable solutions. And more importantly, students learn how to communicate, share, use the information, and create solutions for problems, instead of using ordinary skills only.

While affordances of ICT resources are without a doubt in education, educators still need to figure out how to utilise them to their full potential. Furthermore, the integration of ICT in the educational practice of teachers is a very difficult process that requires time and continuous effort (Benghalem, 2018). The role and capacity of teachers have become more critical than ever. One of the biggest challenges is how to enable teachers to use and integrate appropriate technology into the teaching and learning process. According to J. Zhang et al. (2016), "successful integration of ICT into education calls for understanding of the opportunities technology offers and of the needs emerging from the context of application." (p. 5). In the same sense, ICT enables innovative educational resources and the renewal of learning methods. Zhang et al. (2016) identifies six points that reflect the benefits that could be reaped from using ICT in education:

Learning interest growth: The use of resources is varied from videos, websites, graphics, and games that make traditional subjects more interesting. Multimedia content is a useful tool to bring different subjects closer to students in a new entertaining way.

Interactivity: The use of ICT in the classroom promotes the student's active and participatory attitude, which consequently help them be more involved while learning.

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Collaboration between students: Collaboration between students can be enhanced thanks to various digital tools. It is much easier for them to create teams, cooperate and learn from each other.

Enhancing creativity: ICT tools stimulate the development of the imagination and develop thinking outside the box attitude when solving problems.

Increasing communication: Close communication between students and teachers is encouraged through various channels, more spontaneously and less formally.

Personalisation and content up-to-date: Digital environments allow real-time updating of all information and resources. In addition, it is possible to adjust the tools and content to local and nearby realities.

Along with ICT being at the core of education, it is also helpful or necessary for the large numbers of learners that reside in locations that are far removed from mortar and brick institutions. It is also important to note that the current environment the learners around the world are living in (the spread of the COVID-19 pandemic), requires them to be more autonomous. This consequently makes ICT resources in education more needed than ever and compulsory for learners' success in such unstable environments. According to Dettori & Persico (2010), autonomous learners that rely on ICT are more likely to be successful in their learning since:

(a) the environment is focused on complex, multi-step tasks in which possible solution strategies and outcomes are not known in advance (so the learner must plan and monitor performance), (b) it is easy for the learner to become distracted, lose interest, or forget the main goals of the task, (c) the task requires the use of strategies (e.g., note-taking) to overcome the processing limitations of the mind, and (d) learners must engage in helpful behaviours (e.g., planning, monitoring, strategy use, etc.) (p. 3).

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ICT helps learners engage in autonomous behaviours and own their learning. Even if they are on their own, without guidance, pressure, or prompting from others. In such environments, ICT allows learners to have the capacity to control the structure of their learning, time, pace and path to obtain the desired goals and attain success in education.

1.5 ICT in Learning the English Language

People are opting to learn English throughout the world because it promises greater returns in terms of access to knowledge and contacts with others (native or no native English speakers). Furthermore, mastering the English language enables anyone to be understood almost anywhere, whether in the real world or on the Internet. Moreover, even though this language is considered a lingua franca, the growth of the English language status around the world has been consolidated by its connection with industrial and technological developments (such as satellite television and the Internet). As mentioned above, this situation currently works to the advantage of the English language, ICT and the intersection between the two. Whether for travelling or not, daily life calls for a much wider range of linguistic competencies in English, and all of this is the result of advances in ICT and globalisation.

ICT has played a major part in revolutionising English language learning and teaching from printed texts to technological innovations used in language education. Furthermore, one field which stands to benefit greatly from ICT resources is second language acquisition (SLA) research, since one of the main obstacles has always been the difficulty of observation. Kenning & Kenning (1983) maintains that one of the main assets of ICT resources for SLA research is providing the possibility to:

Probe into aspects of study habits and learning patterns that are not readily amenable to direct enquiry, either because they are intrinsically difficult to get at, or because the

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subjects know themselves to be under observation is liable to distort the results. (p. 193).

Using ICT resources may help teachers track learners' moves to test hypotheses and provide insights into processing learners' needs and preferences and informing pedagogy.

In recent years, ICT has come to contribute to the authentic use of foreign languages, such as simulations, role-plays, online chatrooms, and virtual reality games. While the use of ICT in formal language learning settings remains as an instruction platform despite the versatility of modern technology. Instead of facing learners with raw language learning materials, ICT provides learners with "an arena for natural, meaningful, and realistic language production and reception between and among native and non-native speakers of the target language" (Kenning, 2007, p. 158). Furthermore, it serves as an opportunity for them to manipulate the speed, pace, and access to additional information, which helps them improve their imperfect language competency (listening, speaking, reading and writing).

1.6 ICT Tools Used in Teaching and Learning English

Various ICT tools supplement and enhance the teaching and learning of the English language. Holding many advantages in the learning process, these tools provide learners with interactivity and boundless authentic materials for learning English. Furthermore, the effective use of ICT tools helps learners create their own personal learning environment, learn anywhere and anytime, and supply them with online courses, e-tutorials, and continuous lifelong learning.

1.6.1 Computer-Assisted Language Learning

Computer-Assisted Language Learning (CALL) is a broad discipline. It is an approach to teaching and learning in which the computer and computer-based resources (such as the Internet, software, CD-ROMS, and Office software applications) are used to present,

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reinforce and assess materials to be learned. Beatty (2013) defines, CALL as "any process in which a learner uses a computer and as a result improves his or her language and it covers the wide range of current practice in the field" (p. 7). CALL strongly supports the utilisation of ICT for effectiveness of learning which can improve the quality of understanding and mastery of the language studied.

1.6.2 Internet

The Internet offers the optimum ways to learn any language, especially English since it is considered the language of the Internet. The learner's engagement with websites is more noticeable than with print-based text. Internet users can practice English language learning by reading books or articles, listening or watching free accessible content online (such as YouTube). The Internet is used by both learners and teachers in the classroom and in their personal lives. With the Internet students can learn English anywhere at any time and whenever they want. It also offers instant feedback which enhances the learning experience.

1.6.3 Audio-Visual Aids

In the twenty-first century, the use of Audio-Visual Aids (AVA) has become inevitable, precisely in the field of teaching and learning a language. AVA makes students active and get rid of their boredom and dullness during learning. AVA also provides attentiveness and enthusiasm while giving clarifications about the content of the lessons. PowerPoint is one of the most useful and effective AVA used in education these days. This educational material is a type of presentation software that allows one to show coloured text and images with simple animation and sound. It can be shown on a computer screen or using a projector (Data show) with a large screen for the whole class, who can view the same presentation at the same time.

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1.6.4 Mobile Devices and Mobile Applications

Mobile digital devices such as laptops, tablets and smartphones have made English language learning easier (Djoub, 2014), by serving as a mini-computer in everyone's pocket. Nowadays, so many apps are available in the App Store (iPhone) and Play Store (Android) markets. These apps supply students with entraining ways of learning, such as; quizzes, games, dictionaries, Podcasts and tests. Mobile apps can perform as a personal 24/7 English language teacher. Some mobile apps which are amending English language learning and teaching are Dictionary apps, Grammar apps, Cake: Lesson updates every day, Quizmaster, BBC Learning English, Hello English: Learn English, Duolingo, English Idioms Illustrated...etc. Additionally, these mobile devices can function in many ways like texting, sending emails and accessing information along with doing other functions similar to a computer. Mobile devices assisted language learning can offer portability, social interactivity, community, individuality and immediacy.

The use of mobile devices by students is growing every day. Students are connected all the time and can use them anywhere. Many educational games are developed to support mobile learning to link the advantages of mobile learning (learn at any time and any place) with the fascinating features that attract students to learn the English language. According to UNESCO (2013, p. 26), the main benefits of using mobile devices in learning:

- Expanding the reach and equity of education;
- Facilitating personalised learning;
- Providing immediate feedback and assessment;
- Enabling anytime, anywhere learning;
- Ensuring the productive use of time spent in classroom;
- Building new communities of learners;

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- Supporting situated learning;
- Enhancing seamless learning;
- Formal and informal learning bridge;
- Minimising educational disruption in conflict and disaster areas;
- Assisting learners with disabilities;
- Improving communication and administration;
- Maximising cost-efficiency.

The recognition that mobile devices have great potential for education allowed to overcome some barriers to its use in the educational context, as these devices are in most cases already used for their entertainment features (SMS's, sharing photos and videos, comments, watching movies and YouTube, access to social networks and games). Moreover, "most mobile devices are now capable of processing information in the same way desktop computers." (Khaddage & Lattemann, 2013, p. 119). Apps for mobile devices have grown exponentially, giving access to features that facilitate the day-to-day tasks.

1.7 Commonly Used Mobile Devices in English Language Learning

Laptops, smartphones or tablets are all mobile devices that enables access to authentic English language learning content by following the three 'Ss'; Speed "are designed to be fast and efficient", Security "are designed to keep users safe and more secure" and Simplicity "apps can be streamlined, clean and simple, efficient, and easy to use" (Khaddage & Lattemann, 2013, p. 121). Also, Quinn (2011) highlights the achievements of mobile learning through the four C's; Content "accessing content in the form of media", Capture "of information", Compute "the ability to compute a response", and Communicate "to communicate people with each other" (pp. 98-99). According to Godwin-Jones (2018), these mobile devices can benefit English language learners by:

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- Integrating into instruction multimodal language learning tasks by involving the use of images, audio and video;
- Enabling collaborative activities using mobile devices for group writing, listening or speaking;
- Enriching classroom activities with authentic language resources through apps and online sites;
- Leveraging individual preferences on mobile devices to personalise learning and develop learner autonomy;
- Enhancing students' digital literacy and other 21st-century skills needed for the workplace;
- Encouraging out-of-school and lifelong language learning.

Helping students be aware of their natural and preferred learning style is helpful, as well as encouraging students to stretch beyond their comfort level and try out different learning approaches. Linked to the internet, mobile devices can provide that and effective autonomous learning of the English language.

1.8 Online Learning

With the Coronavirus pandemic is taking a toll on everyone's life, including tutors and students. They have been pushed to a situation they cannot avoid, where they must learn and understand the ways to handle distance or online education. According to Douglas (2020, p. 5), online learning "is a mode of education where teachers and students are separated, and learning is carried out through telecommunications systems." Some of the software that provides virtual classrooms and an easy system of video conferencing are Zoom, Google Apps (Such as Google Classroom, Google Meet) and Moodle. Such software makes students feel easy to collaborate with the teachers.

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The use of ICT has many fruitful benefits in foreign language teaching and learning. It helps both the teachers and learners get the required information within a fraction of a second. English lessons that incorporate ICT resources can bring more motivation and exciting ways to learn. Furthermore, ICT provides up to date and authentic sources for students and teachers to work with. In addition, students can learn independently, and at the same time, ameliorate their interactions and involvements in group collaborative learning. Curricula must include technological aids to provide quality learning materials for learners and create autonomy of learning. During the COVID-19 global pandemic, ICT resources have proven to be a pivotal pillar for the educational process. ICT has played an essential role in the pandemic by maintaining the safety of the learners, while simultaneously supplying them with the education they need and could not get anywhere else.

1.9 Conclusion

To conclude, this chapter contains two parts. The first part dealt with learner autonomy, its definitions and theories, stages of autonomy, and autonomy and new technologies. The second part covered the technological advancements of ICT resources; focusing on mobile-assisted language learning that helps students develop autonomy and take full control of their English language learning process.

Chapter Two:

Methodology

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Chapter two: Methodology

2.1 Introduction

The second chapter is devoted to the empirical aspects of the research work. It provides an overall description of the methodological process that governs the investigation of the main concern of the research, which is investigating the influence of mobile devices' utility on learner autonomy in an EFL Context; the case study of second-year master students of Didactics and Applied Languages, faculty of letters, languages and social sciences, University of Ain Temouchent - Belhadj Bouchaib. On this basis, this chapter presents the objectives to conduct this research work along with the description of the sample, the research design, the research setting and the research instruments employed for gathering data, encompassing a questionnaire and an interview targeted at university teachers and students. Moreover, it will give insight into the data collection procedure used in this research study and how the data analysis was accomplished.

2.2 Research Design

Any fruitful research study necessitates a well-organised framed research design. The research design provides specific directions for procedures in a research study. According to Creswell & Creswell (2018), "a research design is a set of formal procedures for collecting, analysing, and interpreting data such as those found in a quantitative experiment or qualitative case study" (p. 309). Over the years, as computer technology has grown, the designs available to the researcher advanced the data analysis and the ability to analyse complex models (Creswell & Creswell, 2018). The research design ensures how effectively the researcher addresses the research problem; it draws the blueprint for collecting, analysing and interpreting data. Organising the research framework involves embedding the appropriate methods for gathering data to establish validity and reliability during data analysis.

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In this research study, the researcher integrated a mixed methods core design to provide a stronger understanding of investigating the influence of mobile devices utility on learners' autonomy in an EFL Context: the case study of second year master students of Didactics and Applied Languages at Belhadj Bouchaib University in Ain-Temouchent. Furthermore, Creswell & Creswell (2018) affirm that since "each type of data collection has both limitations and strengths, we can consider how the strengths can be combined to develop a stronger understanding of the research problem or questions (and, as well, overcome the limitations of each)" (p. 294). In this sense, with this mixing of data (open-ended data in the case of qualitative and closed-ended data in the case of quantitative), the research instruments of data collection, measurement and analysis will provide different types of information.

A mixed-method model provides a broader, sophisticated and complex approach to the research problem. The use of mixed method research also helps the researcher converge, explain, and explore his qualitative and quantitative findings. For example, the results of one database could be used to check the accuracy and validity of the other database (Creswell & Creswell, 2018). Moreover, using a mixed-method approach allows a better understanding of complex research problems in different contexts than could be done through either quantitative or qualitative approaches alone.

2.3 Sample of Study

One of the major steps in any research study is clearly defining whom the research will focus on and how the participants were chosen. Also known as the sampling procedure or selecting individuals who represent the population. Polit et al. (2001) explain the process of sampling as "selecting a group of people, events, behaviours or other elements with which to conduct a study...the sample represents the entire population as nearly as possible. This decision has a major impact on the meaning and generalisability of findings" (p. 234).

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Therefore, the objective of population sampling in a research study is to obtain the maximum information about the population without examining every population unit. In the current research, the sample population was master two students and teachers of Didactics and Applied Languages at the department of English language, faculty of letters, languages and social sciences, University of Ain Temouchent - Belhadj Bouchaib, during the academic year 2021/2022.

In this study, the researcher has worked with fifty-five (55) out of sixty-nine (69) EFL students of master two Didactics and Applied Languages in the department of letters and English language at the University of Belhadj Bouchaib of Ain-Temouchent, the promotion of 2021/2022. The choice of this sample was motivated by the fact that the students are required to prepare their dissertation during this year, which leads them to do many readings and research online. Another reason is that this promotion has witnessed a change in educational settings, from in-class learning to online due to the COVID-19 pandemic. Furthermore, they are more mature and responsible for their learning than first, second and third-year students, notably because they are more motivated to learn to accomplish their master's extended essay for this year. Throughout their years in university, they evolved their autonomy in learning and became accustomed to using mobile devices for their learning.

Moreover, the researcher selected five (5) out of eight (8) EFL teachers from the department of letters and English language at the University of Belhadj Bouchaib of Ain-Temouchent. The objective behind choosing them to participate in the research is their long experience in teaching and especially in teaching master students. In addition, these teachers have worked pre, while and post the COVID-19 pandemic, and they can provide a better perspective on the whole teaching experience.

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2.4 Data Collection Instruments

In any research, multiple research instruments are necessary to obtain reliable research results. According to Wilkinson & Birmingham (2003), "research instruments are simply devices for obtaining information relevant to your research project, and there are many alternatives from which to choose...No single research instrument is inherently superior to any other. All can be used well or poorly" (p. 3). Two research tools were used for data collection in this study, as explained in the next subsections.

2.4.1 Questionnaire

The questionnaire is considered one of the most common and useful methods of collecting data, especially from a large sample population. This research tool can gather vast quantities of information from a variety of respondents (Patten, 2017). Therefore, the questionnaire used in the present research study is made and distributed via Google Forms. It is divided into two sections. The first section is dedicated only to mobile device utility by master two students. This section of the questionnaire is made of five questions. The first two are multiple-choice questions about what mobile device(s) students use in their daily lives and how many hours. The third question is in the form of a rating scale question (always, often, sometimes, rarely, never) about the frequency of master two students' use of mobile devices in English language learning. The fourth question is a multiple-choice question (they can select more than one answer), employed by the researcher to know the way students use their mobile devices for learning English. Finally, in the fifth question, the participants are given two statements to select one of them, to know their attitude on whether the English department supports mobile technologies in learning or ignores them.

The second section of the questionnaire is devoted to learner autonomy and mobile devices' influence. This section also proceeds with a YouTube video explaining the notion of

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Learner Autonomy (Akhurst, 2014). This section consists of three questions. The first one is a multiple-choice question used by the researcher to know the most preferred autonomous behaviour by master two students. The second question includes five options (strongly agree, agree, neutral, disagree, strongly disagree) for knowing the students' attitude on whether learning through mobile devices enhances autonomy. The last question is presented in the form of a yes/no question related to knowing the level of autonomy students have with using mobile devices for learning. This question is also followed by an option for the participant to justify his previous answer.

2.4.2 Interview

The Interview is another research instrument used by the researcher to reach the objectives of the research study. The interview is considered a powerful and flexible research tool for mostly extracting qualitative data (Cohen et al., 2018). The interviewer can press the interviewee for complete answers and responses about complex and deep issues. An interview is seen by Kvale (1996) cited in Cohen et al. (2018) as "an interchange of views between two or more people on a topic of mutual interest, sees the centrality of human interaction for knowledge production" (p. 506). Therefore, the interview has a specific purpose, i.e., to gain evidence or data or information. The interview is often question-based, with the questions being asked by the interviewer and the responses of the interviewee being as explicit and as detailed as possible.

This research study interview is formed of seven questions arranged into two sections. The first section consists of four questions related to the teachers' perspective on students' use of mobile devices for learning. The second section comprises three questions used by the researcher to get the teachers' insight into how they foster autonomy and whether they guide learners' use of mobile devices for learning. The first two questions of this section are made

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to shed light on the teachers' strategy of fostering autonomy and the guidance they give to their students on using mobile devices for learning. The last question is designed to give room for teachers to provide suggestions on promoting autonomy in learners outside the classroom.

2.5 Data Collection Procedures

Although methods and aims may differ between fields, the overall data collection process for research remains the same. The data collection procedure is a systematic process of collecting quantitative or qualitative data or both in the research study. The data collection procedure is defined as "the procedure of collecting, measuring and analysing accurate insights for research using standard validated techniques" (Bhat, 2021). Data collection enables the researcher to evaluate the hypothesis, measure information, and test reliability based on the data collected. The researcher embedded a mixed data collection procedure, quantitative and qualitative data (triangulation method).

Furthermore, before initiating data gathering, a pilot study was conducted to examine the effectiveness and functioning of the research instruments and to check the interest of the participants in the topic investigated by the researcher. Thus, they give sufficient and relevant data to the research study. Furthermore, the researcher gathered quantitative and qualitative data via a questionnaire of mixed questions to master two respondents at the department of English, Institute of letters and foreign languages, Belhadj Bouchaib University, Ain Temouchent, to investigate the influence of mobile devices on learners' autonomy, in addition to an interview to EFL teachers from the same research setting.

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2.5.1 Administration of the Questionnaire

The questionnaire was administrated through various stages. Initially, the questionnaire designed by the researcher was examined by the supervisor, and then it was modified and amended according to his feedback. Next, a pilot study was addressed to four selected participants to examine the questionnaire's intelligibility and effectiveness. After ensuring the participants' answers, the questionnaire was shared online with the targeted population. An explanation from the researcher followed the questionnaire to the participants about the nature of the research. In addition, they were invited to contact the researcher about any questions, concerns or clarifications related to the questionnaire and the research study. The participants were informed beforehand that their identities would remain anonymous. The answers were automatically stored for analysis.

2.5.2 Administration of the Interview

The researcher of this research study followed a semi-structured interview with the five teachers. Three of the interviews were done face to face and recorded after taking the participants' permission. The other two interviews were done online via Zoom meeting and were recorded with the participants' permission to record. All the interviews were conducted formally, confined to English. The five interviews with the teachers took between ten to fifteen minutes to answer all the questions. The interviewees were introduced to the research topic before questioning them and were informed that their identities would remain confidential.

2.6 Data Analysis

After selecting and administering the research instruments and collecting the needed data, the researcher's task now is to analyse, interpret, and summarise the data gathered to attain the research study objectives and answer the research questions. Data analysis is a

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systematic process that involves analysing the participants' information; organising and preparing the data; coding the data; using computer programs, representing the findings in tables, graphs, and figures, and interpreting the findings (Creswell & Creswell, 2018). In this research work, there are two types of data analysis. The data obtained via the questionnaire were analysed quantitatively, except for the data obtained by the open-ended questions, which were analysed qualitatively along with the data gathered by the Interview.

2.6.1 Questionnaire Analysis

Quantitative data analysis is a powerful research form and is often associated with large scale research. It involves employing number-based data and various statistical techniques (Cohen et al., 2018). Since the questionnaire of this research study was administrated online and designed through Google-forms, a web-based app, the data are stored automatically in a spreadsheet. In addition, the web-based app automatically performed the results through the mathematical equation by multiplying the number of answers by one hundred per cent (100%), then dividing among the number of participants. However, during comparing the results, the separation of the collected information was done manually.

2.6.2 Interview Analysis

Qualitative data analysis is non-numerical, such as interview transcripts, observational notes, video and audio recordings...etc. Qualitative data analysis is usually presented in words, and this data could be attitudes, experiences or opinions (Creswell & Creswell, 2018). In this research study, the qualitative data of the Interview and the open-ended question of the questionnaire were analysed in the form of quotations.

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2.7 Conclusion

This chapter provides a clear description of the steps followed in the methodological process of this research work. It provides a general overview of the research design, the objectives and the sample population. This chapter also uncovers the settings of the research and the research instruments employed. It demonstrates the data collection procedure and analysis. The following chapter is practical; it aims to analyse the research findings, providing a discussion of the obtained results and drawing the conclusions of this research study.

Chapter Three:

Data Analysis, Suggestions and Recommendations

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Chapter three: Data analysis, suggestions and recommendations

3.1 Introduction

The present chapter deals with the data analysis and discussion of the results, including quantitative analysis for the questionnaire results and qualitative analysis for the interview results. Followed by some helpful suggestions and recommendations to overcome the problems of the research study. Finally, the limitation of the study that impacted the interpretations of the present research findings.

3.2 Results of the Research Instruments

This part of the research is devoted to analysing the data collected by the research instruments, the questionnaire and the interview. This part of the study would help calculate, interpret, and figure out answers that illustrate the influence of mobile devices on learners' autonomy in learning the English language.

3.2.1 Results of the Questionnaire

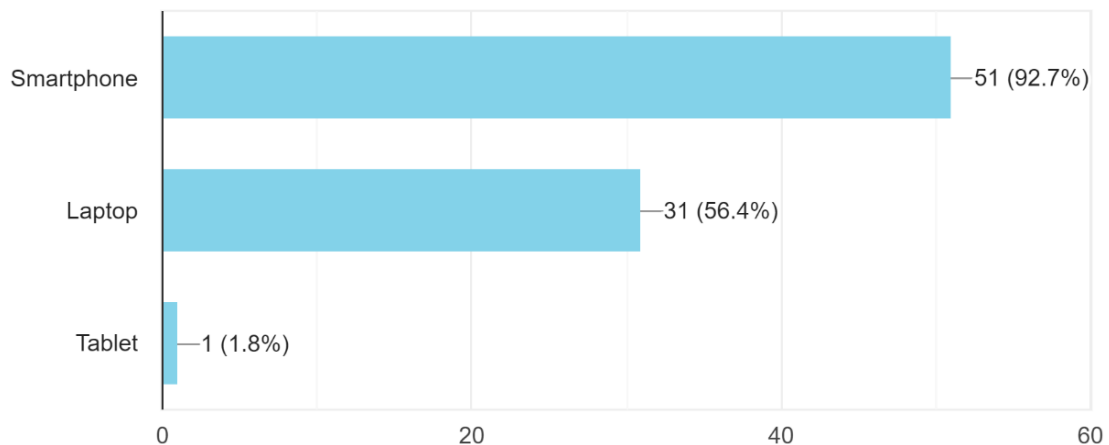
This research study addressed the questionnaire to master two Didactics and Applied Languages learners, and fifty-five (55) students answered it. The questionnaire contains two sections; the first one was concerned only with mobile devices' utility by students. At the same time, the second section dealt with the influence of mobile devices on learners' autonomy.

Section one: Mobile devices utility by master two Didactics and Applied Languages students.

The first question showed that among the fifty participants, there was 92.7% of students using smartphones, 56.4% of students using laptops, and 1.8% of students who used tablets in their daily lives. The following figure illustrates the findings above:

Chapter three: Data analysis, suggestions and recommendations

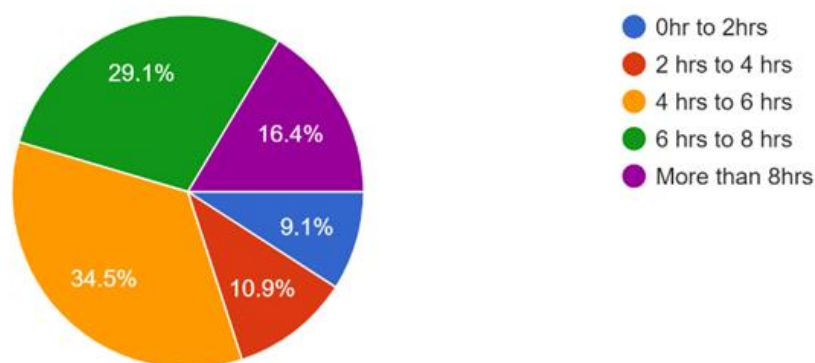
Figure 3.1: Mobile Device(s) That Students Use in Their Daily Life



According to figure 3.1, the results revealed that the majority of students used and owned smartphones and laptops, with tablets being the least used devices in this category. The results also showed that 45.45% of students used both smartphones and laptops daily.

The second question was designed to know the number of hours per day students used their mobile devices. The following figure illustrates the findings of such a question:

Figure 3.2: Number of Hours Per Day Students Use Mobile Devices



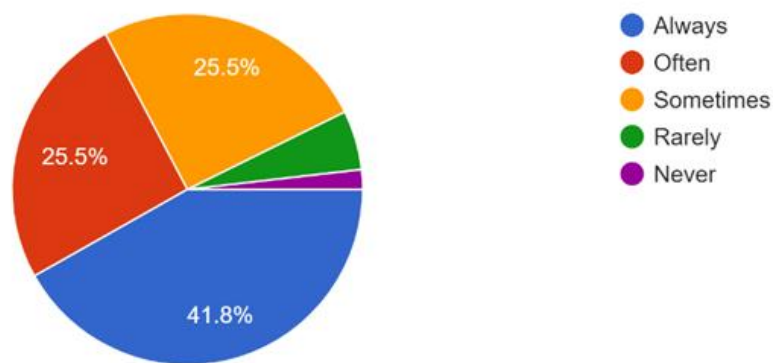
According to Figure 3.2, the results showed that 34.5% of students used mobile devices from 4 to 6 hours a day, other 29.1% of students used mobile devices from 6 to 8 hours a day. Whereas 16.4% of students used their mobile devices more than 8 hours a day. Another 10.9% of students used their mobile devices from 2 to 4 hours a day. The rest, 9.1%,

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of students revealed that they used their mobile devices for two or fewer hours a day. This indicates that mobile devices are use in a high amount of time among students, whether for entraining, learning or other purposes in their daily lives.

The third question was set to know the frequency of students' use of mobile devices in learning the English language. The following figure demonstrates the results of this question:

Figure 3.3: Students' Frequency of Using Mobile Devices for Learning English

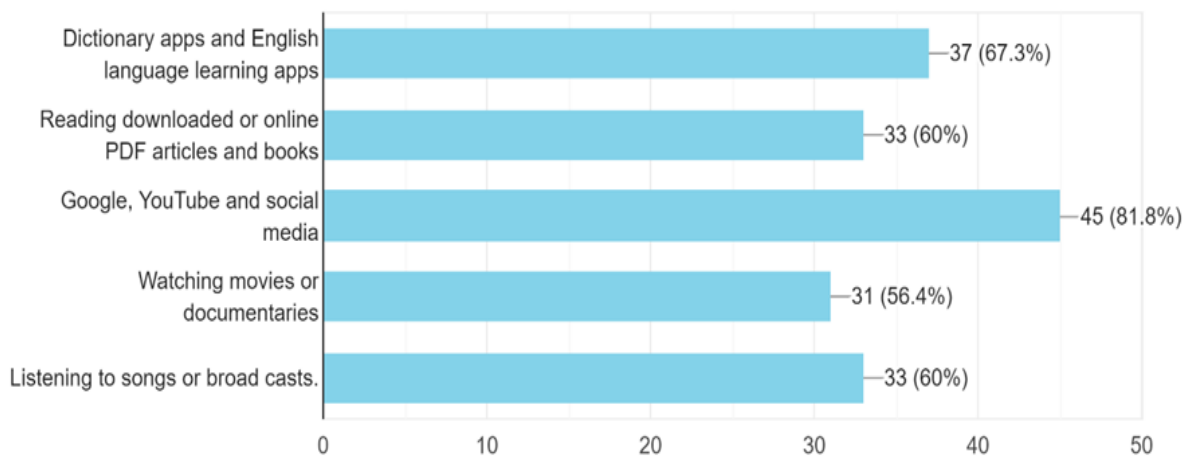


According to Figure 3.3, the results showed that 41.8% of participants always used mobile devices for learning English, 25.5% used them often, another 25.5% used them sometimes, 5.5% rarely used them, and 1.8% never used them. This indicated that most of the participants in this research work relied heavily on mobile devices to learn English because these devices can offer them diverse materials and sources to learn from.

The fourth question was formed to know the ways students used their mobile devices to learn English. The following figure provides the results of this question:

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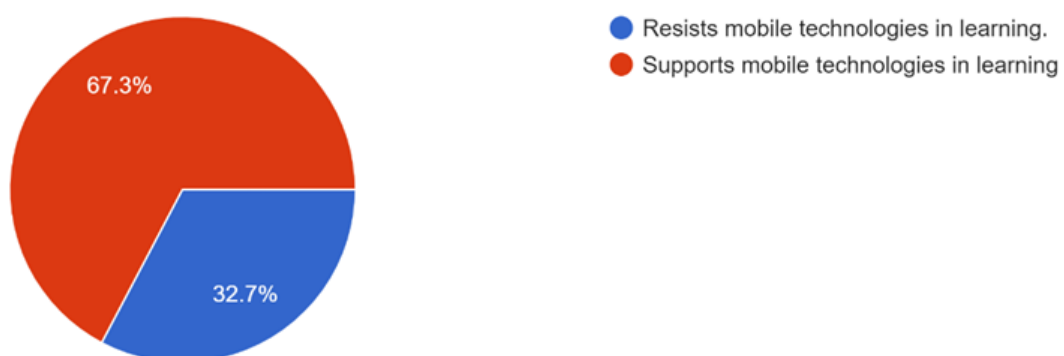
Figure 3.4: Students' Ways of Using Mobile Devices for Learning English



According to Figure 3.4, the results showed that 81.8% of students used Google, YouTube and social media, 67.3% used dictionary apps and English language learning apps, 60% read online or downloaded PDF articles and books, another 60% listened to songs or broadcasts, and 56.4% watched movies or documentaries to learn English. This indicated that all of the participants in this study had different and multiple ways that helped them learn English on their mobile devices.

The fifth question was set to know students' perspectives on whether mobile technologies in learning are supported or ignored in the curriculum presented by the English language and letters department. The following figure shows the results of such a question:

Figure 3.5: Resistance and Acceptance of Mobile Devices in Learning



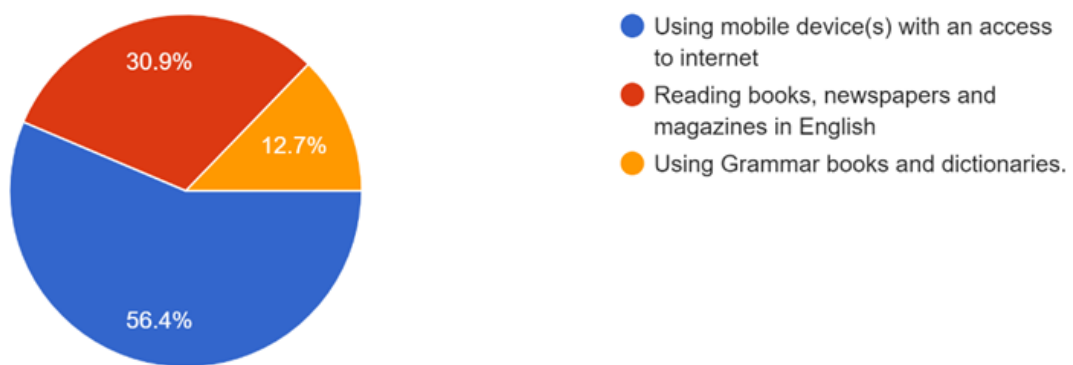
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According to Figure 3.5, the results showed that 67.3% of students saw that their curriculum supported mobile technologies in learning, whereas 32.7 saw that their curriculum resisted mobile technologies in learning. This indicates that students saw learning via mobile devices should be welcomed and endorsed in the curriculum since it provides many advantages for the learning process.

Section two: Mobile devices influence on learners' autonomy.

The sixth question was arranged to know the most helpful behaviour that fostered autonomy in learners. The following figure illustrates the results of this question:

Figure 3.6: Most Preferred Behaviour to Foster Autonomy in Learning

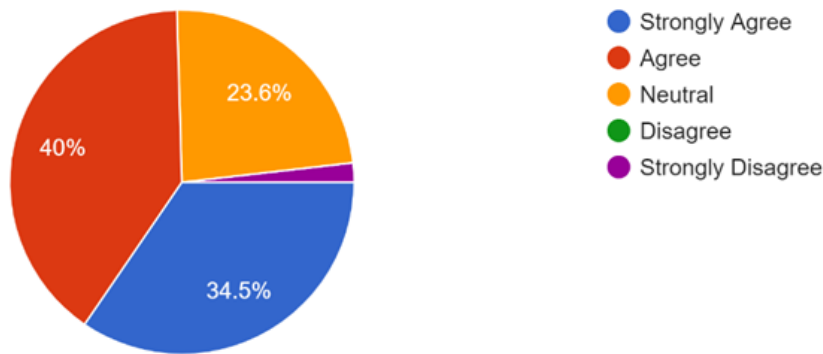


According to figure 3.6, the results show that 56.4% of participants preferred using mobile devices with access to the internet to foster their autonomy in learning, 30.9% choose reading books, newspapers and magazines in English, and 12.7% would rather use grammar books and dictionaries to enhance their autonomy learning. This indicates that most students favour learning via mobile devices as optimal for enhancing their autonomy.

The seventh question was designed to determine if mobile-assisted English language learning enhances learners' autonomy. The following figure shows the results of this question:

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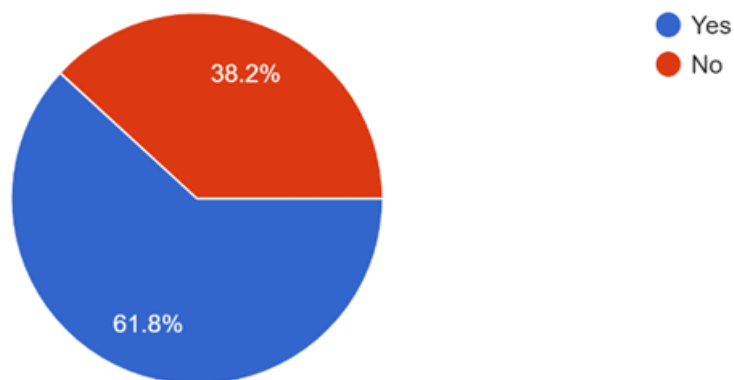
Figure 3.7: Mobile-Assisted English Language Learning and Learner Autonomy



According to Figure 3.7, the results revealed that 40% of students agreed that mobile-assisted English language learning enhanced autonomy in learning, 34.5% strongly agreed, and 1.8% strongly disagreed. It is observed from these results that using mobile devices helped in improving autonomy in learning the English language.

The eighth question is about the student's capacity to study by themselves using only mobile devices and with no interference from the teacher. The following figure illustrates the results of this question:

Figure 3.8: Students' Capacity to Study Alone



According to Figure 3.8, the results show that 61.8% of students were able to study by themselves using mobile devices and not receiving help from the teacher, 38.2% were incapable of learning without the teacher's help or only via the use of mobile devices. This

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indicates that the majority of students using mobile devices have the capacity to be autonomous and learn without relying on the teacher.

The ninth question is part of the eighth question and was set to know students' awareness of autonomy in learning and the use of mobile devices to achieve it. Many participants' answers varied in terms of words; however, they agreed on the same idea. The majority of students agreed that the teacher's role in attaining autonomy in learning was more necessary than only using mobile devices. As one of the participants said, "teachers can guide students to use mobile devices in their learning process."

3.2.2 Results of the Interview

The interview was addressed to five master degree teachers at Ain Temouchent University. The researcher preferred to use face to face interviews with three candidates who teach master students to acquire authentic data. However, two teachers were interviewed online due to some factors. The interview involved seven (07) main questions that aimed to inquire about learner autonomy and the influence of mobile devices on autonomous learning. The interview's questions were analysed and presented as below:

Question 01: Do your students see you as the only source of information?

Table 3.1: Teachers' Interview Answers of Question 01

Teacher one	According to me lazy students will rely on me for the most autonomous learners I won't be this only source of information they will make their own research by themselves it will be either inside the classrooms through their dictionaries, books and outside in the library or through the internet.
Teacher two	Yes, most students depend entirely on me regardless of the different sources available from libraries to the web.

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Teacher three	<p>This perspective is somehow old and outdated nowadays it is not really, we cannot say that the teacher is the only source of information it is one among the several sources available for students to get information he is organiser he is a guide he is helping he is doing his best in order to mediate between the information and the student but he is not by anyway the only source there are many sources especially in this age of technology and new devices.</p>
Teacher four	<p>Okay, so here it depends for example L3 they see me as the only source of information for master degree no it depends on the student as well there are some students who entirely depend on me, they don't go and check other things which is not a good thing to do in a master degree because in a master degree there are like more reading is required therefore generally master degree students depend on both the teacher and other sources.</p>
Teacher five	<p>Okay, the primary source of information is the teacher okay because he knows how to transmit new ideas to his students since the students at the level of obtaining and acquiring new technics of learning etc. etc. but it doesn't mean that I'm the only source of information according to what is urged to the recent researches of CBA or learner-centred approach or that puts the students him at the centre.</p>

This question sought to know master degree teachers' perspective on their students' autonomy. The results reveal that the majority of teachers agreed that their students still see them as the only source of information. For teacher one and teacher four learner autonomy depends on the type of the learner and his level. However, all the teachers agree that there are

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more available sources for student to learn from, but students are not willing to use them and keep relying only on the teacher for seeking knowledge.

Question 02: What is your opinion on mobile-assisted language learning?

Table 3.2: Teachers' Interview Answers of Question 02

Teacher one	Mobile devices unlike the PC are very small compact and you can have thousands of books inside them even without talking about the internet connection so yes, I would say that it is very helpful and with the internet it's something wonderful and very helpful inside the classroom for quick references for maybe checking meanings or words or for showing pictures and videos for pronunciation of a word and so on yes it can be useful.
Teacher two	Mobiles in general make life easier and when it is used for learning, the advantages are numerous for learners
Teacher three	It seems interesting and new updated method of learning motivational for young learners and researchers and those adolescence are always attracted to what is new, modern and technological but I do encourage the use of such device in learning especially those students are always having their mobiles in their hands and sometimes they cannot stay far from their mobiles so why not to profit and to use them for learning but whether really our students are using their mobiles for learning this needs to be investigated.
	Actually, I am more with MALL approach than a CALL approach because a CALL approach requires more devices and set-ups and internet speed etc but MALL is more practical rather than bringing heavyweights

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Teacher four	now I just bring my mobile the only thing I need to do is to share the so they can download it or send it via Bluetooth. I really encourage using mobile assisted language learning because it benefits the students and the teachers.
Teacher five	Mobile... Well technology now plays a very important role in the teaching-learning process so if we use mobiles in their or in a good way it will provide us with many positive learning services.

The reason behind asking this question was to discover the teachers' point of view about mobile-assisted language learning. The teachers expressed support to this idea and gave many innovative examples from their daily experience in teaching; on how to take full advantage of mobile technologies in learning both for them and for the learners. This indicates that all the participants teachers in this study have a positive perspective towards mobile assisted language learning since it offers many benefits if used properly.

Question 03: Do you think learners' level of autonomy in learning English can improve by the use of mobile devices?

Table 3.3: Teachers' Interview Answers of Question 03

Teacher one	Yes, it can improve for the same reason I have mentioned earlier because it is something which is compact the mobile or the laptop can be connected online and if the connection is available at university or at home it can be something great but relying only on the mobile phones or on the mobile devices no, I would say that it won't be enough and it will won't help.
	Yes indeed, because language is all about practice and since time inside

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Teacher two	the classroom is limited, students need more space where they can practise their language which mobile devices can provide that setting.
Teacher three	Yes it can be improved but if the learner is using is really using mobile for learning because from time to time I blame my students and I said you are using your mobile for doing everything except learning for entertaining for chatting for I don't know for social media for everything when it comes to learning it is for some students not all quite heavy to use it for learning but okay I hope they will use it because it is really beneficial and useful and it has a role to improve and to foster and even promote their autonomy in English learning.
Teacher four	I used MALL with them in the first semester but they usually go to social media and tend to do other things except following me on the screen with they should know if they follow, they will understand better and the level of autonomy will increase by using it in a better useful way in an educational setting they don't see mobiles as an educational tool they see it as social media playing entertaining anything except studying but for some students, I think they have understood that.
Teacher five	Yes, the point is that students shouldn't dependent on materials okay but as a tool I need mobiles in order for me as a teacher I use mobiles in order to fetch for information to check new notions to learn some new ideas via mobile so I use mobile but there are some bases of learning or authentic materials that I shouldn't reject so this the idea

The purpose behind such a question is to know if learners' level of autonomy in learning English can be improved via the use of mobile devices. By asking this question, the

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researcher could notice that the five teachers have confirmed that mobile devices may help the learner's autonomy, but the student himself has to be responsible in the ways he uses these mobile devices to learn. This indicates that learners have to be knowledgeable about the proper ways of using these tools for learning, and not only view them as entertaining tools.

Question 04: Are you ready to give your learners much more responsibility in organising their learning by using mobile devices?

Table 3.4: Teachers' Interview Answers of Question 04

Teacher one	Of course, why not if it may help in each learner is different there will be some learners which are fond of all what is technology and for whom this technology is available so if they can organise themselves in learning and if they can improve their selves this way of course I encourage and I would invite all the students to try at least using the mobile devices.
Teacher two	As a teacher, I'm pro-technology however students are used to being spoon-fed. They do not want to be autonomous.
Teacher three	Yes, nowadays when we speak about lifelong learning learner autonomy, it is what we are going to share responsibility with our learners in organising the learning in setting objectives in selecting tasks so here the responsibility is no more that of the teacher for 100% now we are partners in learning it means we share with them we even ask them about their opinions we give them somehow larger room for choosing and commenting and even to give them they are in the level university students are in the level of choosing even the content they want to learn.
	It depends again on the maturity of the students. But I am willing to give them the responsibility but the questions is, are they willing to take it I

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Teacher four	am always share with them this responsibility I encourage them to use mobiles for the sake of learning I always encourage them I set my self as an example I say look I use it in an educational setting you can use it as well but the like the feedback is more limited.
Teacher five	Well, I don't like using mobile devices inside the classroom because or depends on the behaviour of the students or the nature of the students there are many students who do not use mobiles in their appropriate object or objective okay so here I do not accept using mobiles inside my classroom outside they are free.

By asking this question, the researcher could check if the teachers allow and encourage their students to organise their learning through the use of mobile devices. Most teachers agree that sharing the responsibility of learning with their students is one of the main goals. However, the learners are not all fully responsible and mature enough to learn by themselves and properly rely on technology to learn. Moving towards learner centredness and autonomous learning entails both the learners and teachers sharing the responsibilities. This also indicates that learners need to be aware of responsibly relying on mobile devices for learning rather than using them for only entertaining purposes most of the time.

Question 05: Do you provide your learners with strategies to learn by themselves?

Table 3.5: Teachers' Interview Answers of Question 05

Teacher one	Yes, but it stands to be more classical strategies read a lot while talking try to record yourself and then listen to yourself again try to speak in front of a mirror try to write proofread yourself this kind of thing but other strategies, I don't know these are the strategies normally I share
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	with my students listen to music watch movies in the beginning with subtitles by the end try to watch the movie without subtitle things like this.
Teacher two	To a certain extent yes, I usually give necessary details about the lecture and I advise students for further readings in general because learning strategies vary from one student to another
Teacher three	Learning strategies are really useful and beneficial in organising learning we have the cognitive strategies the metacognitive strategies the social strategies we have even certain effective strategies that help the learners how to learn examples on taking notes example for summarising paraphrasing we can help our students by giving them pieces of advice how they can develop their learner autonomy reading is as an advice reaching urging them or helping them or even giving them extra marks for their personal efforts so this is just for encouragement.
Teacher four	Okay, well we generally tend to give them like books pdfs or links to YouTube videos and tell them to do that we try to provide them with materials, learn how to do their own PowerPoint by themselves I would say do not read everything you have to be selective in your reading I try to give pieces of advice more than strategies I give them the audio-visual thing there are student who like reading, listening or watching so the pdf I provide I make sure to provide the audio form and the visual form so each type of learner can take the approach that suits him/her so this is my strategy.
Teacher five	Of course, yes, I always prompt them to or push them to know about their responsibilities as 21st century students so I think they should be

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	informed by such strategies in order to be learner-centred or autonomous learners
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The reason behind such a question is to know the teachers' methods and strategies in enhancing their learner's autonomy. The five teachers' answers varied in words but their view was similar. All teachers saw that it was better to provide learners with helpful pieces of advice rather than learning strategies, since each learner is unique in his way of learning. It was also observed that teachers rely on these technological tools ability to provide different learning materials to meet the different learning strategies of the learners.

Question 06: Do you provide your learners with guidance on how to use mobile devices for learning?

Table 3.6: Teachers' Interview Answers of Question 06

Teacher one	I have never done this the only thing that I could say is try to at least download the dictionary on your mobile sometimes I invite them also to check on their mobiles meaning of some words they can't understand. For advance learners I tell them to make further research on your laptop try to get the connection at home and make more research read more, print maybe and then read or readjust in your mobile apart this.
Teacher two	Mobiles have become a part of our life, so when we ask students to look for information, we remotely ignore the library and assume right away that students will search for that information online. Therefore, yes, sometimes, I share my experience on how to look for a piece of information online in order to facilitate the task
	Ironically said sometimes the teacher needs guidance from the students in

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Teacher three	using mobile devices because they are really excellent and they are perfect in using mobiles personally speaking I found that my students know how to use this manipulation for the mobile and the computer better than me I don't know if they are informed or they have diplomas or this is just through curiosity and through research but if I can it is okay but I personally I receive help from them I'm going to be honest.
Teacher four	Yeah I do I even send them links especially for example with google classroom with zoom with PowerPoints and word documents generally I send them videos on how to use them or I set the example myself for example I share the screen on a zoom call and I tell them how to do that I show them how to do it I will do it myself and generally we do it in the classroom as well yeah this is the only thing I always do I try to make them understand that this material this phone can be beneficial than they think.
Teacher five	No, not at all since they are far much better than me, they are from the digital generation. I do learn from them.

This question was set to know or check which methods or strategies the teachers employed and shared with their students to learn via their mobile devices. However, it is observed from the participants' answers that they did not provide any guidance on how to learn via mobile devices since they lacked the experience and knowledge on how to use these tools themselves. Most of the teachers also confessed that students were more knowledgeable about these technological tools than the teacher. This indicates that students' capacity to use mobile devices in learning is the consequence of their aptitude for technology.

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Question 07: How do you foster your learner's autonomy outside the classroom?

Table 3.7: Teachers' Interview Answers of Question 07

Teacher one	I tell them that the teacher is not the only reference and that the new era wants more autonomous learners and workers to, this should be prepared in school being autonomous for me when we learn by ourselves, we learn really and we will remember what we have written and read it will be as a fingerprint in our minds and it will stay for a very long maybe forever in our minds this is it so being autonomous for me is synonymous with success in learning relying on oneself is much better than relying on someone for learning.
Teacher two	It depends on the module, for example when it comes to grammar; I remind them that the tasks dealt with in the classroom are not enough. Therefore, they need to practise more. In addition, I usually advise them to look for pages and apps online that can provide more tasks for practice
Teacher three	Giving them tasks and one of the tasks that can foster autonomy is called self-study task or freedom of the choice of the task here you are helping them in fostering their autonomy, outside classroom I do focus on reading it is one of the best technics that makes the learner autonomous it improves his speech, writing and level in vocabulary in grammar in everything because reading is really good to foster autonomy.
Teacher four	I give them material to read at home and I push them to think and this is the most important thing for me to enhance or foster their autonomy they should think outside the box and what I give them is hints about the general I push them to be curious and to ask and to develop their autonomy they can give me conclusions themselves.

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Teacher five	Well, I always send them activities to do at home so I think for all the students they have to search for further information to enrich their knowledge that's why they gain what is confidence to convey and interpret many utterances either with the teacher may be this relationship between teacher and the students provides the student with confidence and autonomy to be self-confidence.
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This question was designed to know teachers' methods to foster autonomy in learners outside the classroom. The five participants revealed that doing further readings and reading in general is the optimal way for enhancing autonomy. Each teacher answered the question in his words, but the most common method the five teachers agreed on was encouraging self-regulated learning. This gives the learner the opportunity to make his own learning choices and monitor his progress by himself leading to true autonomy and ownership in learning.

3.3 Discussion and Analysis

To develop this research study, the researcher proposed a set of hypotheses. The researcher suggested as a first hypothesis that learners have a positive attitude toward mobile-based language learning. After analysing, the data collected from students' questionnaires and teachers' interviews. The present research study proved that this hypothesis is true because both teachers and students confirmed that using mobile devices makes language learning more interesting. Therefore, the students have a positive attitude towards mobile-based language learning.

The results of this research work are compatible with the study of Lahmer (2021) in her studies on "Exploring the use of mobile learning in the Algerian EFL context: case of Ibn Khaldoun". She found out that students of English have positive attitudes towards the

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effectiveness of mobile learning. Furthermore, she reported in her study that students consider mobile learning as a useful technique in improving the four main skills and cultural knowledge.

For the second hypothesis, the researcher suggested that the use of mobile devices assists in enhancing the learner's autonomy in learning the English language. This is because the use of mobile technology in education offers new learning experiences, flexibility in learning, and autonomous learning, learning anywhere and anytime. This research study revealed that this hypothesis is confirmed since both teachers and students demonstrated that mobile assisted language learning offers new learning modes beyond the classroom context, a variety of learning materials with diverse ways of delivery along with learning space and time, therefore, enhancing learners' autonomy.

The results of this research work are compatible with Djoub's (2014) research. In her study on "Mobile technology and learner autonomy in language learning", she found out that mobile assisted language learning provides learners with the capacity to take control of their learning. She also revealed that mobile devices allow learning anywhere, anytime and can be a multimodal learning content and provide plenty of opportunities to develop learner autonomy.

Finally, to engage in successful lifelong learning, the students must be autonomous learners, and with the exponential knowledge growth, mobile technology provides, any learner can reach a high level of autonomy inside and outside the classroom. However, the implementation of mobile learning devices entails adequate mobile technology training and an explicit instructional requirement on using these tools in an educational context.

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3.4 Recommendations and Suggestions

Relying on the results obtained from this research study, the researcher has suggested some useful recommendations and suggestions that would help improve learner autonomy inside and outside the classroom. Furthermore, give guidance and proper ways to use mobile devices in optimising learning and developing autonomy.

3.4.1 For Learners

- Being more involved and engaged in sharing the responsibility for the learning process.
- Think critically in planning, monitoring and evaluating the learning.
- Using the target language as the principal medium of language learning.
- Be more familiar with strategies of independent learning.
- Learning how to take risks and always being aware that mistakes are normal.
- Changing your view of the mobile device from an entertaining, addictive piece of tech into a useful productivity tool and a source of ideas.
- Use mobile devices to access content for improving the four language skills.
- Work with mobile devices to record lessons or take notes.
- Rely on applications for learning; dictionary apps, crosswords apps, grammar apps...etc.
- Make use of mobile devices to communicate with classmates and teachers.

3.4.2 For Teachers

- Be technology-friendly and always provide learning materials in different ways.
- Be knowledgeable about learners' needs and updated on methods of teaching.
- Encourage and guide learners to use mobile devices for learning purposes.

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- Make students aware that they are responsible for their learning as well as the learning process.
- Promote autonomy in learners by teaching and providing learning strategies.
- Provide home works that require the student to think more outside the box and be creative.

3.5 Limitations of the Study

Like any research study, this research faced some characteristics of design or methodology that impacted the research findings. The outbreak of COVID-19 is one of the main factors since it was the reason for libraries and universities to be closed and made gathering data of the sample population more difficult. Furthermore, the insufficient size for more reliable statistical measurements and the time constraints to complete the work properly. Finally, the lack of previous research studies on the topic can also be considered one of the limitations.

3.6 Conclusion

This current chapter has summarised the results drawn from the two major research instruments: questionnaires and interviews. Moreover, this chapter provides a clear discussion and interpretation of the main results. Finally, it also suggests some useful recommendations for teachers and learners on promoting autonomy and mobile devices for learning.

General Conclusion

General Conclusion

In teaching and learning foreign languages, it is necessary to use technology to promote learner autonomy since the knowledge provided in class is insufficient. In this era, being technologically friendly is the key to encouraging students to use technology for their academic progress. Mobile-based learning help foster learner autonomy and make students sense the responsibility they have for their learning. Simultaneously, learner autonomy can enhance the security needed for risk-taking, i.e., students can have to make their own decisions and understand the consequences. With English being the leading portal for technology and science, English language teachers need to pay more attention to the development of learner autonomy. This is by relying on ICT resources in teaching and using the mobile devices available in most learners' hands and pockets.

This study aimed to investigate whether students have a positive attitude towards mobile-based language learning and if mobile devices can enhance learner autonomy. Two research instruments were used to collect data, and the results obtained from this study provided answers to the questions stated in the study. The researcher has proposed two hypotheses that suggest that students have a positive attitude toward mobile-based learning and can also promote the student's autonomy. These hypotheses are correct because both teachers and students confirmed that they had a positive attitude towards mobile technology in language learning and its role in enhancing learner autonomy. Furthermore, according to Lahmer's (2021) study, "Exploring the use of mobile learning in the Algerian EFL context: case of Ibn Khaldoun,". She found out that students of English have positive attitudes towards the effectiveness of mobile learning. Furthermore, according to Djoub (2014), in her study conducted on "Mobile technology and learner autonomy in language learning", mobile devices allow learning anywhere anytime and can be a multimodal learning content and provide plenty of opportunities to develop the learner autonomy.

General Conclusion

To conclude, this research study was built on the findings and research of several studies that have explored the concept of learner autonomy, and mobile devices use in learning. On the other hand, there are many challenges that both the teacher and students will have to deal with, but the determination to attain the set goals should prevail. Learner autonomy should be acquired step by step and be up to date with learning and teaching resources that help the education sector be more innovative. Technology came to make men's life easy, which can also be true for learning and acquiring knowledge.

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Appendices

Appendices

Appendix A


Students' Questionnaire



Mobile Devices Utility Influence on Learners Autonomy in an EFL Context

The following questionnaire is part of a study that investigates the effect of mobile devices on learner autonomy. This questionnaire is addressed to second year Master Students at Belhadj Bouchaib University.

You are kindly invited to answer this questionnaire, thank you in advance for the participation.

 benayadsaidou@gmail.com (not shared) [Switch accounts](#)



*Required

Which mobile device(s) do you use in your daily life? *
(you can select more than 1 answer)



- Smartphone
- Laptop
- Tablet

Appendices

How many hours a day do you use your mobile device(s)? *

- 0hr to 2hrs
- 2 hrs to 4 hrs
- 4 hrs to 6 hrs
- 6 hrs to 8 hrs
- More than 8hrs

How often do you use your mobile device(s) for English learning purposes? *

- Always
- Often
- Sometimes
- Rarely
- Never

How do you use your mobile device(s) for learning English? (you can select more than 1 answer) *

- Dictionary apps and English language learning apps
- Reading downloaded or online PDF articles and books
- Google, YouTube and social media
- Watching movies or documentaries
- Listening to songs or broad casts.

Appendices

Do you believe that the current curriculum of the English language and letters department: *

- Resists mobile technologies in learning.
- Supports mobile technologies in learning

If you are not familiar with the concept "Learner Autonomy" you can watch this video (the definition of learner autonomy starts in 0:33 seconds)



To what extent do you agree with the following statement "Mobile-assisted English language learning enhances learner autonomy" *

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

Appendices

Do you think you can study by yourself using mobile device(s), without the help ^{*} of a teacher?

Yes

No

Please explain your previous answer.

Your answer _____

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Appendices

Appendix B

Teachers' Interview

The following interview seeks to gather your perspectives about the influence of ICT (mobile devices in particular) on learner autonomy, and how the latter could be fostered in teaching English. You are therefore kindly requested to answer the following questions.

NB: The data gathered will be used qualitatively, therefore I request that you elaborate your answers if possible.

NB: Your name will remain anonymous.

1. Do your students see you as the only source of information?

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

2. What is your opinion on mobile-assisted language learning?

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

3. Do you think learners' level of autonomy in learning English can improve by the use of mobile devices?

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

Appendices

- 4. Are you ready to give your learners much more responsibility in organizing their learning by using mobile devices?**

.....

.....

.....

.....

- 5. Do you provide your learners with strategies to learn by themselves?**

.....

.....

.....

.....

Résumé :

Dans le monde globalisé actuel, l'apprentissage des langues assisté par le mobile connaît un élargissement rapide inspiré de la technologie contemporaine. Ainsi, les technologies de l'information et de la communication sont employées à des fins d'apprentissage et d'enseignement. Actuellement, il est considéré comme un nouveau domaine de la technologie éducative. Cette étude actuelle tente l'exploration de la notion de l'autonomie de l'apprenant et les attitudes des apprenants de la langue anglaise comme deuxième langue ainsi que les enseignants en vue de l'efficacité de l'utilisation de techniques assistées par mobile pour l'amélioration de l'apprentissage autonome de la langue. A cet effet, le chercheur a employé deux instruments principaux de recherche : un questionnaire et une interview, les résultats ont révélé que la majorité des étudiants de master deux Didactique et Langue Appliquée ont eu une attitude positive, et ont montré une volonté d'adopter cette technique dans leur apprentissage et de prendre leur entière responsabilité dans leur propre apprentissage. Généralement, cette étude vise l'exploration à quel degré le contexte de la langue anglaise comme langue étrangère à l'Université Belhadj Bouchaïb est disposé et prêt à adopter la technologie pour l'amélioration de l'autonomie de l'apprentissage de la langue. En même temps, elle tente de découvrir à quel point le contexte de la langue anglaise comme langue étrangère en acceptant de suivre le monde globalisé dans sa course à l'éducation basée sur la technologie.

ملخص:

في العالم المعولم الحالي، يشهد تعلم بمساعدة المحمول انتشارا سريعا مستوحى من التكنولوجيا المعاصرة. وبالتالي وسائل تكنولوجيا المعلومات والاتصالات تستخدم لغرض التعلم والتعليم. حاليا يعتبر مجالا جديدا لتكنولوجيا التعليم. هذه الدراسة الحالية تحاول استكشاف مفهوم التعلم الذاتي واتجاهات متعلمي اللغة الانجليزية كلغة ثانية وكذلك المدرسين اتجاه فعالية استخدام تقنيات المدعومة بالأجهزة المحمولة لتحسين تعلم اللغة الذاتي. لهذا الغرض، استخدم الباحث اداتين بحث رئيسيتين استبيان ومقابلة. وكشفت النتائج ان معظم طلاب السنة الثانية ماستر علم التعليم واللغات التطبيقية كان لديهم مواقف ايجابية، واطهروا استعداد لتبني التقنية في أخذ المسؤوليات لتعليمهم الخاص. اجماليا، هذه الدراسة تهدف الى استكشاف الى اي مدى سياق اللغة الانجليزية كلغة اجنبية في جامعة بلحاج بوشعيب على استعداد وجاهزية لتبني التكنولوجيا لتحسين التعلم الذاتي للغة. في نفس الوقت تحاول ايضا معرفة مدى تقبل سياق اللغة الانجليزية كلغة اجنبية لمواكبة العالم المعولم في سياق نحو الدراسة القائمة على التكنولوجيا.