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Investigating Students' and Teachers' Perceptions on the Use of Smartphones to Develop Learners' Autonomy

A Dissertation Submitted to the Department of Letters and English Language in Partial Fulfilment of the Requirements for the Degree of Masters in Didactics

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Dedication I

To the hands that help me when I stumble and push me to resist, to my loving mother Souad

To my brothers Aymen and Sohaib, to my aunt Hafsa, whose words of encouragement and push for tenacity ring in my ears.

To my dear grandfather who passed away before witnessing this work,

To my teacher, Sir Hannachi Rachid

To all my teachers

This work is dedicated to you

Daou Khouloud Rayene

Dedication II

In the Name of Allah, the Most Gracious, the Most Merciful, all praises be to Allah, the Lord of the universe.

I dedicate this humble work to my sympathetic father and thoughtful mother whose love always strengthens my will

To my beloved grandparents

To my lovely sisters

To my husband

To my precious family

To my wonderful friends

To all my teachers

To everyone I love

Salhi Ismahane

ABSTRACT

With the rapid proliferation of smartphones and their widespread integration into various aspects of daily life, it becomes increasingly pertinent to examine their potential impact on educational practices. This thesis explores the perceptions of students and teachers regarding the utilization of smartphones as a tool for enhancing learners' autonomy. The study adopts a mixed-method approach using an online questionnaire with 57 students of English and semi-structured interview with 7 teachers at Bordj Bou Arreridj University. The data collected were analyzed using statistical and content analysis. The research findings showed that students have a positive perception of using smartphones to develop learner autonomy. They believe in taking charge of their learning and see smartphones as valuable tools. Students report relying on smartphones consistently for educational purposes, which they believe enhances self-directed learning and skill development. Although some students experienced negative instances, many employ strategies to manage distractions. Teachers use diverse approaches, such as educational apps and promoting independent research, to integrate smartphones into the classroom. Smartphones also serve as communication tools and facilitate cultural exchanges. These findings highlight the importance of promoting self-regulation and providing guidance to optimize the educational benefits of smartphones.

Keywords: learner autonomy, smartphones, online questionnaire, semi-structured interview.

LIST OF ACRONYMS

BBA: Bordj Bou Arreridj

BL: blended learning

EFL: English as a Foreign Language

ICT: Information and Communication Technology

LA: learner autonomy

MALL: Mobile assisted language learning

QR: Quick Response

SDL: Self-directed learning

SDT: Self-Determination Theory

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General Introduction

1. Background of the study

According to Piaget's theory of cognitive development, individuals progress through various stages of development from childhood to adulthood. Initially, they heavily rely on others, depending on them to complete most, if not all, of their tasks. Over time, they gradually take on responsibilities within their capabilities as their physical and intellectual abilities improve. This allows them to become more self-sufficient and less reliant on their parents and others around them. Consequently, individuals become more aware of their own needs, gain independence, and fully assume responsibility for themselves. The learning process is one of the most important concerns in which the individual must develop decision-making independence, take responsibility for his own learning, and be actively involved in the learning process. This is known as autonomy in learning.

Many researchers like Candy (1991) and Little (1996) contended that in any learning environment, students can be classified into two distinct types. The first type relies entirely on the teacher, seeking constant guidance, instructions, assignments, and feedback. For these students, learning ceases when the class ends. On the other hand, the second type exhibits a sense of independence in their learning. They continue to engage in the learning process even outside of formal teaching. They proactively involve themselves by conducting personal research and making important decisions regarding their own learning. This type of learner demonstrates autonomy in learning. An autonomous learner collaborates with the teacher during classroom activities while also exerting additional effort outside of class to enhance their skills.

The notion of autonomy in learning has recently gained significant attention in modern educational methodologies. Learner autonomy is closely linked to modern teaching and learning approaches, as it is believed to foster lifelong learning and enable learners to strive for language proficiency. Autonomy heavily relies on learners' willingness to take control of their own learning, promoting self-reliance and encouraging them to assume greater responsibility for their educational

journey. However, autonomy does not imply complete independence from the teacher, nor does it advocate for exclusive self-instruction. Rather, it aims to shift learners' perceptions of the learning process, encouraging active participation instead of passive reception of knowledge from the instructor. It motivates learners to become more confident and self-directed in their pursuit of knowledge. Developing autonomy is fundamental because the earlier learners become autonomous, the more beneficial it is for both themselves and their teachers.

2. Statement of the problem

Throughout history, the field of language learning has witnessed the development of various technologies aimed at aligning with contemporary trends. These advancements have facilitated greater flexibility, enabling students to engage in language learning at their convenience, regardless of their location or the absence of a teacher. Traditionally, education has predominantly relied on traditional classroom setups and predefined curricula, which often restrict learners' control over their own learning journeys. However, with the advent of smartphones as the latest information technology, they have evolved into handheld devices that function as miniature computers for language learners. These handheld devices, equipped with a wide range of functionalities and internet connectivity, have been integrated into our daily lives, becoming indispensable tools. As a result, educators and researchers such as Anderson (2010), Prof. David Chen (2008), and Dr Sarah Ramirez (2013) have recognized the potential of smartphones as valuable resources to enrich learning experiences and cultivate learner autonomy. This shift promotes self-directed learning, empowering students to take charge of their own learning and adapt to various learning scenarios. This recent approach, often referred to as mobile learning (m-learning), expands upon the foundations of e-learning by encouraging independent and active learning. It effectively transforms educational institutions into accessible and boundary-less learning centres that operate around the clock (Kiumova et al., 2008).

Nowadays, the use of technology plays a noticeable role in education. EFL learners learn by using different ICT tools to be in touch with information through online devices. The underlying

problem revolves around exploring whether smartphones may help students be more responsible in their learning. So, the present research was conducted to determine students' perceptions towards the use of smartphones on autonomous learning.

3. Aim of the study

This research intends to investigate the perceptions of Master One EFL students at Mohammed El Bachir El Ibrahimi University regarding the relevance of smartphones in developing learner autonomy.

4. Research Questions:

Arising from this aim, the following questions are essential in this study:

a) What are the perceptions of Master One EFL students about the relevance of smartphones to develop learner autonomy?

b) How do EFL teachers use and integrate phones to enhance learners' autonomy?

5. Significance of the research

This research contributes to the existing body of knowledge on technology integration in education. Understanding how students perceive and experience smartphone-based learning activities is crucial for designing effective pedagogical strategies that foster learner autonomy. The outcomes of this study will enable educators and policymakers to make informed decisions and create supportive environments that maximize the potential of smartphones in enhancing students' autonomy, leading to more self-directed and engaged learners.

6. The structure of the study

The present study is divided into three chapters. Chapter One reviews learner autonomy and smartphones. It consists of two sections. The first section is devoted to the definition, significance, and characteristics of an autonomous learner. In addition to exploring the autonomous language-learning environment.

The second section reviews the literature related to smartphones, its definition, benefits and its implementation in the classroom. The second chapter is the practical part upon which the research process is based. It is devoted to the explanation of the methodological design. It covers an account of the method chosen, sample population, and data collection procedure as well as analysis.

The third chapter provides a description and analysis of teachers' interview and students' questionnaire, as well as a discussion of the results.

The thesis eventually concludes with a general conclusion that links the research findings and the insights from the literature, as well as recommendations for future research.

Chapter One: Literature Review

Introduction

The aim of this study is to investigate the perceptions of Master One EFL students at Mohammed El Bachir El Ibrahimi University and teachers' perceptions regarding the relevance of smartphones in developing learner autonomy. This chapter offers a comprehensive review of the notion of "learner autonomy" and smartphones. It is divided into two sections. Section one starts with a definition of learner autonomy and an account of its significance as well as its characteristics. It then moves to discuss autonomy within and beyond the classroom in the language learning environment. Section two explores Mobile Assisted Language Learning (MALL) and focuses on smartphones as a crucial component. It examines the benefits of smartphones for language learning, their integration in the classroom, and the challenges associated with mobile learning.

1. Definition of Autonomy

The term autonomy was first published by Holec in 1981 in his book titled "Autonomy and Foreign Language Learning", who defined it as follows:

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

The above statement emphasizes that learner autonomy refers to a learner's ability to take control of their learning. It suggests that autonomous learners are responsible for making decisions about all aspects of their learning, including setting goals, selecting materials, choosing strategies, and evaluating progress. By stating that autonomous are capable of taking charge of their learning and bearing responsibility for all aspects, Holec underscores the active role learners should play in their educational journey. This perspective suggests that autonomy involves not only self-direction but also decision-making and accountability for the choices made throughout the learning process. Holec's

definition highlights the importance of fostering autonomy in education to empower learners and cultivate their ability to become self-regulated and independent learners.

Many other scholars (Little, 1991; Benson, 2001; Smith, 2003) believe that the definition of Holec falls short of the true characteristics of autonomy. Little's (1991) definition completes what Holec's perspective lacks and adds an important psychological feature by describing autonomy as a cognitive and self-management learning process. He states "Autonomy is a capacity - for detachment, critical reflection, decision making, and independent action. It entails that the learner will develop a particular kind of psychological relation to the process and content of his learning." (Little, 1991: 3-4) In the same vein, Benson (2001) evokes that aspects relating to metacognitive skills are indispensable prerequisites for successful self-managed learning. He claims that Holec's perspective on learner autonomy is lacking the "nature cognitive capabilities underlying self-management of learning." (Benson, 2001: 49).

In another context, Little (1996: 76) contends that "in formal educational contexts learners do not automatically accept responsibility for their learning; teachers must help them to do so." To him, teachers are responsible for developing the sense of autonomy in learners through the roles and the practices they adopt in the classroom. They should adopt new roles that are totally different from the ones of the traditional teaching approach. In the same vein, Smith (2003) highlights the omission of the crucial role that teachers play in promoting learner autonomy. Smith argues that autonomy should not be solely attributed to individual learners but should be seen as a shared responsibility between teachers and learners. According to Smith, teachers are seen as facilitators who provide the necessary guidance, scaffolding, and resources to empower learners to take charge of their learning. They have a pivotal role in creating supportive and empowering learning environments that foster the development of learner autonomy.

As mentioned above, various perspectives exist regarding the understanding of what the concept of learner autonomy entails. Some view it as the ability to assume control over one's own learning, while others emphasize the cognitive and self-management aspects of autonomy. Additionally, some acknowledge teachers' critical role in fostering learner autonomy. They can

empower students to become active participants in their own learning journeys and cultivate the skills and mindset necessary for lifelong learning.

2. The Significance of Learner Autonomy

Crabbe (1993) suggests that autonomous learners are more likely to fulfill their own educational needs. While instructors play a vital role, there are situations where they may not have all the answers or resources, just as the society may not provide all the necessary learning opportunities in every domain. Consequently, it becomes the responsibility of learners to actively seek out and attain the knowledge and skills they require. This can be done individually, through self-directed learning, or cooperatively, by collaborating with peers and utilizing various resources. By embracing this responsibility, autonomous learners empower themselves to bridge any gaps and ensure their own growth and development. In this sense, independent learners are more likely to become successful users of the target language as they possess the abilities that allow them to reflect when speaking the language and so communicate correctly and successfully.

Bajrami (2015) reports that the concept of learner autonomy (LA) places importance on the student's active involvement in the learning process, shifting the focus from the instructor. LA prioritizes the journey of learning rather than just the end results, emphasizing the value of the learning process itself. It encourages learners to take charge of their education by setting their own learning goals, empowering them to shape their educational experiences according to their individual needs and interests. Additionally, LA promotes the idea of learning as a lifelong endeavour, highlighting that the pursuit of knowledge and growth extends beyond formal education.

There are several reasons for fostering learner autonomy. It is often recognized that learners are more efficient when they take an active role in the learning process, which overcomes the problem of motivation. Little (2003) states "If learners are proactively committed to their learning, the problem of motivation is by definition solved". He also believes that these students would have “the introspective and attitudinal tools to overcome brief motivating setbacks”. Furthermore, learners who take control and responsibility for their learning are more likely to learn better. Candy (1991: 24)

assumes "when learners are involved in making choices and decisions about the content and the mode of what they are studying, learning is more meaningful and thus, effective". Additionally, when learners are able to hold and take control of the learning process, they build meat-cognitive and meta-linguistic knowledge, which boosts their feeling of self-esteem and leads to increased participation in the learning process (Dam, 2000).

3. Characteristics of an Autonomous Learner

An autonomous learner is one who "is obedient to a law that he prescribes to himself," according to Rousseau (Candy, 1991, p. 102). An independent learner is the one who makes key decisions regarding the learning process. Because of his/her high level of awareness, he/she also takes responsibility for selecting appropriate educational materials and eventually assesses himself/herself. With this in mind, Dr Lucy (1980) divided the qualities of autonomous learners into six major categories: self-direction, self-determination, self-regulation, self-monitoring, self-assessment, and lastly, responsibility for learning. These are summarized below:

3.1. Self-Direction

Self-directed learning (SDL) is a key characteristic of autonomous learners. SDL refers to the procedures through which learners take control of various parts of their learning. It recognizes learners' major involvement, which is reflected via creating goals and objectives, identifying instructional resources and materials, and selecting suitable learning styles (Knowles, 1975, p. 18). When learners are given the autonomy to manage the factors mentioned earlier, their awareness and engagement in the learning process are likely to be heightened, leading to enhanced learning outcomes. In essence, SDL fosters learner independence by advocating for greater flexibility in the primary areas of the learning process.

3.2. Self-Determination

Self-determination is another crucial attribute emphasized in discussion on the qualities of autonomous learners. Having made significant contributions to the development of the Self

Determination Theory (SDT), Deci and Ryan (2000) are the most prominent figures in self-determination research. Self-determination is an intrinsic sort of motivation that is driven by basic psychological demands and a desire for progress. According to this description, self-directed learners aim to meet three primary needs: competence, autonomy, and psychological relatedness (Ryan & Deci, 2000). Notably, autonomy is related to self-determination in the sense that "when students' basic psychological needs for autonomy, competence, and relatedness are supported in the classroom, they are more likely to internalize their motivation to learn and to be more autonomously engaged in their studies" (Niemiec & Ryan, 2009, p. 140).

The notion of competence, on the other hand, refers to the inherent human need to feel capable and effective in mastering tasks and achieving goals. When learners perceive themselves as competent, they experience a sense of accomplishment and confidence in their abilities. Moreover, Psychological relatedness refers to the need for social connection and a sense of belonging. Humans are inherently social beings, and learners thrive in environments that provide opportunities for meaningful interactions, collaboration, and supportive relationships. When learners feel connected to others, whether it be peers, teachers, or mentors, they experience a sense of belonging, emotional support, and validation, which in turn fuels their motivation and engagement. To put it another way, when schools address their three primary needs, students become more motivated and self-sufficient.

3.3. **Self-Regulation**

Self-regulation is another component of learner autonomy, encompassing the internal processes and actions that learners employ to achieve their educational objectives. It involves the self-initiated generation of ideas, emotions, and behaviours aimed at guiding and supporting one's own learning journey (Zimmerman, Bonner, & Kovach, 1996). Zimmerman (1989) identifies self-regulated learners as the ones who are "meta-cognitively, motivationally, and behaviourally active participants in their own learning process". Zimmerman's perspective is based on the premise that self-regulated learners contribute to the learning process in three ways: Metacognitively, by planning, creating objectives, documenting their learning process (self-monitoring), and analysing their success on a

regular basis (self-assessment). Motivationally, they demonstrate their interest and want to learn by clearly expressing their interest and desire to learn, working to complete their duties, and attributing success or failure to themselves since they have a high level of confidence and self-efficacy. Furthermore, they exhibit behavioural actions that align with their learning goals, effectively managing their time, resources, and study environment.

3.4. **Self-Monitoring**

Self-monitoring is a sub-component of self-regulation. It is a high achiever trait that relates to the learners' conscious observation of explicit and implicit parts of their learning results (Zimmerman, Bonner, & Kovach, 1996, p. 2). Coleman and Webber (2002) define self-monitoring as "the process of having individuals record data regarding their own behaviour for the purpose of changing its rate "(Coleman & Webber, 2002, p. 103). Chang (2010, p. 300) emphasizes the critical necessity of self-monitoring since it influences learners' self-regulation as well as the pace and success of learning. Hence, self-monitoring is viewed as one of the characteristics of autonomy in which learners record their learning accomplishments.

3.5. **Self-Assessment**

Another trait of independent learners is self-assessment, which is regarded as one of the indicators of learners' control over learning (Holec, 1981). Self-assessment, according to Cooker (2012), is a helpful technique to improve second language learners' autonomy since it allows for the formation of self-tailored norms by which learners may measure the quality of their performance rather than relying on external evaluation. Autonomous assessment is made up of self-evaluation and autonomy. The latter is described as any evaluation that primarily strives to promote the independence of learners (Lamb, 2010, p. 101). In other words, Autonomy in assessment grants students control over how they demonstrate their learning, select assessment methods, and reflect on their work, leading to increased motivation, enhanced learning outcomes, and the development of critical thinking skills. Additionally, self-assessment allows students to track their progress and performance

while also providing vital feedback on the effectiveness of the techniques and approaches they are using in learning.

3.6. **Responsibility for Learning**

According to Holec (1981, p. 3), the capacity "to take charge of one's learning is to have [...] responsibility for all decisions concerning all aspects of this learning *[...]*". In this regard, autonomy and responsibility are two interconnected notions since the former requires the presence of the latter. In view of Holec's definition, Little (2007, p. 1) asserts that autonomous learning begins when responsibility is accepted on the basis of the concept that effective learning is the consequence of the learners' own effort. In other terms, autonomy and responsibility are two interwoven concepts that promote active engagement in the learning process. Taking into consideration this relationship, encouraging learners' autonomy involves promoting their sense of responsibility.

4. **Autonomy and the Language Learning Environment**

The concept of "language learning autonomy" includes a variety of responsibilities for both students and teachers. This notion is regarded to be beyond classroom practice. EFL learners, on the other hand, can be independent in their classrooms, and both teachers and students should be considered when fostering autonomy in language learning. Regarding this, Benson (2001, p.11) highlighted that "autonomy in language learning focuses not only on out -of-class learning, but also classroom practice". Teachers play an important role in both circumstances in helping students acquire a level of autonomy.

Indeed. Researchers in the field of foreign language learning and teaching are increasingly interested in the distinction between "within" and "beyond" classroom practices for autonomous language learning, as well as what teachers may do to encourage learners' autonomy in both situations.

4.1. **Autonomy within EFL Classrooms**

EFL classes are expected to be student-centered, with a gradual application of learner autonomy, as education shifts from teacher-centeredness to learner-centeredness. Autonomous

learning entails "learners taking ownership partial or total, of many processes which have traditionally belonged to the teacher" (Littlewood, 1999, p.71). That is, students should no longer regard the instructor as a figure of authority who always informs them what to do. Rather, with the assistance of the teacher, they can take charge of certain tasks in the language classroom.

Nunan (1996) compares autonomous and non-autonomous classrooms, referring to them as "institution focused classroom" and "autonomy focused classroom". He explains what language learners and teachers are supposed to do in each session. This is presented in the table (Table 1). He contrasts what may occur in an autonomy-focused classroom, which is intended to foster student autonomy, with what would occur in an institution-oriented classroom. The following phases are involved: language course planning, implementation, and evaluation.

Institution-focused classroom	Autonomy-focused classroom
▪ The instructor or the institution makes decisions on course material with little regard for the requirements of the students. ▪ Learners are encouraged to reflect on their experiences and to assess the possibilities provided in the classroom.	▪ Decisions concerning course material are based on learners' usage of language outside of the classroom. ▪ Learners participate in the selection, modification, and adaption of material as well as the learning process. ▪ When selecting a teaching approach, the instructor considers the learner's learning style preferences.

Table 1- 1 Comparison between autonomous and non-autonomous classrooms (Nunan, 1996, p.21)

The table compares an institution-focused classroom, where decisions are made by the instructor or institution with little consideration for student needs, to an autonomy-focused classroom that encourages learner reflection and active participation in decision-making. In the autonomy-focused classroom, learners have a role in selecting and adapting course material, and the instructor considers their learning style preferences. This comparison underscores the shift towards a learner-

centred approach that promotes autonomy, self-direction, and a more personalized learning experience.

Contrasting views exist regarding the institution-focused and autonomy-focused classrooms in language learning. Some educators and researchers argue for a more institution-focused approach, emphasizing the importance of consistency, standardized assessments, and centralized decision-making (Holec, 1981; Dam, 1995; Sheerin, 1997). They believe that expert instructors and institutions can provide a well-rounded learning experience. However, proponents of learner autonomy, such as Benson and Huang (2013), highlight the benefits of involving learners in decision-making, fostering motivation, critical thinking, and improved proficiency. Autonomy-focused classrooms, according to Tremblay and Gardner (1995), enhance real-life language skills and empower learners. Balancing both approaches, as advocated by scholars like Dam (1995), Benson and Huang (2013) can create a structured yet empowering environment that values learners' individual needs and choices.

4.2. **Autonomy beyond EFL Classrooms**

Learning outside the classroom, also known as "Out-of-class Learning" by Benson, refers to the efforts of students enrolled in classroom-based language courses to identify possibilities for language learning and utilization outside of class (Benson, 2007). He also mentions that new research (Plucker & Makel, 2010; Reiter-Palmon & Illies, 2004; Runco, 2004) reveals that students who participate in out-of-class learning activities on their own are more creative. The chapter titled "Assessment of Creativity", written by Plucker and Makel (2010), provides an overview of various assessment methods used to measure creativity. It discusses how out-of-class learning activities, such as hobbies, independent projects, and self-directed learning, can contribute to the development of creative skills and abilities.

Teachers are required to provide personal and instructional support to help students acquire a sense of autonomy. Learners must also make efforts outside of the classroom to enhance their level and build a sense of autonomy in their learning. Things are becoming easier with the availability of ICTs (information and communication technologies) nowadays, especially smartphones. They can

help in English language practice, provide access to real-life circumstances in which the language is used, and increase learners' autonomy by allowing them to choose what to study, how to learn, and with whom to speak (Gitsaky& Tylor, 2001-cited in Kuo, 2008).

Having explored the literature on learner autonomy, the focus in the next section shifts towards exploring the role of smartphones in educational contexts.

1. Mobile Assisted Language Learning (MALL)

Mobile learning (henceforth m-learning), according to Dudeney and Hockly (2007), refers to a collection of technical gadgets, such as cellphones and handheld computers like tablets. Kukulska and Chinnery (2006) also argue that "the development of mobile technology brought changes in the education system, and its features like portability, affordability, and wireless technology have made learning anytime and anywhere." Certainly, the advancement and widespread use of mobile technology has had a significant impact on the education system. The availability of features such as portability, affordability, and wireless connectivity has made it possible for learners to access educational resources and engage in learning activities anytime and anywhere, without being constrained by traditional physical boundaries. This has led to greater flexibility and convenience in education, as well as expanded opportunities for lifelong learning. Mobile learning environments can be face-to-face, remote, or online. Chinnery (2006) proposed the term Mobile Assisted Language Learning (MALL) to describe the convergence of mobile learning with language acquisition. Since then, MALL has flourished as a new field of research in language teaching and learning. It can be said that MALL is concerned with the application of mobile technologies in language learning. In contrast to classroom learning, learners in MALL do not need to sit in a classroom or at a computer to access learning resources. MALL is an answer to time and location-based language learning constraints. Students do not always have to study a second language in a classroom. They may be able to learn it using mobile devices whenever and wherever they desire.

MALL and M-learning are two related terms that are implemented divergently. Both terms were discussed in the literature review so we found in necessary to clarify the difference between the

two. As stated by Kukulska-Hulme (2008), MALL applications are often designed with specific language learning objectives in mind, while M-learning encompasses a broader range of technologies and tools. Stockwell (2013) notes that MALL is particularly well-suited to communicative approaches to language teaching and learning, which aim to develop language use in real-life contexts. On the other hand, Wang and Vásquez-Colina (2012) point out that MALL has been primarily designed for self-directed, informal language learning, while M-learning has been used in both formal and informal education. Finally, Sharples et al. emphasize that MALL is a specific subset of M-learning focused on the language learning domain. Overall, while MALL and M-learning share some similarities, such as the use of mobile devices and technologies, they differ in terms of their focus, pedagogy, and learning context.

To put it briefly, MALL specifically refers to the use of mobile devices such as smartphones, tablets, or other handheld devices to support language learning. MALL applications may include language learning apps, online dictionaries, chat and communication tools, and other learning materials designed for mobile devices. On the other hand, M-learning is a broader term that refers to the use of mobile devices for learning in general. This can include using mobile devices to access educational content, collaborate with other learners, complete assignments, and engage in other learning activities. So, the main difference between MALL and M-learning is that MALL focuses specifically on language learning, while M-learning encompasses a broader range of educational activities beyond language learning. While MALL and M-learning are related to the use of mobile devices for learning, smartphones have emerged as the most commonly used device for these purposes due to their widespread availability and versatility.

Given that smartphones are the primary device used in MALL and M-learning, now we delve into the ways in which these devices are revolutionizing the field of language learning.

2. Smartphones

Kukulska-Hulme and Shield (2008) define smartphones as handheld devices that combine computing, connectivity, and communication functions into a single device that can be carried around

by the user. Many scholars describe smartphones as mobile devices that offer advanced computing and communication capabilities beyond traditional cell phones, such as a touchscreen interface, internet connectivity, voice and text messaging, cameras, video recording, access to multiple applications, and authentic content (Bauer et al., 2018; Kim et al., 2018; Kharum et al., 2019). Smartphones have become ubiquitous in modern society and are used for various purposes, including communication, entertainment, productivity, and education. They have also been identified as key tools for mobile learning and language acquisition (Kuimova et al., 2018). Canny (2009) states that cell phones are the optimal learning platforms since they are widely available, affordable, compact, and wireless. Smartphones are particularly popular in learning contexts because they are lightweight, easy to carry, and cheaper than laptops. Their portability allows learners to move them from one place to another with ease, while their connectivity enables them to access e-learning materials via websites and share notes through social media platforms such as Facebook, Twitter, Viber, WhatsApp, and Google Plus. Furthermore, students can communicate with their friends and teachers through video chat and Skype to resolve any learning issues they may have. With the added benefit of reducing textbook costs, these gadgets are even known as "school gadgets" due to their ability to assist students in their learning.

There have been several attempts to use specific functions of mobile devices in language teaching and learning environments. Brown (2001) states that The Stanford Learning Lab, an interdisciplinary research and design group at Stanford University dedicated to exploring innovative approaches to teaching and learning with a focus on empowering learners and creating engaging, effective learning experiences, was the first to develop a language learning project using mobile phones. They created Spanish study programs that included features like voice and email, vocabulary practice, quizzes, translations, and access to live talking tutors. The results showed that mobile phones were effective for quiz delivery in small portions and that automated voice lessons and quizzes were very promising. However, the small screen size was judged to be "not suitable for learning new content but useful for review and practice" (Thornton & Houser, 2002, p. 236). Live tutoring was also effective, but the poor audio quality could potentially impact comprehension negatively.

Using yet another function of mobile phones, Rivers (2009) required Japanese learners of English to scan QR (quick response) codes that were posted around the university to complete several information exchange tasks. QR codes are graphics that enable phones to automatically link to online information. This brief list provides some indication of the innovative ways in which mobile devices can be used for language learning that go beyond the simple replication of paper-based or even computer-based learning materials.

2.1. Benefits of Smartphones

Mobile and smartphone technology can assist learners in the process of autonomous language acquisition (Reinders & Hubbard, 2013). Smartphones are useful for getting greater control over the learning process, while teachers act as facilitators, making learning more flexible and offering a wealth of content and practice opportunities as well as interacting with others. According to Reinders and Hubbard (2013), technology would benefit the LA route by providing learners with tools that allow them to regulate their language acquisition. They add that LA may be viewed as one channel for connecting instructors and students as well as connecting classroom learning to the real world. As reported by Lydon (2016), smartphones play a crucial role in improving learners' ability to observe and recall information, as well as filling gaps in their knowledge and enhancing their communication skills. The use of mobile technologies provides learners with the opportunity to access a variety of rich, multimodal content and learn anytime and anywhere, thereby offering unprecedented opportunities for improving language acquisition in language learning.

Smartphones have a crucial attribute that allows them to download and install applications developed by third-party developers. As mentioned by Dudeney and Hockly (2007), the smartphone is a tool that provides a lot of applications (e.g., dictionary, English idioms, English grammar, etc.) to the learners in order to develop their knowledge about anything, including their ability to speak English. Mindog (2016) argues that these apps have become well-liked technological tools that hold significant potential for facilitating language learning. It is logical to assume that a single app may not provide enough solutions for all the needs of language learners. Therefore, installing multiple

smartphone applications can help address specific language learning skill requirements such as grammar, vocabulary, reading, listening, writing, or speaking (Rosell-Aguilar, 2014). This flexibility is the most significant advantage of using language learning apps since they can provide a portable solution that suits every learning style.

Similarly, language learners can enjoy using language learning apps, such as practising language skills whenever and wherever, portability, taking tests on different language skills, sharing proficiency with peers, practising all four skills on a single device, receiving lessons and tips on various skills, having fun while learning, apps that are both technologically advanced and linguistically beneficial, the availability of free apps, and the opportunity to use them 24/7 (Hossain, 2018).

2.2. Smartphones in the Classroom

The smartphone is not just used for WhatsApp, Facebook, Candy Crush, or Angry Birds; it can be used in a multitude of ways from an educational perspective. The following are examples of how students use smartphones in the classroom as paraphrased from (Leyden, 2015).

- Checking of facts relating to academic work.
- Taking photos to illustrate work and presentations.
- Using mobile phones as videos to record experiments for inclusion in projects.
- Using mobile phones by teachers to carry out tests and quizzes.
- Reading news and current affairs that are related to learning.
- Using mobile phones as dictionaries, translator and calculator.
- Using mobile phones as calendar for planning learning activities.
- Accessing resources and materials quickly before the examination.
- Using a stopwatch/timer for proper time management.
- Reading eBooks.
- Recording explanations given by teachers for future reference.

- Research: Students can use their smartphones to access the internet and find information on specific topics.
- Digital Flashcards: Students can create digital flashcards on their smartphones using various applications to study and review information.
- Mind Mapping: Students can use mind mapping apps on their smartphones to organize and summarize information visually.
- Audio Recording: Students can record lectures, discussions, or other class content using their smartphones for later review.
- QR Codes: Teachers can use QR codes to provide additional information or resources for students to access on their smartphones.
- Polls and Surveys: Teachers can use polling or survey apps to gather feedback from students and engage them in the learning process

3. Challenges of Mobile Learning

Even though mobile learning has made progress in education and has been welcomed as an innovation (Sharples et al., 2009) and a new paradigm (Rosman, 2008), there are several difficulties with m-learning environments. To start with, Naismith et al. (2004) identify obstacles such as context, mobility, learning over time, informality, and ownership. Although mobility can be useful, it does not necessarily support classroom learning, as students may engage in activities that are not aligned with the curriculum or teaching. Furthermore, maintaining a log of the mobile learning experience over time is essential because learning takes place at various times. Informality may cause difficulties when too much mobile learning is integrated into formal education, threatening learners' social and personal spaces and causing them to abandon the use of technology for learning. Personal ownership of mobile devices may cause problems for institutional control, as students may deviate from the topic. Like Naismith et al. (2004), Motiwalla (2007) emphasizes that the duration of content delivery and interaction overload are also crucial considerations. M-learning content delivery should be enhanced with value-added features such as alerts, discussions, or interaction platforms to help users

use their time more efficiently while on the move. Students in the mobile learning context do not prefer to access material for long periods of time (Dean, 2011).

Keough (2005) lists other challenges, taking a pessimistic view of the role of m-learning. He believes that m-learning is technocentric, aiming to be a mobile device for market participation rather than education. Additionally, little is known about the flow of information and the relationship between users. Finally, "mobigogy" is essential, which is the need for teaching and learning models (Keough, 2005, p. 1).

According to Klimova (2018, 2019), there are several drawbacks to using MALL, such as the potential for mobile phone multi-tasking to cause a lack of attention, a shortage of appropriate apps for English for Specific Purposes (ESP) at different proficiency levels, and issues with internet access, small screen size, and a lack of face-to-face contact. Andersen (2019) also notes that mobile app feedback is limited, while Heil et al. (2016) suggest that many foreign language learning apps concentrate on individual words rather than authentic speech production across all four language skills. Presently, mobile apps are mostly used to support language acquisition, with the blended learning (BL) approach, which combines face-to-face instruction with online learning, being the most common approach (Klimova & Prazak, 2019). The BL approach has been determined to be more effective than traditional instruction and is especially useful for distant students who cannot commit to full-time English language study due to work commitments (Klimova & Prazak, 2019).

Although some pessimism exists, the world is dynamic and becoming smaller. Technology, teaching, and the learning culture have embraced the direction of adapting to innovations. To comprehend the practice of m-learning and assess its outcomes, it is necessary to establish a comprehensive pedagogical framework for designing and delivering m-learning to learners, which can inform key considerations for the preparation and application of instructional materials supported by mobile technologies.

Conclusion

In this chapter, we conducted a comprehensive exploration of learner autonomy and the role of smartphones in language learning. The chapter provided a definition and significance of learner autonomy, discussed its characteristics, and examined its application within and beyond the classroom. Furthermore, it explored Mobile Assisted Language Learning (MALL) and the benefits of smartphones for language learning, while also addressing challenges associated with mobile learning.

Learner autonomy is a multifaceted concept that emphasizes learners' active role in their education. Creating a language learning environment that supports autonomy involves a shift towards learner-centred classrooms, where students are actively involved in decision-making and collaboration with teachers, enabling them to develop the necessary skills and mindset for independent learning. Both teachers and learners play essential roles in creating an environment that supports learner autonomy, leading to empowered and independent learners. Smartphones, with their advanced capabilities, provide learners with autonomy, personalized learning experiences, and communication opportunities. However, challenges, including potential distractions, limited language learning apps, internet access issues, small screen size, and lack of face-to-face contact, need to be addressed through pedagogical frameworks and teaching models specific to mobile learning to enhance the impact of smartphones in language learning.

The upcoming chapter will outline the research framework and design that was chosen to collect data for this study.

Chapter Two: Methodology

Introduction

To carry on the present research a practical framework has been designed for the sake of gaining insights about learner autonomy and how it can be developed using smartphones. It gives a detailed description of the sample chosen, the research tools used, and further details are presented concerning the data collection procedures and analysis. To gather relevant data and guiding information, a questionnaire for master's students and an interview for teachers in the Department of English at Bordj Bou Arreridj University were administered.

2.1. Research Design

Since the study focuses on students' perceptions towards the use of smartphones to develop learner autonomy, the study has adopted an exploratory method. Exploratory research is a useful approach for researchers seeking to identify patterns, connections, and relationships and gain a deeper understanding of a phenomenon that is not well understood. According to Cervo, Bervian, and Silva (2006), exploratory research allows researchers to generate new ideas for future research while gaining a deeper understanding of the phenomenon. This approach can be especially helpful when there is limited prior research on a topic or when the research area is complex and poorly understood. As Trochim (2006) points out, the flexibility of the exploratory research approach allows researchers to adapt their research design as new information emerges. This characteristic makes exploratory research an excellent approach when dealing with complex or changing research areas, as researchers can adjust their approach to suit the changing research objectives. Additionally, Creswell (2014) emphasizes that exploratory research can help researchers identify patterns and relationships that may not be immediately apparent in other research designs. By examining a research area from different angles, exploratory research can provide researchers with a more comprehensive view of the phenomenon under investigation.

A combination of quantitative and qualitative approaches is selected to yield data that can expand the understanding of the research problem and ensure the validity of the findings. The mixed-methods approach enables the study of complex phenomena in a single study by highlighting the participants' viewpoints and quantifying measurable variables (Williams, 2007). It is a valuable approach that combines both qualitative and quantitative method to provide a comprehensive understanding of a research topic. As Creswell (2014) explains, "Mixed method research involves the collection or analysis of both qualitative and quantitative data in a single study or in multiple phases of a research project" (p. 4). By integrating different types of data, researchers can gain deeper insights, validate findings, and explore complex phenomena that cannot be adequately captured by a single method. The combination of qualitative and quantitative approaches allows for a more nuanced understanding of research questions, enhances the credibility and validity of the findings, and provides a richer and more holistic perspective. As Johnson and Onwuegbuzie (2004) emphasize, "The complementary strengths of qualitative and quantitative methods can offset the weaknesses inherent in each method when used alone" (p. 17). Thus, mixed method research is a valuable tool that expands the methodological toolkit and enables researchers to address multifaceted research inquiries.

Furthermore, Triangulation is the most common technique for mixing method (Cresswell & Plano Clarck, 2007: 62). It draws from the strengths and minimizes the weaknesses of both approaches (Morse, 1991: 122). Triangulation thus increases the validity of the results, more than the use of either method alone (Risjord et al. 2001: 10).

2.2. Setting and Participants

This thesis is conducted within the University of Mohammed El Bachir El Ibrahimi, located in Bordj Bou Arreridj, Algeria (the academic year 2022-2023). We selected this university based on multiple factors, such as the potential to secure research permissions and the convenience of having direct access to the students since we are studying there. Furthermore, the university's close proximity to our location made it the most pragmatic option for our research objectives. Additionally, the present

research targets Master One students at the Department of English of BBA. The selection of this sample in particular is related to the fact that master's students are presumed to possess sufficient background knowledge and competence that enable them to recognize their educational level and to share their perceptions far from any reservation. Equally, they have already received at least four years of university instruction, which, therefore, has influenced their learning experience. Furthermore, they would be of great help in terms of providing insights into the development of learner autonomy through using smartphones. In light of the previous reasons, a sample consisting of 57 students have purposively participated in the study. The term "purposively" is used here to emphasize that the researchers intentionally chose these students based on specific criteria or characteristics relevant to the research objectives. By using purposive sampling, the researchers aimed to ensure that the selected participants would provide valuable insights and contribute to a comprehensive understanding of the topic under investigation as highlighted by Creswell (2014). The participants included both males and females, with females comprising 96% of the sample and males accounting for 4%, as illustrated in the table:

Participants	Frequency	Percentage
Females	55	96%
Males	2	4%
Total	57	100%

Table 2-1: Students' gender

The study also consisted of a sample of teachers in the same department. Seven teachers were chosen purposively to participate in the study. They have different certificates (Magister, Doctorate), different teaching experience, and different specialities (Didactics, Literature & Civilization, and Applied Linguistics), and they are in charge of different levels.

The following table describes teachers' profiles:

Participants	Years of experience	Degree
Teacher A	8 years.	Magister in simultaneous interpretation.
Teacher B	29 years.	Magister in linguistics and language sciences preparing.
Teacher C	7 years.	PhD in cultural studies.
Teacher D	43 years	PhD
Teacher E	11 years.	PhD
Teacher F	6 years.	Magister
Teacher G	4 years.	PhD in didactics of languages and Cultures.

Table 2-2: Teachers' profiles

The background and experience of the teachers in the study are important factors to consider when evaluating their responses to the research questions. Four of them (out of seven) hold a PhD degree and three hold a Magister degree preparing for a PhD. Five teachers have been teaching English for less than 12 years, this implies that they have an acceptable amount of experience. Two respondents have served for 29 years and 43 years. This suggests that they are mavens. That is to say, they have lived through different generations and eventually encountered all types of learners. It indicates their outstanding instructional expertise which, along with others' experience, would certainly benefit this research. To sum up, the fact that a majority of the teachers hold advanced degrees in their field indicates that they have a strong theoretical foundation in the subject matter. Additionally, the diversity in the number of years of teaching experience among the participants provides a range of perspectives and insights into the teaching and learning process.

2.3. Research Tools

To ensure a comprehensive and well-rounded exploration of the topic, two tools were adopted, interview with teachers and questionnaire for students**.**

2.3.1. Questionnaire

Brown (2001) defines questionnaires as

"written instruments that present respondents with a series of questions or statements to which they are to respond either by writing out their answers or selecting from existing answers".

We selected to employ a questionnaire as the primary means of data collection for our research endeavour due to the consideration of various factors. First, questionnaires allow for the collection of standardized data from a large number of respondents, as noted by Bryman (2016). This standardization ensures consistency in the data collection process and reduces the potential for bias. Additionally, the large sample size achievable through questionnaires can increase the statistical power of the research findings. Furthermore, as highlighted by Field (2013), questionnaires can be easily distributed and collected online, which allowed us to reach a geographically diverse sample within the limitations of our research resources and timeline. The online distribution of questionnaires also reduced the logistical burden of data collection, as it eliminated the need for face-to-face interactions and paper-based surveys.

To investigate students' perspectives on using smartphones to enhance their autonomy, this study employed an online questionnaire (see Appendix A). The utilization of online questionnaire offers several advantages, including convenience, cost-effectiveness, and the ability to reach a broader audience. As highlighted by Dillman, Smyth, and Christian (2014), online surveys reduce costs, expedite data collection, enhance respondent convenience, and enable the integration of multimedia (p. 9). By utilizing online questionnaires, researchers can easily distribute surveys to participants worldwide, allowing for large-scale data collection and enhancing the generalizability of the findings. Moreover, online questionnaires provide flexibility in terms of response time, enabling participants to complete them at their convenience.

However, it is important to acknowledge certain limitations. As noted by Couper (2008), online surveys may be less suitable for reaching specific populations, such as those lacking internet access or individuals who are less comfortable with technology (p. 200). Additionally, concerns regarding data security and potential response bias should be taken into account. Despite these limitations, online questionnaires remain an indispensable tool in contemporary research, facilitating efficient and cost-effective data collection and analysis. For this particular study, the online questionnaire was

designed using Google Forms and distributed to the participants via email and a dedicated Facebook group created for Master One students at BBA University. This approach ensured easy access and participation for the target group, enhancing the likelihood of obtaining a comprehensive range of responses.

The questions were designed to allow students to provide detailed explanations, opinions, and examples. In this respect, Seliger and Shohamy (1989) are of the opinion that *"*close-ended questionnaires are more efficient because of their ease of analysis*"*. On the other hand**,** Gillham (2000) argues that *"*open questions can lead to a greater level of discovery*"* (Gillham, 2000, p. 5). The use of these types of questions allowed us to generate rich and detailed data, which enabled us to gain a deeper understanding of the phenomenon under investigation. The questionnaire consisted of fifteen questions, not divided into sections. The first four questions were about the background information of the students; the main aim behind collecting this general data was to show that the selected sample shared some features and was homogenous to some extent. Questions 5, 6, 7, and 8 deal with autonomous learning in general as they address learners' autonomy, their practices towards their learning process, and their ability to take responsibility for their progress. Then, the frequency of using smartphones for learning, their perceptions and experiences of using smartphones as a tool for learning and education were tackled from Q9 to Q15. The questions were a mix of closed-ended, open-ended, and 4 Likert scale questions. Closed-ended questions that require students to answer with 'yes' or 'no', were used to collect quantitative data that could be easily analyzed, compared, and presented clearly. Whereas open-ended questions were included to gather qualitative data, which allowed for a more in-depth exploration of students' perceptions.

2.3.2. Interview

The purpose of the interview is to collect a huge amount of data about teachers' opinions on how to use smartphones to develop learner autonomy. This way, it would be possible to answer the research questions credibly.

Interviews serve as instruments for eliciting qualitative data. *Burns* (1999) notes that **"**interviews are a popular and widely used means of collecting qualitative data**"** (Burns, 1999, p. 118). In the same respect, Richards (2001) asserts that

"interviews allow for a more in-depth exploration of issues than is possible with a questionnaire, though they take longer to administer and are only feasible for smaller groups"**.** (Richards,2001, p.61).

Moreover, the interview may be regarded as a more reliable instrument, especially when dealing with a small group of teachers**.** Nunan (1992) notes:

"The interview is the elicitation of data by one person from another through person-to-person encounters" (Nunan, 1992, p. 231).

In the same line of thought, McDonough et al., (1997) note:

"Interview (…) are just another way of asking question … they may be employed for the purpose of being as the primary research instrument or rather occupying the additional role, functioning as cross-checking tool"***(****McDonough et al., 1997, p. 182****).***

There are different types of interviews namely structured, unstructured, and semi-structured. In this research work, the researchers have chosen a semi-structured interview which was conducted with seven teachers at BBA University. Semi-structured interview offers the advantages of flexibility, participant comfort, depth of understanding, contextual exploration, researcher-participant collaboration, and the generation of rich qualitative data. It allows for adaptive conversations, encourages participants to freely express their thoughts, and enables in-depth exploration of complex topics. This approach fosters a collaborative relationship, provides valuable contextual information, and yields detailed insights into the research topic, complementing quantitative measures with nuanced qualitative data.

This interview (Appendix B) is made up of twelve questions. Explicitly, the questions are not categorized into sections. However, they are implicitly ordered thematically. Almost all questions are open-ended, which makes the nature of the elicited findings mainly qualitative. The first question (Q1) is concerned with teachers' qualifications, background and teaching experience to derive an

overall idea about their expertise. Questions two and three tackle the dependent variable (autonomy) intending to explore teachers' views regarding the concept of learners' autonomy and whether their students are autonomous or not. Questions 4 to 11 address the independent variable (smartphones) attempting to identify the key uses of smartphones in education, their impact on English language learning, the strategies employed by teachers to ensure responsible and appropriate smartphone usage. These questions also aim to gather insights into any observed changes in student engagement, motivation, or learning outcomes since incorporating smartphones into teaching practices. The last question (Q12) provides an open space for teachers to share further comments, suggestions, or recommendations concerning the present topic.

2.3.3. Piloting the Research Instruments

Conducting a pilot study of the research instruments before data collection is considered "an essential part of the research process. It is a small-scale trial run of the research design and instruments to identify any issues and problems that may affect the validity and reliability of the data." (Goodnow & McConville, 2015). In order to improve the quality of our data, we introduced the questionnaire to four groups of classmates to check the clarity of the questions. The respondents showed positive reactions towards the questionnaire as proof of the absence of ambiguity and the clarity of the questions. The respondents understood all the questions and were able to respond easily, so the questionnaire is ready to be administered to the rest of the sample. Similarly, the interview questions were piloted with two teachers who had similar characteristics to the actual participants. Given the limited number of English tutors at BBA University, we sought to expand our pool of participants by reaching out to two former instructors who previously taught at BBA University. The pilot test aimed to evaluate the clarity and validity of the questions and make necessary revisions to improve the quality of the interview. The pilot test was successful as the questions were found to be clear and understandable, and the responses provided valuable insights into the research topic. As a result, no major changes were needed in the interview questions, and the interview was ready to be conducted with the actual participants.

2.4. Data Collection Procedures

The administration of the online questionnaire took place over a two-week period in April 2023. The questionnaire was designed using Google Forms. It was distributed via email and posted in Master One students' Facebook group from the English Department at the University of BBA. We received a total of 57 responses. Participants were given clear instructions on how to access and complete the questionnaire and were assured of the confidentiality of their responses. Students did not face any difficulty or ambiguity as the questionnaire has been corrected and re-corrected three times to ensure its validity and avoid any kind of ambiguity. The questionnaire covers topics such as the frequency of smartphone use for educational purposes, perceptions of the impact of smartphone use on learner autonomy, and strategies for managing distractions. The data collected from the questionnaire are analyzed using descriptive statistical analysis to answer the research questions.

To gather data from teachers, we conducted semi-structured interviews that explored their perceptions and experiences of using cell phones to support student learning and promote learner autonomy. 15 teachers were contacted via email. Regrettably, we have not received responses from five teachers thus far. Only seven teachers agreed to participate. The educators granted us their consent to be recorded. The interviews were conducted in person, at BBA University and lasted approximately 30–45 minutes. On March 11th, interviews were conducted with teachers A and B. Following that, on March 19th, three interviews took place with teachers C, F, and G. On March 26th, an interview was conducted with teacher E. Finally, on April 4th, an interview was carried out with teacher D. The interviews were designed to allow for in-depth exploration of the topic under investigation, and the semi-structured format provided the flexibility to follow up on interesting points raised by the participants. The data collected from the interview will be analyzed using content analysis as will be explained below.

By combining data collection methods, we were able to gather a comprehensive range of data that provided insights into both the quantitative and qualitative aspects of our research questions. The

use of both questionnaires and interviews allowed us to generate rich and detailed data, which enabled us to gain a deeper understanding of the phenomenon under investigation.

2.5. Data Analysis

The data collected through the questionnaire and interview were meticulously analyzed and presented, providing valuable insights into students' perceptions of the use of cell phones in developing learner autonomy. Given the mixed nature of the data, a combination of content analysis and descriptive statistical analysis methods were employed. As Smithson (2019) asserts, content analysis is a powerful research method that systematically examines and interprets qualitative aspects within textual, visual, or audio content. It allows for the exploration of underlying meanings, themes, and patterns present in the data. the qualitative data underwent content analysis, with participants' textual responses organized into themes. The identified themes were then presented in paragraphs, supplemented with illustrative examples, facilitating a thorough understanding of the qualitative findings.

Complementarily, Johnson (2017) emphasizes the importance of descriptive statistical analysis in summarizing and presenting complex data. By employing descriptive statistics, researchers were able to uncover patterns, trends, and central tendencies within the quantitative data. Frequencies and percentages were utilized to describe and summarize the data, presenting the results in tables and figures for clarity. This combined approach utilizing both content analysis and descriptive statistical analysis techniques ensured a comprehensive and insightful analysis of the collected data.

The online questionnaire was analyzed using descriptive statistical analysis for closed-ended questions while open-ended questions were analysed through content analysis. We retrieved the responses in the form of an Excel sheet. Initially, the responses were organized and tabulated to create frequency distributions and percentages enabling a clear overview of the distribution of participants' answers. Content analysis was used to determine the average and most common responses within each answer. Furthermore, graphical representations, such as bar charts and tables were generated to visually depict the patterns and proportions of the responses. Through this

descriptive statistical analysis and content analysis, the questionnaire data was transformed into a concise and interpretable format, providing valuable insights into the participants' perceptions and behaviours. However, the analysis of data from the semi-structured interviews, content analysis was employed, which involved multiple steps. First, transcribing the interviews verbatim. Then, developing a coding scheme and apply the codes to the transcripts followed by categorizing the repeated codes. Finally, interpreting the results and reporting them, providing a comprehensive understanding of the interview data.

2.6. Research Quality

The researchers employed a mixed-method approach, utilizing both interviews and questionnaires to gather data from participants. This combination allowed for a deeper understanding of students' perceptions through qualitative insights from interviews and quantitative data from the questionnaires. To ensure research quality, content analysis was employed to systematically examine and interpret the qualitative data obtained from the interviews. This method enabled the researchers to identify underlying themes, patterns, and meanings within the participants' responses. It provided valuable insights into students' perspectives on the use of smartphones and its impact on learner autonomy.

Throughout the research process, the researchers ensured ethical considerations by obtaining informed consent from participants and protecting their privacy. we also maintained a systematic and organized approach to data collection, analysis, and interpretation, adhering to best practices in research methodology. By employing content analysis and descriptive statistical analysis within a mixed-method approach, this research study demonstrated research quality by capturing both the qualitative nuances of students' perceptions and the quantitative trends in their responses. The findings contribute to the understanding of how smartphones can influence learner autonomy, offering valuable insights for educators, researchers, and policymakers in promoting effective technology integration in education.

2.7. Research Ethics

This study placed significant emphasis on ethical considerations, particularly regarding voluntary participation, anonymity, and confidentiality. In order to uphold these principles, the researchers took specific steps to ensure the ethical integrity of the study. Firstly, at the outset of the research, the participants were provided with a detailed explanation of the study's objectives and the purpose of the questionnaire. They were explicitly informed that their participation was entirely voluntary, emphasizing their freedom to withdraw from the study at any time without facing any penalties, pressure, or coercion. This approach respected the participants' autonomy and right to make independent decisions regarding their involvement.

Furthermore, to guarantee anonymity and confidentiality, the researchers implemented robust measures. Participants were assured that their personal information and responses would be treated with the utmost care and kept strictly confidential. They were informed that any data collected would be anonymized, meaning that their identities would not be associated with their responses in any published reports or analysis. This commitment to anonymity aimed to create a safe and secure environment that encouraged participants to provide honest and candid feedback without the fear of identification or consequences.

Conclusion

In this section, the researchers attempted to describe and illustrate the research methodology including the research sample and population, data gathering tools (questionnaires and interview) and the procedures of data collection and analysis. Having established the methodology, we delve into the findings of this study, in the next chapter, where we will present and analyze the collected data to shed light on the key outcomes, patterns, and insights that emerged from the research.

Chapter Three: Results and Findings

Introduction

The current chapter presents the results collected through the research instruments. It is divided into two sections. The first section presents the findings obtained from the pupils' questionnaires, while the second section presents the findings collected from teachers' interviews, which will be analyzed in relation to the questionnaire results. The researcher seeks to interpret them so as to answer the research questions that were suggested in the general introduction.

3.1. Students' Questionnaire Results

Question 2: Do you like studying English?

Answer	Frequency	Percentage
Yes	55	96%
No	2	4%
Total	57	100%

Table 3-1: Exploring whether students like studying English or not

The second question seeks to find out students' inclinations towards studying English. The results shown in the table above revealed that the majority of participants 96% enjoy studying English, while a small minority of 4% do not. This suggests that the vast majority of students surveyed have a positive attitude towards studying the English language.

Question 3: Your choice of studying English at university was

Option	Respondents	Percentage
Your personal choice	49	87%
Your parent(s)' choice	7	12%
An orientation	1	2%
Total	57	100%

Table 3-2: Students' Reasons for Studying English at University

The findings indicate that a majority of respondents, 87%, reported that studying English was their personal choice. This suggests that a significant number of individuals have a personal interest in or motivation to study the English language. Whereas, a smaller percentage of respondents, 12%, reported that studying English was their parents' choice. This suggests that there are cases where parents or guardians play a role in influencing their children's decision to study English. Only a very small percentage of respondents (2%) indicated that their choice of studying English was influenced by an orientation.

Question 4: How do you feel about your English level?

Answer	Frequency	Percentage
Poor	1	2 %
Average	10	18%
Good	43	75%
Excellent	3	5%

Table 3-3: Students' level in English

The fourth question aimed to find out how students rated their level in English. Table 3 indicates that almost all participants considered their level in English as good to some extent. While a large number of participants with 75% rated their level as good, 5% described it as very good, and 18% considered it to be average, only one participant viewed their level as bad. These results indicate that a significant portion of the surveyed individuals have a positive perception of their English proficiency and consider themselves to be proficient in the language.

Question 5: According to you independent learning is:

Answer	Frequency	Percentage
A total reliance on yourself	29	51%
The act of seeking answers without asking the teacher	9	16%
The ability to decide what to learn	19	33%
Total	57	100%

Table 3-4: Learners' view towards autonomy

This question was interested in getting students' selected definitions of independent learning by choosing what corresponds to their perspectives towards this concept. A great number of students, that is, 51% of them, regard independent learning as a total reliance on themselves. Eventually, it's mirrored as a self-responsibility of the learners to be fully involved in learning, and merely, highlights a pivotal connotation of individualistic efforts. Additionally, about 16% have chosen the second proposition, which denotes the act of seeking answers without asking the teacher. Promptly, this definition symbolizes a part of autonomy, in which students prefer relying on themselves when looking for answers. Moreover, the remaining students, who are about 33%, define independent learning as the ability to decide what to be learnt, particularly mentioning the importance of their choice in correspondence to autonomous learning.

Question 6: When you do not understand a word, or a meaning seems ambiguous, you:

Answer	Frequency	Percentage
Check it by yourself	45	77%
Ask the teacher	8	12%
Ask your classmates	4	9%
Total	57	100%

Table 3-5: Students' approaches to resolving word ambiguity

The findings indicate that a significant majority, 77%, of respondents prefer to check the meaning of a word or clarify ambiguity by themselves when they do not understand something. This suggests a self-reliant approach to learning and problem-solving, where individuals take responsibility for seeking out information and understanding independently. Asking the teacher was the second most popular option, chosen by 12% of respondents. This implies that there is still a reliance on teachers for clarification, which is understandable considering their role as educators and experts in the subject matter. Seeking guidance from teachers can provide valuable insights and explanations, especially in more complex or nuanced situations. Moreover, only 9% of respondents indicated that they would ask their classmates when they encountered an unfamiliar word or ambiguity. This suggests that peer support and collaboration may be less preferred or utilized in such

instances. It's worth noting that this finding might be influenced by the survey methodology or the specific context in which the survey was conducted.

Question 7: When the English class ends, you:

Answer	Frequency	Percentage
Do further research	15	26 %
Satisfied with the knowledge gained	11	19 %
Both	31	54 %
Total	57	100 %

Table 3-6: Exploring the practices of students after class

These findings suggest that a majority of people (54%) selected the third option, in which they do further research and feel satisfied with the knowledge gained when they come across a word they don't understand or a meaning that seems ambiguous. This step may be beneficial in helping to expand one's knowledge and understanding, while also increasing the likelihood of accurate interpretation and communication. The fact that only 26% of respondents reported doing further research may indicate that some individuals are either unaware of the resources available to them or do not place a high value on understanding the meaning of unfamiliar words or phrases. On the other hand, the 19% who are satisfied with the knowledge gained may be confident in their ability to infer meaning from context or may not feel the need to delve deeper into the subject matter.

Question 8: Do you use any strategies or techniques to improve your English level? If yes, what are they? If no, why?

Answer	Frequency	Percentage
Yes	47	83 %
No	3	5 %
No answer	7	12 %
Total	57	100 %

Table 3-7: Students' strategies to improve their English level

The table above indicates that a majority of respondents, 83%, use strategies or techniques to improve their English level. The strategies mentioned by the students include activities such as reading books, listening to podcasts, watching movies and videos, practising speaking with others, using language learning apps, attending online courses, engaging with social media content in English, and seeking out resources like dictionaries. The emphasis on various modalities of language learning, such as reading, listening, speaking, and writing, is evident in the responses. The use of multimedia platforms like YouTube and Instagram is also highlighted as a means of exposure to authentic English content. According to Balakrishnan and Lay (2016), Facebook and YouTube have been utilized "within and outside classrooms for teaching purposes, such as to upload educational videos or learning materials for students." They explain that this action has been taken due to the popularity of these media among students, who use them to complement and enhance their classroom learning due to the ease and speed of communication offered by these platforms. This emphasizes the role of multimedia platforms, including YouTube and Instagram, as valuable resources for language learners to access authentic English content and educational materials. These strategies demonstrate the proactive approach taken by the respondents to enhance their English skills and their recognition of the importance of diverse learning resources.

However, only 5% do not use any techniques without substantiating their decision with any justifications. It is worth noting that 12% of respondents did not provide an answer. The high percentage of individuals utilizing strategies to enhance their English proficiency suggests a proactive approach towards language learning. However, without specific details on the strategies employed, it is difficult to determine the exact techniques used. Further exploration of the strategies and techniques employed would provide valuable insights into effective language learning methods and inform language education practices.

Question 9: To what extent do you use your smartphone for educational purposes?

Answer	Frequency	Percentage
Always	47	58%
Frequently	3	16 %
Occasionally	7	12 %
Total	57	100 %

Table 3-8: Smartphone utilization for educational purposes

The findings indicate that a significant majority of respondents, 58%, reported that they always use their smartphones for educational purposes. This suggests that smartphones have become an integral part of their learning and educational activities, and they rely on them consistently for accessing educational resources, information, and tools. An additional 28% of respondents reported frequently using their smartphones for educational purposes. This implies that while they may not rely on their smartphones as extensively as the "always" group, they still utilize them on a regular basis to support their learning endeavour. Around 12% of respondents indicated that they use their smartphones for educational purposes occasionally. This suggests that while they may not heavily rely on their smartphones for learning, they still find them useful on certain occasions or for specific tasks or topics. Importantly, none of the respondents reported using their smartphones for educational purposes. This indicates that smartphones have found some level of utility in supporting learning and education across the entire surveyed population.

Overall, these findings highlight the significant role smartphones play in modern education. They have become versatile tool that enables individuals to access information, educational resources, and learning opportunities conveniently and flexibly. The high percentages of individuals who reported using their smartphones always or frequently for educational purposes indicate a strong reliance on mobile technology for supporting learning and academic pursuits. The findings from the study titled "Mobile learning: The impact of smartphones on student performance and satisfaction" by Sungwook Shin, Hae-Deok Song, and Ji-Yeon Lee (2018) align with the pervious findings provided. The study examined the influence of smartphones on student performance and satisfaction in a mobile learning environment. The researchers collected data from 296 undergraduate students,

analyzing their smartphone usage patterns, academic performance, and satisfaction levels. The study revealed that students who frequently used smartphones for educational purposes reported higher levels of academic performance and satisfaction. This supports the notion that smartphones play a significant role in modern education by enabling individuals to conveniently and flexibly access information, educational resources, and learning opportunities. The study's findings also indicate a strong reliance on mobile technology for supporting learning and academic pursuits, as evidenced by the high percentages of individuals who reported using their smartphones always or frequently for educational purposes.

Question 10: Do you think that using your smartphone for education has improved your ability to learn independently?

Answer	Frequency	Percentage
Yes	50	88 %
No	7	12 %
Total	57	100 %

Table 3-9: Exploring the impact of smartphone usage on independent learning abilities

The findings indicate that a significant majority of respondents, 88%, believe that using their smartphones for education has improved their ability to learn independently. They highlight several justifications for this perspective. Firstly, smartphones provide quick and easy access to information, allowing users to search for and understand concepts by themselves. The convenience and portability of smartphones make it possible to check ambiguous information instantly. Moreover, respondents emphasize the abundance of resources available on the internet, such as educational videos, podcasts, and online courses, which contribute to independent learning. They also appreciate the accessibility of dictionaries and the ease of learning through smartphone applications. Furthermore, smartphones are seen as modern tools that facilitate the learning process by offering vast knowledge and information sources. The ability to conduct research, learn new words, and have information readily

available are additional factors mentioned in support of the positive impact of smartphone use on independent learning.

On the other hand, 12% of respondents expressed a different perspective, they do not believe that using their smartphones for education has improved their ability to learn independently. Their justifications for this perspective include concerns about time wastage, the belief that smartphones hinder the education of children, and the notion that using books is more effective for learning compared to using smartphones. Some respondents express that smartphones can be distracting and that they feel the need for a guide or instructor to navigate their learning process effectively. These viewpoints highlight reservations and preferences for traditional learning methods like books, suggesting that smartphones may not be universally perceived as beneficial for independent learning. It is important to consider individual learning preferences and the potential challenges associated with using smartphones for education when exploring the impact on independent learning abilities. This relates to findings from, Smith and Caruso (2010) who found that while smartphones can enhance independent learning by providing access to a wide range of information and resources, some individuals still prefer traditional learning methods. Moreover, Clark and Luckin (2013) echoed these concerns, emphasizing the distractions and lack of focus that smartphones can introduce. Similarly, Kukulska-Hulme and Pettit (2009) highlighted that while smartphones can support independent learning, learners may face challenges such as information overload and difficulties in managing their learning process effectively. These studies collectively underscore the importance of considering individual preferences and addressing potential challenges when integrating smartphones into independent learning, suggesting the need for appropriate strategies and guidance for effective learning experiences.

Question 11: Do you think that using your smartphone for education has helped you develop new skills or knowledge?

Answer	Frequency	Percentage
Yes	51	89 %
No	1	2 %
Uncertainty	5	9%

Table 3-10: The impact of using smartphones on skill and knowledge development in education

The findings reveal a largely positive view towards the use of smartphones for education, with 89% of participants expressing that it has helped them develop new skills and knowledge. Participants pointed out various benefits, such as the ability to search for information, improve language skills (writing, speaking, and listening), access diverse content, learn from native speakers, practice new languages and cultures, and enhance learning autonomy. Furthermore, the convenience and accessibility of smartphones were highlighted as major advantages for learners, allowing them to practice and engage in learning at any time and from any location. The findings suggest that smartphones have become an important tool for modern learners, providing a range of benefits that support skill and knowledge development. Conversely, 9% of participants in the contrasting group highlight limitations and uncertainties about smartphones' effectiveness in skill or knowledge development. Additionally, a minority of participants (2%) outright disagree that smartphones have facilitated their learning process. All in all, the findings highlight the varying experiences and perspectives on smartphone usage for education, suggesting that while smartphones may support research and language skills to some extent, their overall impact on skill or knowledge development is not consistently perceived as significant.

Question 12: How often do you use your smartphone to collaborate with classmates on educational tasks?

Answer	Frequency	Percentage
Always	26	46%
Sometimes	16	28 %
Often	12	21%
Rarely	3	5%
Total	57	100%

Table 3-11: Smartphone usage for collaborative educational tasks among students

The findings indicate the frequency with which respondents use their smartphones to collaborate with classmates on educational tasks. The largest percentage, 46%, reported always using their smartphones to collaborate with classmates. This suggests that these individuals heavily rely on their smartphones as a primary tool for collaborating with their peers on various educational tasks. 21% of respondents reported often using their smartphones for collaboration with classmates. While not as frequent as the "always" group, this group still relies on their smartphones regularly to engage in collaborative educational activities. 28% of respondents indicated that they sometimes use their smartphones to collaborate with classmates. They may prefer other means of communication or collaboration, such as in-person meetings or desktop computers, but still recognize the value of smartphones for certain situations. A smaller percentage, 5%, reported rarely using their smartphones to collaborate with classmates. This group likely prefers alternative methods of collaboration, such as face-to-face interactions or dedicated collaboration tools on other devices. They may find smartphones less suitable or convenient for collaborative tasks, or they might have limited access to the necessary smartphone features or apps.

In sum, these findings highlight the significant role smartphones play in facilitating collaboration among students. Whether it's through constant reliance, regular use, occasional utilization, or limited usage, smartphones are recognized as valuable tools for collaborating with classmates on educational tasks. They provide convenient and accessible means for communication, sharing resources, and working together, promoting teamwork and knowledge sharing among students.

Question 13: Have you ever had any negative experiences using your smartphone for educational purposes (e.g., distractions, technical difficulties, etc.)?

Answer	Frequency	Percentage
Yes	30	53%
No	27	47%
Total	57	100%

Table 3-12: Exploring negative experiences of smartphone use for education

The findings reveal a mix of experiences when using smartphones for educational purposes. While 53% of students reported having negative experiences, citing issues such as insufficient information, weak internet access, distractions from social apps and games as well as technical difficulties. These experiences highlight the need for improvements in information quality, internet infrastructure, minimizing distractions, and ensuring better technical support to optimize the educational benefits of smartphone usage. On the other hand, 47% reported positive experiences without distractions or difficulties, as they know how to effectively use their phones for studying and acquiring knowledge. They perceive using smartphones for education as a positive experience, highlighting its role in facilitating research and providing easy access to information. They also appreciate the evolving nature of smartphones, with the availability of various applications that help them find answers to their questions. These findings highlight the potential benefits and positive impact of utilizing smartphones for educational purposes, showcasing how they can enhance learning experiences and provide valuable resources for students if used appropriately.

Question 14: What types of educational activities do you use your smartphone for (e.g., reading articles, watching videos, taking notes, etc.)?

Based on the participants' responses, several types of educational activities were identified. The most common activities mentioned include watching videos, reading articles, taking notes, searching for information, and seeking answers to questions.

Participants also mentioned activities such as listening to podcasts, enrolling in online courses, reading books, downloading lessons, writing research papers, creating presentations, and using apps

to enhance language skills. These activities demonstrate the diverse ways in which smartphones are utilized for educational purposes, ranging from accessing multimedia content to engaging in interactive learning experiences. The findings indicate that smartphones offer a versatile platform for a wide range of educational activities, catering to individual preferences and learning styles.

Question 15: How do you manage distractions when using your smartphone for educational purposes?

The responses reveal various strategies employed by participants to manage distractions when using their smartphones for educational purposes. The most common strategies mentioned include turning off notifications, logging out of social media, putting the phone on silent or "do not disturb" mode, and setting dedicated time and space for studying. Quoting from a student:

> *"*… there are several strategies that I use to stay focused and avoid distractions. One of the things I do is to set aside a dedicated time and place for my English language learning activities. During this time, I turn off notifications and put my phone on silent mode to minimize distractions"

Participants also mentioned avoiding non-educational apps and removing distracting apps from their phones. some participants reported relying on self-control and staying committed to their studies to avoid distractions, while others use alternative devices such as laptops or find helpful applications and articles to stay engaged. Additionally, time management techniques like using timers or taking scheduled breaks were mentioned.

Such findings suggest that participants employ a combination of proactive measures and self-discipline to minimize distractions and maintain focus during their educational smartphone use.

3.2. Teachers' Interview Findings:

An interview was incorporated into the study in order to provide valuable qualitative data that complements the quantitative information gathered through the questionnaire; it is useful in such a study because it allows the researcher to capture the opinions of the participants. The purpose of this interview is to examine how students perceive the use of smartphones as a tool for enhancing their ability to take control of their own learning process. Moreover, it was used to identify how teachers integrate smartphones as a means of facilitating the development of learner autonomy among Algerian EFL students.

Question 2: According to you, what does learning autonomy mean?

Since autonomy is one of the pillars of the present research, it is necessary to ask teachers how they view learning autonomy. Teachers A, D, E, G and F agreed that LA is:

*"*the state of learning independently from a teacher*"*.

That is to say, learners are able to take responsibility for their learning and learning independently without relying solely on the teacher. They stress the importance of self-directed learning and the idea that learners should be able to make their own decisions, evaluate their progress and take ownership of their learning process. Additionally, they acknowledge that there may be methods and approaches that can assist in fostering learning autonomy, but ultimately it is the learners who must be proactive and take the initiative to become autonomous learners. However, both teachers B and C emphasize that LA is

*"*Learning to be learner-centred rather than teacher-centred*"*.

They suggest that the teacher's role is to guide and facilitate the learning process rather than to be the central figure in it, indicating a shift away from a teacher-centred approach towards a more learner-centred approach.

In short, the responses from the teachers suggest that they have a good understanding of what learning autonomy is and how it can be achieved. The teachers' views on learning autonomy suggest that it involves learners taking responsibility for their own learning and being able to learn

independently, with some focusing on the importance of self-directed learning and others giving prominence to a shift towards a more learner-centred approach.

Question 3: Do you think that your students are autonomous in their learning? Why?

Teacher A states that

"It's not easy to determine whether the learners are autonomous or not".

Only a minority of students of teacher's E are autonomous. While, the majority of students of teachers A, C, F and G are not autonomous since there is a dependence on classroom instruction as mentioned by teacher F:

"They depend too much on what we present here inside the classroom and it is not enough."

Similarly, Teacher G contends:

"Students do not master technological tools, and even if they do, they do not use them within the pedagogical framework".

To Teacher G, there is a lack of mastery of technological tools. As well as a need for more autonomy-promoting tasks and assignments as mentioned by teacher A

"Teachers should design tasks that help them depend on themselves".

Nevertheless, teacher D, believes that his/her students are autonomous since they learn mostly on their own outside the classroom, seek knowledge from their peers and other sources, and have the capacity to choose the appropriate learning methods, as he declares:

"My students are autonomous because, most of the time, they learn alone at home, in the library, learn from peers and learn from knowledgeable others".

This indicates that respondent D trusts in his/her students' ability to learn and take ownership of their learning process, and they facilitate this process by providing guidance and support. Overall, most teachers acknowledge that autonomy is not something that all students possess from the start, and it is the teacher's responsibility to guide and facilitate their journey towards becoming autonomous learners.

Question 4: What do you think are the most important uses of smartphones in education for the millennial generation today?

Based on the respondents' answers, there are the most important uses of smartphones in education for the millennial generation today:

- Accessing educational resources such as PDF books, videos, and different platforms for learning
- Searching for information through various research sites
- SMS messaging, making calls, recording, listening, and learning from chatting
- Using educational apps and dictionaries
- Looking for materials and information on the internet
- Resource number one for learning anything

However, there is also a concern raised in response G that the current generation may not fully master technological tools for learning and research and a lack of education regarding these digital tools. In this regard, teacher G notes:

"This generation is called the digital generation, but in fact, it is a generation that does not master anything… they do not even master Google search… where teachers do not transmit to students the appropriate method of how to conduct research through technological tools."

Question 5: What do you think about using smartphones as a tool to support student learning and autonomy inside the classroom?

The responses provide a range of opinions on using smartphones as a tool to support student learning and autonomy inside the classroom. Teachers A, B, C, and D highlight the benefits of using smartphones as a tool to enhance learning and provide students with more autonomy, quoting from teacher A:

"... it gives access to all the tools that enable the students to learn autonomously."

Response E, on the other hand, presents a different viewpoint

“I am totally against using smartphones in class because they distract students from learning.”

She argues against the use of smartphones in class, stating that they can be a distraction. Teacher F focuses on the impact of smartphones on language learning specifically, highlighting how technology has changed the way students learn and practice English:

“I feel a great difference between the generation where I was a student and the generation of today in terms of what, when we learned English for the first time it was the first time we hear the English language from our teachers and we didn't have this ability to pronounce or having this daily communication or learn a lot of words in English. Nowadays, students speak English fluently from the first year at the very beginning at university.”

Overall, the responses suggest that there are both advantages and disadvantages to using smartphones in education, and opinions may vary depending on the context and individual preferences.

Question 6: In your opinion, what is the impact of smartphones on English language learning in Algeria?

Response A acknowledges the role of smartphones as a valuable resource for diligent learners who actively utilize the opportunities it provides, contrasting with the observation that lazy students may not reap the benefits, stating,

"That is dependent on the student and whether he/she wants to learn or not… Lazy students, however, are not included in this."

Besides, Response D offers a caution against excessive reliance on smartphones, noting that they may result in passive dependence and hinder students' motivation and creativity, cautioning that

"Smartphones should not be exaggerated in use because they can create passive dependence on them … and make from them dependent learners and not autonomous ones."

Furthermore, both responses B and C highlight the facilitating nature of smartphones in the educational process. Response B emphasizes the development of learners' social skills and increased

awareness of information and communication technology (ICT) through smartphone use. Similarly, Response C emphasizes the positive contribution of smartphones, citing their support for listening, watching videos, recording, and practising pronunciation, stating,

"*It supports learning using the phone to listen to podcasts, watch videos, and record*."

Moreover, Responses F and G shed light on the transformative impact of smartphones on English language learning, with Response F emphasizing enhanced language learning experiences and proficiency in the current generation compared to previous ones, and Response G emphasizing the significance of smartphones in promoting English language usage, noting societal shifts and a policy emphasis on English. Meanwhile, Response E takes a negative stance without providing specific reasons, simply expressing,

"*In general, it has a negative impact."*

Overall, the responses demonstrate a range of perspectives on the impact of smartphones on English language learning in Algeria. Some responses emphasize the benefits and opportunities provided by smartphones, while others caution against excessive reliance or express negative opinions.

Question 7: What strategies have you used to incorporate smartphone use into your teaching and learning practices?

Teachers have different approaches when it comes to incorporating the use of smartphones in the classroom. Teachers A, C, F and G allow students to use dictionaries and vocabulary apps on their phones, while also introducing them to YouTube channels for additional learning. Teacher A stated:

“Dictionaries on their phones are allowed for grammar and vocabulary. I sometimes introduce them to new teachers from whom they can learn on YouTube with the use of their phones, of course”.

Teacher B encourages smartphone use only when necessary, such as for looking up definitions or using Google.

“I just urge learners to use in case of need such using a dictionary or Google”.

There are also strategies that Teacher D involves to enable students to independently search for information, collaborate with peers, and present their findings. However, teacher E does not promote smartphone use for instructional purposes. Nevertheless, due to resource limitations, teachers F and G ask students to use their smartphones to access textbooks, search for words or concepts, or share lessons.Teacher G declared:

“That is why I always try to make use of smartphones by installing dictionaries, conducting searches in dictionaries, sometimes looking for quotes, books, and authors”.

In certain cases, teachers embrace smartphones as a means of communication and utilize them for activities like conducting searches, showcasing course-related content, and facilitating cultural exchanges with students from other countries. Broadly, the responses reflected various approaches to integrating smartphones as tools for learning and instruction.

Question 8: In your experience, how have students used smartphones to support their learning and independence? Have you seen any notable positive or negative effects?

According to the responses, students have used smartphones to support their learning and independence in various ways. Social media has been mentioned by teacher A to be a platform where positive effects can be observed, such as using it for learning purposes and language mastery, quoting

“The positive effects are using social media for learning and mastering their language”.

However, he/she mentioned concerns about students wasting time on trivial activities and becoming addicted to their phones. Non-academic use of smartphones is also seen as a drawback by teacher B. On the positive side, teacher D asserted that:

“Students use smartphones positively if you assign them something precise to do and finish on time. In this case, you can see all the learners working and supporting their learning with concrete web quests. In this case, we see only positive effects”.

When students are given specific tasks and time limits, they engage actively with web quests and show support for their learning. However, without proper control and guidance, there is a risk of students getting distracted and deviating from the intended purpose. smartphones are reported by teacher E to be extensively used for "searching for words for vocabulary and lexical search and use it to know about new theories that they do not know." In addition, teacher G asserts that the willingness of students to utilize smartphones for learning is influenced by the teacher's involvement and desire to incorporate digital tools, including smartphones, into their teaching. In a global sense, the impact of smartphone use on learning and independence depends on factors such as purpose, guidance, and control**.**

Question 9: How do you ensure that students use their smartphones appropriately and responsibly in the classroom?

In addressing how to ensure appropriate and responsible smartphone use in the classroom, several common answers can be observed:

Firstly, Responses A and D emphasize the importance of establishing clear guidelines and boundaries. Response A suggests allocating dedicated time for students to use their smartphones for academic purposes, stating

"... and before they focus on the lesson, they get enough time to use their phones to do their work."

While response D declares

"... you need to give activities with time bound. To avoid any negative effect, use smartphones only as a support and not as a device to play with*."*

It is important to recognize the significance of setting time limits and prioritizing the educational potential of smartphones over their recreational use.

Secondly, response F highlights the role of direct communication and guidance from the teacher, declaring

*"*I always advise them directly with their names … to use smartphones for class purposes*"*

The teacher advises students personally, reminding them to refrain from using smartphones for non-academic purposes and promoting their integration into classroom interactions.

Thirdly, response G acknowledges the challenges in guaranteeing responsible smartphone use but offers a specific approach. By requiring students to use their smartphones for a specific task within a specified time frame, they are limited to using their devices exclusively for that purpose.

However, it is worth noting that Response C brings attention to the reality that not all students may use smartphones appropriately despite efforts to enforce guidelines and promote responsible usage, quoting

"We can't ensure that all students are using smartphones appropriately."

In sum, these responses reflect the significance of setting clear boundaries, providing guidance, incorporating smartphones into academic activities, and recognizing the limitations in ensuring universal adherence to responsible smartphone use in the classroom.

Question 10: What types of educational activities do you find most effective when using smartphones to support student learning and autonomy?

While respondent E provided no answer, a variety of educational activities are identified by the rest of the respondents as effective in utilizing smartphones for supporting student learning and autonomy. Instructors A, B and C mentioned activities that cover various aspects of language learning, including vocabulary acquisition, grammar practice, listening comprehension, and watching videos. The use of movies based on novels is also emphasized as a valuable resource by respondent C. Additionally, respondent D mentioned tasks such as

"Matching synonyms and antonyms, finding definitions, checking pronunciation, problem-solving, and seeking assistance from online resources like Google".

Translation activities and encouraging students to search for new words and concepts were also mentioned by instructor F. There is a notable emphasis on task-based learning which focuses on engaging students in action-oriented activities to promote smartphone use for learning purposes.

However, it is highlighted that simply downloading files is not considered an appropriate use of smartphones, whereas creating or utilizing platforms for interactive learning is seen as a more beneficial approach for fostering student autonomy as teacher G maintains:

"The most appropriate activities are those that are based on action, which is what we call task-based learning in English. This approach's activities help in the optimal use of smartphones. For example, downloading files is not, in my opinion, an appropriate use of smartphones. Instead, using the smartphone to create a platform or using an existing platform is a more appropriate use that will improve student' autonomy".

In the larger context, the responses highlight the diverse ways in which smartphones can be effectively incorporated into educational activities to support student learning and autonomy.

Question 11: Have you noticed any changes in student engagement, motivation, or learning outcomes since you started incorporating smartphones into your teaching practice?

The responses provided offer insights into the impact of incorporating smartphones into teaching practices on student engagement, motivation, and learning outcomes. Response A highlights that students are motivated to participate and engage in the classroom when they can use their phones to find answers, leading to independent learning and improved information retrieval, stating

"The effort made here enables them to learn independently and reminds them to retrieve the information when needed".

Response D also emphasizes the positive effects, noting that students are more motivated and engaged when they are asked to check word pronunciations or meanings using their smartphones. However, interviewee C acknowledges a change without providing specific details. Furthermore, Interviewee F mentions a specific instance were incorporating smartphones as a substitute for a data show enhanced the lesson, indicating a potential positive impact. Interviewee G emphasizes that smartphones have become an indispensable tool for teaching and learning, particularly for students who do not have access to personal computers, suggesting a significant change in educational practices, expressing

"It has become an indispensable tool for teaching and learning. We cannot exclude the use of smartphones anymore".

However, Interviewee B states no answer, and Interviewee E mentions no prior incorporation of smartphones. Taken together, the interviewees indicate that incorporating smartphones in teaching practices can have a positive influence on student engagement, motivation, and learning outcomes, although the extent of the impact may vary.

Question 12: Do you have further comments, suggestions or recommendations?

Teachers have differing perspectives on the use of smartphones in education. While instructor (B) emphasizes the need to encourage learners to use smartphones for research purposes, instructor (C) views smartphones as double-edged swords that should be used appropriately to enhance skills and motivation. It is important for both teachers and students to establish boundaries on how, when, and for what purposes smartphones should be used. Integrating smartphones into teaching and learning processes, especially in ICT credits and presentations, is seen as essential for fostering learner autonomy as stated by teacher D

"…Both teachers and learners should set demarcation lines in what concerns how to use them, when to use them and what for. The inclusion of smartphones and Technology in the class has become a must. Hence, to help learners work autonomously, teachers need to incorporate is as part of teaching/ learning process especially in ICT credits, and in PPT presentations etc".

However, teacher (E) discourages the use of smartphones as instructional tools due to concerns about their negative impact on overall student performance. Interviewee (F) recommends using smartphones as supporting tools within the classroom, while interviewee (G) proposes exploiting them by incorporating activities that require their use, installing dictionaries, and setting time limits to ensure focused educational usage. By striking a balance between freedom and appropriate usage, students can utilize smartphones effectively for educational purposes.

Conclusion

In this chapter, we aimed to explore and examine the perceptions of Master One EFL students at BBA University regarding the relevance of smartphones in developing learner autonomy. Additionally, we sought to investigate how EFL teachers at the university utilize and integrate smartphones to enhance learners' autonomy. By investigating the perceptions of EFL students and teachers regarding smartphone use doing so, we aimed to contribute valuable insights to the existing body of literature. The findings of this study can inform educational practices and help educators harness the potential of smartphones to promote learner autonomy in EFL contexts. The subsequent chapter will address the analysis of the acquired findings through the utilization of research instruments, alongside the provision of responses to the research inquiries.

Discussion

The objective of this study is to explore how students and teachers perceive the use of smartphones as a tool for fostering learner autonomy and to examine teachers' practices for integrating smartphones into the classroom to facilitate the development of learner autonomy among students. For the sake of summarizing and drawing a conclusion to this study, this part will state and merge the main results obtained from the quantitative and qualitative data of students' questionnaire and teachers' interview. The results will be discussed in light of the research questions and the literature review.

The first research question sought to know students' perceptions towards using smartphones to develop autonomous learning. The analysis of students' questionnaire came out with significant results revealing that:

- Students' understanding of autonomy is regarded as a complete dependence on oneself (question 5), representing a self-imposed responsibility for learners to engage actively in the learning process. Moreover, most of the students who took part in our research asserted the importance of taking charge of their learning (as presented in question 6). Moreover, they believe that depending on teachers is not enough for accomplishing their learning, but it demands that they do an extra effort outside the classroom (question 7). Likewise, the teachers' interview results supported the results of students' views towards autonomous learning, teachers do consider autonomous learning is important in learning foreign languages.
- Findings from question 9, 10 and 11 revealed the significant role that smartphones play in modern education. Most students indicated that they rely on smartphones consistently for educational purposes. A significant majority of them assert that utilizing their smartphones for educational purposes has enhanced their capacity for self-directed learning and helped them develop new skills. Similarly, most teachers highlight the benefits of using smartphones as a tool to enhance learning and provide students with more autonomy. they have noticed changes in student engagement, motivation, and learning outcomes since incorporating

smartphones into their teaching practices. Students are motivated to participate, engage in independent learning, and retrieve information when needed.

- The results from question 13 and 15 indicate that while a majority of participants reported having experienced negative instances when using their smartphones for educational purposes, a substantial portion did not encounter any negative experiences. This suggests that while challenges exist, they are not experienced by all students. Furthermore, the strategies employed by participants to manage distractions when using smartphones for educational purposes highlight the proactive and self-regulatory approaches taken. By turning off notifications, logging out of social media, and creating dedicated study environments, participants demonstrate a conscious effort to minimize potential distractions.
- The study reveals that while negative experiences exist when using smartphones for educational purposes, students employ various strategies to manage distractions and maintain focus. These findings emphasize the importance of promoting self-regulation and providing guidance on effective smartphone use to optimize the educational benefits of this technology. Therefore, the first research question which states students' perceptions about using smartphones to develop autonomous learning is partially confirmed.

The second research question sought to identify teachers' practices to integrate smartphones to develop learner autonomy. The analysis of teachers' interview has shown different approaches including:

- Teachers employ diverse strategies for integrating smartphones into their classrooms. For instance, some teachers encourage the use of dictionaries, vocabulary apps, and educational YouTube channels to enhance learning. Others promote smartphone usage for quick searches and references and emphasize independent research, collaboration, and presentations. Additionally, smartphones serve as communication tools, aid in searching, facilitate presentations, and enable cultural exchanges with students from other countries. These varied approaches highlight the multifaceted use of smartphones as educational tools in the classroom.

In terms of learner autonomy, the perceptions of students in our study align with the understanding of autonomy as a self-imposed responsibility for actively engaging in the learning process. Students expressed the importance of taking charge of their own learning and going beyond classroom instruction to accomplish their learning goals. These findings are consistent with the views expressed by participants in the study by Naismith et al. (2004), who identified autonomy as a key element for effective learning. Additionally, our findings are supported by the teachers' interviews, as they also recognized the importance of promoting autonomous learning in foreign language education.

The findings of this study align with the existing literature on the use of language learning apps, as highlighted by Mindog (2016) and Rosell-Aguilar (2014). Mindog (2016) argues that language learning apps have become popular tools with significant potential for facilitating language learning. Similarly, Rosell-Aguilar (2014) suggests that installing multiple smartphone applications can address specific language learning skill requirements, providing a flexible and portable solution that caters to different learning styles. The results of our study support these claims, as students reported relying on smartphones consistently for educational purposes and highlighted the benefits of using multiple apps (Duolingo, YouTube, Instagram, etc) to enhance their capacity for self-directed learning and develop new skills.

Despite the overall positive perceptions and benefits of using smartphones for educational purposes, our study also acknowledged the existence of challenges and negative experiences. These findings are consistent with the study by Naismith et al. (2004), which identified obstacles such as context, mobility, and informality associated with the use of mobile devices in education. However, our participants demonstrated proactive and self-regulatory approaches to managing distractions and maintaining focus, reflecting the strategies identified by Naismith et al. (2004) and Motiwalla (2007) for minimizing potential challenges.

In terms of teachers' practices, our study revealed diverse approaches to integrating smartphones into the classroom to develop learner autonomy. Teachers employed various strategies such as encouraging the use of language learning apps, promoting independent research,

collaboration, and presentations, and utilizing smartphones as communication tools and aids for cultural exchanges. These findings support the multifaceted use of smartphones as educational tools in line with the literature discussed by Mindog (2016) and Rosell-Aguilar (2014).

General Conclusion

The obtained results through both data collection tools draw upon the concluding outline of the final synthesis. The present study relies on both questionnaire and semi-structured interview, in order to answer the studied research questions.

The research suggests that smartphones have the potential to play a significant role in developing learner autonomy. The findings highlight the importance of incorporating smartphones into educational settings to enhance students' self-directed learning skills, promote critical thinking, and foster independence. However, it is crucial to acknowledge that effective implementation strategies, teacher guidance, and responsible usage guidelines are essential to maximize the benefits of smartphone integration while minimizing potential distractions or misuse.

This study is divided into three chapters. The first one is theoretical and consists of two sections. The first section deals with the main concepts related to the concept of learner autonomy, its definition, the significance of learner autonomy, the characteristics of an autonomous learner, and autonomy and the language learning environment. The second section tackles the use of smartphones to develop learners' autonomy and pertinent concepts like benefits and challenges. Chapter 2, however, is practical and aims to answer the research question. The study applied a mixed-method approach and employed an online mixed questionnaire for students and a semi-structured interview for teachers as an instrument for data collection.

These data were analyzed in accordance with their nature, quantitatively and qualitatively. The third chapter deals with findings and discussion, in which the findings showed that the majority of the participants have positive opinions towards the use of smartphones to develop learners and agreed that they are very helpful in their autonomy. Based on this, it can be said that this study's results go in the same direction as the cited works in the literature review.

In the end, this dissertation ends with pedagogical recommendations and suggestions for future research. It is hoped that this research can be significant for students, teachers, and researchers who are interested in further conducting studies about the same topic.

Limitations and Recommendations

During the process of conducting this study, several limitations and methodological challenges were encountered. The first major obstacle in this research was the reluctance of a significant number of teachers to participate in the interview phase, which had an impact on the representativeness of the sample. Additionally, a lack of collaboration was observed among certain students, leading to unanswered questions and incomplete or random responses, resulting in their exclusion and the need to substitute them with other respondents. Despite these limitations, the study aimed to mitigate these challenges and draw meaningful insights from the available data.

Based on the findings, the researchers suggest that to promote learner autonomy, it is crucial for teachers to explicitly introduce the concept to students, emphasizing the significance of assuming responsibility for their learning journey and cultivating self-directed learning skills. By providing opportunities for goal-setting, self-reflection, and self-assessment, teachers can encourage students to identify their strengths and areas for improvement. Creating a supportive environment that values independent thinking and problem-solving is also essential in empowering students to engage actively in their learning and develop the necessary skills to utilize smartphones as tools for autonomy within the digital landscape.

Furthermore, it is essential for educators and institutions to recognize the potential of smartphones as valuable tools for promoting learner autonomy. Efforts should be made to provide guidance and support to students in utilizing smartphones effectively for independent learning, such as recommending educational apps, online resources, and productivity tools that align with their specific learning goals. Additionally, incorporating digital literacy and responsible smartphone usage into the curriculum can help students develop the necessary skills to navigate the digital landscape safely and responsibly.

Moreover, fostering a positive and inclusive learning environment is crucial. Educators should promote open discussions and encourage students to share their experiences and perspectives on using smartphones for autonomous learning. This can be facilitated through collaborative activities, group projects, and peer learning opportunities that leverage the benefits of smartphone technology. By

creating a supportive and engaging environment, students can feel empowered to explore new learning possibilities and take ownership of their educational journey.

Ongoing research in this field is essential to deepen our understanding of the impact of smartphone use on learner autonomy. Future studies could explore specific strategies or interventions that optimize the use of smartphones for promoting learner autonomy in different educational contexts. Longitudinal studies can also investigate the long-term effects of smartphone usage on students' motivation, self-regulation, and academic achievement.

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Appendices

Appendix A

Students' questionnaire

INVESTIGATING STUDENTS' AND TEACHERS' PERCEPTIONS ON THE USE OF SMARTPHONES TO DEVELOP LEARNERS' AUTONOMY

Dear students,

This questionnaire investigates your perceptions towards the use of smartphones to develop EFL learners' autonomy. You are invited kindly to complete this questionnaire. Please read the statements carefully, tick (√) in **the appropriate blanks** and give full answer(s) whenever it is necessary. There are no right or wrong answers, choose the ones which best describe your perceptions. We can assure you a total confidentiality.

Your collaboration will be a great help for us.

If you have any question, or do not understand any item, please ask the researcher giving you this questionnaire.

1. Gender: Male ☐ Female ☐

2. Do you like studying English?

Yes ☐ No ☐

3. Your choice of studying English at university was:

a) Your personal choice ☐ b) Your parent(s)' choice ☐ c) An orientation ☐

4. How do you feel about your English level?

a) Poor ☐ b) Average ☐ c) Good ☐ d) Excellent ☐

5. according to you independent learning is:

- A total reliance on yourself in the learning process ☐
- The act of seeking for answers without asking the teacher ☐
- The ability to decide about what to learn ☐

6. When you do not understand a word, or a meaning seems ambiguous, you:

a) Ask the teacher ☐ b) Ask your classmates ☐ c) Check it by yourself ☐

7. When the English class ends you:

Do further research ☐ are satisfied with the knowledge gained ☐ Both ☐

Justify your answer

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……...……

8. Do you use any strategies or techniques to improve your English level? If yes, what are they ? If no, why ?

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……...……

9. To what extent do you use your smartphone for educational purposes?

a) Always ☐ b) Frequently ☐ c) Occasionally ☐ d) Never ☐

10. Do you think that using your smartphone for education has improved your ability to learn independently?

Yes ☐ No ☐

Justify your answer

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……..…...

……..……

……..……

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11. Do you think that using your smartphone for education has helped you develop new skills or knowledge?

Yes ☐ No ☐

Justify your answer

……..…

……...……..…...

……

12. How often do you use your smartphone to collaborate with classmates on educational tasks?

a) Always ☐ b) Often ☐ c) Sometimes ☐ d) Rarely ☐

13. Have you ever had any negative experiences using your smartphone for educational purposes (e.g., distractions, technical difficulties, etc.)?

Yes ☐ No ☐

Justify your answer

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…….....……

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14. What types of educational activities do you use your smartphone for (e.g., reading articles, watching videos, taking notes, etc.)?

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15. How do you manage distractions when using your smartphone for educational purposes?

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Appendix B

Teachers' questions:

1. Tell me about your academic and professional background? How did you become a teacher? How long have you been teaching?
2. According to you, what does learning autonomy mean?
3. Do you think that your students are somehow autonomous in their learning? Why?
4. What do you think are the most important uses of smartphones in the education for the millennial generation today?
5. What do you think about using smartphones as a tool to support student learning and autonomy inside the classroom?
6. In your opinion what is the impact of smartphones on English language learning in Algeria?
7. What strategies have you used to incorporate smartphone use into your teaching and learning practices?
8. In your experience, how have students used smartphones to support their learning and independence? Have you seen any notable positive or negative effects?
9. How do you ensure that students use their smartphones appropriately and responsibly in the classroom?
10. What types of educational activities do you find most effective when using smartphones to support student learning and autonomy?
11. Have you noticed any changes in student engagement, motivation, or learning outcomes since you started incorporating smartphones into your teaching practice?
12. Do you have further comments, suggestions or recommendations?

RÉSUMÉ

Avec la prolifération rapide des smartphones et leur intégration généralisée dans divers aspects de la vie quotidienne, il devient de plus en plus pertinent d'examiner leur impact potentiel sur les pratiques éducatives. Cette thèse explore les perceptions des étudiants et des enseignants concernant l'utilisation des smartphones comme outil pour renforcer l'autonomie des apprenants. L'étude adopte une approche mixte en utilisant un questionnaire en ligne auprès de 57 étudiants en anglais et des entretiens semi-structurés avec 7 enseignants à l'Université de Bordj Bou Arreridj. Les données collectées ont été analysées à l'aide d'une analyse statistique et d'une analyse de contenu. Les résultats de la recherche ont montré que les étudiants ont une perception positive de l'utilisation des smartphones pour développer l'autonomie des apprenants. Ils croient en leur capacité à prendre en charge leur apprentissage et considèrent les smartphones comme des outils précieux. Les étudiants déclarent utiliser régulièrement les smartphones à des fins éducatives, ce qu'ils estiment favoriser l'apprentissage autodirigé et le développement des compétences. Bien que certains étudiants aient connu des expériences négatives, beaucoup utilisent des stratégies pour gérer les distractions. Les enseignants utilisent différentes approches, telles que des applications éducatives et la promotion de la recherche indépendante, pour intégrer les smartphones dans la salle de classe. Les smartphones servent également d'outils de communication et facilitent les échanges culturels. Ces résultats soulignent l'importance de promouvoir l'autorégulation et de fournir des orientations pour optimiser les avantages éducatifs des smartphones.

Mots-clés : autonomie de l'apprenant, smartphones, questionnaire en ligne, entretien semi-structuré.

الملخص

مع الانتشار السريع للهواتف الذكية واندماجها الواسع في مختلف جوانب الحياة اليومية، يصبح من الأهمية المتزايدة دراسة تأثيرها المحتمل على الممارسات التعليمية. تستكشف هذه الأطروحة إدراك الطلاب والمعلمين بشأن استخدام الهواتف الذكية كأداة لتعزيز استقلالية المتعلمين. تعتمد الدراسة على نهج مختلط باستخدام استبيان عبر الإنترنت لـ 57 طالبًا في تخصص اللغة الإنجليزية ومقابلات شبه هيكلية مع 7 معلمين في جامعة برج بوعريريج. تم تحليل البيانات المجمعة باستخدام التحليل الإحصائي وتحليل المحتوى. أظهرت نتائج البحث أن للطلاب ادراكًا إيجابيًا لاستخدام الهواتف الذكية لتطوير استقلالية المتعلمين. إنهم يؤمنون بضرورة تحملهم لمسؤولية تعلمهم ويرون الهواتف الذكية كأدوات قيمة. يقوم الطلاب بالاعتماد على الهواتف الذكية بشكل مستمر لأغراض تعليمية، مما يعزز التعلم التوجيهي الذاتي وتطوير المهارات. على الرغم من أن بعض الطلاب قد واجهوا حوادث سلبية، إلا أن الكثير منهم يستخدمون استراتيجيات لإدارة التشتت. يستخدم المعلمون نهجًا متنوعًا، مثل تطبيقات التعليم وتعزيز البحث المستقل، لدمج الهواتف الذكية في الفصل الدراسي. تعمل الهواتف الذكية أيضًا كأدوات اتصال وتسهل تبادل الثقافات. تسلط هذه النتائج الضوء على أهمية تعزيز التنظيم الذاتي وتوفير التوجيه لتحقيق الفوائد التعليمية الأمثل للهواتف الذكية.

الكلمات الرئيسية: استقلالية المتعلم، الهواتف الذكية، استبيان عبر الإنترنت، مقابلة شبه هيكلية

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تصريح بالالتزام بقواعد النزاهة العلمية لإنجاز البحث

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والمكلف (ة) بإنجاز مذكرة ماستر،

عنوانها:

Investigating Students' and Teachers' Perceptions on the Use of Smartphones to Develop Learners' Autonomy

أصرح بشرفي أني ألتزم بمراعاة المعايير العلمية والمنهجية ومعايير الأخلاقيات المهنية والنزاهة الأكاديمية المطلوبة في إنجاز البحث المذكور أعلاه.

التاريخ: 2023.07.13

توقيع المعني (ة)

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والمكلف (ة) بإنجاز مذكرة ماستر، عنوانها:

Investigating Students' and Teachers' Perceptions on the Use of Smartphones to Develop Learners' Autonomy.

أصرح بشرفي أني ألتزم بمراعاة المعايير العلمية والمنهجية ومعايير الأخلاقيات المهنية والنزاهة الأكاديمية المطلوبة في إنجاز البحث المذكور أعلاه.

التاريخ: 2023.07.13

توقيع المعني (ة)