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Attitudes towards a Blended Learning-Based Instruction: Case of EFL Master Students at the University of Ain-Temouchent

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Dedications

This work is dedicated to :

My parents for their unconditional love and constant support

My dearest sister for her love, care, and encouragement

My closest friends for their presence and support

All who own a place in my heart

Imane BOUTRIG

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Abstract

Blended learning has been commonly used in the Algerian universities since the outbreak of coronavirus. The evaluation and constant improvement of this educational mode depend on understanding how students and teachers evaluate and judge it. Thus, this study aims to investigate students' and teachers' attitudes towards blended learning, in addition to the factors that affect them. To this end, two research tools are used including a questionnaire targeted to EFL Master students, and an interview conducted with EFL teachers from the Department of Letters and English language at the University of Ain-Temouchent. The sample population consists of 51 EFL Master students and seven EFL teachers. The analysis of the data collected relies on a mixed methods approach. Accordingly, the results obtained indicated that most students and teachers have positive attitudes towards a blended learning-based instruction as they receive more advantages than disadvantages from this educational mode, and that these attitudes are affected by many factors like flexibility, training, motivation and engagement. Moreover, the present study has encountered some limitations, and presented a set of suggestions and recommendations that contribute to the adoption of blended learning in an effective way.

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List of Acronyms and Abbreviations

App : Application

CD-ROM : Compact Disc Read-Only Memory

E-books : Electronic Books

EFL : English as a Foreign Language

E-learning : Electronic Learning

ELT : English Language Teaching

High-tech : High Technology

ICT: Information Communication Technology

IT : Information Technology

Low-tech : Low Technology

UNESCO : United Nations Educational, Scientific and Cultural Organization

Wi-Fi : Wireless Fidelity

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General Introduction

The last decade has witnessed remarkable advancements in information and communication technologies (ICTs). These technologies have been implemented in all sectors, including education. The use of ICT to enhance the learning/teaching process has become more widely used recently, especially during and after the Covid-19 pandemic.

The spread of Coronavirus, in early 2020, led to the closure of all educational institutions around the world, and Algeria is no exception. Consequently, online learning was offered as a solution to these institutions to continue their academic activities. Moreover, online learning was later combined with face-to-face learning, and this combination is known as 'blended learning'.

Blended learning has become an essential process for teaching and learning in the Algerian universities, including the University of Ain Temouchent. For the evaluation and continuous improvement of blended learning, it is necessary to understand how students and teachers evaluate and judge this educational mode. Therefore, the current research work aims to investigate the students' and teachers' attitudes towards blended learning. Additionally, this study seeks to identify the factors that affect students' and teachers' attitudes towards this new mode. To this end, this study addresses the following research questions:

1- What are EFL students' and EFL teachers' attitudes towards the advantages and disadvantages of blended learning?

2- Which factors affect EFL students' and EFL teachers' attitudes towards blended learning?

In the light of the above- raised research questions, we hypothesise that:

a- Students display positive attitudes towards blended learning because of its flexibility. However, teachers have negative attitudes towards this new mode, for they believe it triggers low quality teaching and learning.

b- The major factors that affect students' and teachers' attitudes towards blended learning involve flexibility, training, motivation and comfort.

To address the research questions and verify the proposed hypotheses, we adopted a case study to effectively investigate the attitudes of students and teachers towards a blended learning-based instruction. Therefore, two research tools were used : a questionnaire targeting EFL Master students, and an interview delivered to EFL teachers at the University of Ain Temouchent. In this regard, the questionnaire was randomly distributed to 164 EFL Master students, with 51 participants providing responses. In addition, seven EFL teachers out of 24 were randomly chosen to participate in interviews. The analysis of the data collected from the research tools relied on a mixed methods approach.

This research work is built upon three chapters. The first chapter focuses on attitudes and blended learning. This chapter covers the notion of attitude by shedding light on its definition and components. It also describes information and communication technologies (ICTs) and education. The chapter tackles the historical background of blended learning, and introduces this latter with regard to education. In this chapter, blended learning is also explored by focusing on its constituents, models, as well as its advantages and disadvantages. The chapter finally explains blended learning in the Algerian context, and attitudes towards this educational mode.

The second chapter is devoted to research methodology and data collection procedures. The chapter introduces the aims of the study and motivations behind choosing this research topic. It also discusses the research design, participants' profile, type of sampling, site, research tools, data collection procedures, and the mixed method approach.

The third chapter is allocated to data collection and analysis. The chapter begins with the presentation and analysis of the data gathered from students' questionnaire and the teachers' interview, moving to the general interpretation of the main results. The chapter also introduces some suggestions and recommendations that may contribute to the improvement of blended learning, along with highlighting the limitations that we encountered while conducting the current research sudy.

CHAPTER I

Attitudes and Blended Learning

1.1 Introduction

The widespread use of technology in education has led to the emergence of new teaching approaches, including blended learning. The maintenance and continuity of this approach greatly depend on the attitudes of both students and teachers towards it. Therefore, this chapter highlights the concepts of attitude and blended learning. First, the present chapter, defines the notion of attitude and its components; then, it introduces information and communication technologies (ICTs) along with education. Moreover, the chapter explores the historical background of blended learning, and defines this latter in relation to education. Furthermore, blended learning is explained through shedding light on its constituents, models, as well as its advantages and disadvantages. Finally, the chapter discusses blended learning in the Algerian context, and attitudes towards this educational approach.

1.2 Definition of Attitude

The term 'attitude' has been defined differently by various scholars. For example, Bizer, Barden and Petty (2006) state that attitudes are essential notion in psychology as they provide insight into individuals' decision-making and behaviors. Eagly and Chaiken (1993) define attitude as "a psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor" (cited in Albarracín et al., 2005, p.4). In other words, attitude refers to a psychological inclination towards a specific object, concept, person, or situation. This inclination is exhibited by judging that particular entity with a certain level of preference or aversion.

Bilgin (2007), on his part, argues that 'attitude' is commonly demonstrated as positive or negative feelings and ideas relevant to a particular social entity including people, objects, truths, or incidents (cited in Meral, 2019). In this regard, Bizer et al. (2006) mention that "…the more favorably we evaluate something, the more positive our attitude towards the object is; the more negatively we evaluate something, the more negative our attitude is" (p.247). Moreover, Walley et al. (2009) state that attitudes can be positive, negative, or neutral (Cited in Jain, 2014).

Attitudes are either shaped through direct experience or indirect experience. An example of an attitude stemming from direct experience is a person who holds a positive attitude towards *Greek olives* because she or he has tasted them. Whereas an individual who holds a negative attitude towards *Greek olives*, for their siblings who claimed the olives were unpleasant tasting, exemplifies an attitude shaped by indirect experience. In this sense, someone who develops an attitude based on indirect experience does not have direct contact with the entity, but instead

learns about it from sources like reading or hearing from others (Frymier & Nadler, 2017). Therefore, attitudes formed by direct experience indicate direct interaction with the attitude entity.

The nature of attitudes is further explored by various scholars in the literature. Cherry (2018) highlights the fact that even though attitudes tend to be long-lasting, they are also susceptible to change. This illustrates that attitudes are not static but raher dynamic. Therefore, the attitudes of people towards particular entities are likely to evolve and change over time.

1.3 Components of Attitude

The notion of attitude has produced a set of conceptual models (Maio & Haddock, 2009). According to Eagly and Chaiken (1993) and Zanna and Rempel (1988), the most influential model of attitude is the multicomponent model (cited in Maio & Haddock, 2009). Based on this model, attitudes are composed of three components: cognitive component, affective component, and behavioral component. These components are discussed as follows :

-Cognitive Component

Maio and Haddock (2009) state that the cognitive component of attitudes indicates the beliefs, thoughts, and attributes we link to an entity. Jain (2014) defines the cognitive component as "an evaluation of the entity that constitutes an individual's opinion (belief/disbelief) about the object" (p.6). In this vein, Fishbein and Ajzen (1975) state that belief is the knowledge an individual possesses regarding an object ; it is the knowledge that particularly connects an object and attribute. The cognitive component serves as the storage area where an individual arranges this knowledge (cited in Jain, 2014).

-Affective Component

Jain (2014) defines the affective component as "the emotional response (liking/disliking) towards an attitude object" (p.6). The affective component of attitudes involves the emotions and feelings associated with an attitude entity. Moreover, affective reactions affect attitudes in various ways. One significant way in which emotions influence attitudes is through the emotions elicited in reaction to an attitude entity (Maio & Haddock, 2009).

-Behavioral Component

Maio and Haddock (2009) state that "the behavioral component of attitudes refers to past behaviors or experiences regarding an attitude object" (p.25). Therefore, a person may have a

negative attitude towards someone or something when she or he remembers having a bad experience with that particular entity, and vice versa.

1.4 Information and Communication Technologies ICTs and Education

Information and communication technology (ICT) is a prevalent concept related to the technologies used to gather, store, edit, and transmit information (Singh, 2021). Talebian, Mohammadi & Rezvanfar (2014) state that information and communication technologies are composed of "hardware, software, network and media for collecting, storing, processing, transmitting and presenting information (voice, data, text and image) as well as related services" (p.301).

Ratheeswari (2018) mentions that ICT encompasses technologies that allow for the transmission of information through telecommunication. While it resembles information technology (IT), ICT particularly emphisizes communication technologies including wireless networks, the internet, cellular phones, and other means of communication. In this vein, Sarkar (2012) illustrates that ICTs consist of information and communication infrastructure (ICI) and information technology (IT). The former includes the actual telecommunications systems and networks such as cellular, voice, mail, radio, and television, while the latter consists of the hardware and software used for gathering, storing, processing, and presenting information (cited in Talebian et al, 2014).

In the field of education, Chen, Castillo, and Ligon (2015) state that UNESCO, along with numerous international organizations and governments, have stressed the significance of ICT and strived to integrate it into educational systems. In this regard, Kreijnsa et al. (2014) define ICT as a collection of instruments that facilitate, support, and strengthen educational progress (cited in Chen et al, 2015). Moreover, various scholars (e.g: Collins (1991), David (1991), Sheingold, Hadley and Center for Technology in Education (1990)) highlight that information and communication technology has the potential to improve learning and teaching experiences when teachers and students have access to it (cited in Chen et al, 2015). Therefore, Chen et al. (2015) stress the fact that having ICT skills is essential for both teachers and students at any educational level, regardless of the subjects being taught or degrees earned.

Different modes of teaching and learning have emerged as a result of the integration of ICTs in education. Tayebinik and Puteh (2013) argue that information and communication technology has become widespread in the education sector. The concept of "e-learning" has appeared due to the incorporation of ICT in the field of education. As this technology is

implemented in teaching, challenges have been recognized, leading to the emergence of "Blended learning". Burgess et al. (2016) and Shin et al. (2018) state that due to technological development and pedagogical change relevant to presenting information and encouraging cooperative learning among students, the use of blended learning has become more popular, especially in higher education (cited in Islam, Sarker & Islam, 2021).

1.5 Historical Background of Blended Learning

The exact origin of the concept of "blended learning" is unclear (Friesen, 2012). Malik and Riasat (2022) state that even though blended learning has been around for a while, and the concept of combining traditional and online/distance learning had been tackled as early as 1960, the concept itself did not obtain popularity in academic fields until later. The Free Library (2013) highlights that the concept was first identified in 1999 when an Atlanta-based computer skill certification and software training business introduced "blended learning" to its customers (cited in Malik & Riasat, 2022). Since that time, the concept has been extensively used by policy makers, educators, investigators, and scholars (Malik & Riasat, 2022).

The earliest definitions of blended learning are different from what this term means nowadays. Smith (2001) defines blended learning as "a method of educating at a distance that uses technology (high-tech, such as television and the internet or low-tech, such as voice mail or confer)" (cited in Malik & Riasat, 2022, p.19). In this vein, Malik and Riasat (2022) argue that this definition does not clearly address the integration of traditional and distance/online approaches. It also indicates that blended learning was initially viewed as an approach primarily intended for supporting distance learning.

Discroll (2002) provides a very broad and multi-faceted definition of blended learning. He outlines four distinct ways in which blended learning can occur: by integrating various forms of web-based learning, integrating different teaching approaches with or without technology, inserting any form of instructional technology with face-to-face learning, and integrating learning and work through the incorporation of instructional technology with real job responsibilities (cited in Malik & Riasat, 2022). Therefore, blended learning does not refer only to the incorporation of traditional and online learning, but it also encompasses various technology-based learning strategies, teaching approaches, and the combination of learning and real work (Malik & Riasat, 2022).

Singh (2003) defines blended learning as "a combination of multiple delivery media designed to complement each other and promote meaningful learning. The transition of

technology from a luxury to a need has turned the table for individuals" (cited in Malik & Riasat, 2022, p.19). In this regard, Malik and Riasat (2022) claim that even though Singh (2003) mentioned technology, the primary understanding of blended learning was seen as the "combination of multiple delivery media". This suggests that, in his view, blended learning could involve an incorporation of traditional media or distance education media independently. Integrating online and traditional modes does not appear to be mandatory even within this context.

During the mid-2000s, there was a noticeable change in the use of the concept of blended learning: Its significance within higher education settings, instead of industry and training, became evident, along with a widely common definition of its sense (Friesen, 2012). Malik and Riasat (2022) state that in 2004, the term blended learning began to be specifically used to describe the integration of distance/online learning with traditional learning. Moreover, Friesen (2012) mentions that the first *Handbook of Blended Learning* was published by Bonk, Graham, Cross and Moore in 2006, and in 2007, the book *Blended Learning in Higher Education: Framework, Principles, and Guidelines* by Randy Garrison and Norman Vaughan was released.

1.6 Blended Learning and Education

Garrison and Kanuka (2004) define blended learning as the combination of "face-to-face instruction with computer-mediated instruction" (cited in Malik & Riasat, 2022, p.20). Oliver and Trigwell (2005) express a similar view, stating that blended learning involves combining e-learning with traditional learning, integrating online learning with face-to-face learning (cited in Malik & Riasat, 2022).

Moreover, Graham (2006) defines blended learning as the incorporation of face-to-face learning and distributed learning, i.e. learning by using technology (cited in Malik & Riasat, 2022). Graham et al. (2019) view blended learning as a "strategic combination of online and in-person instruction" (cited in Avazmatova, 2020, p.507). Vyas and Jain (2022) argue that blended learning goes beyond simply combining online and face-to-face approaches; it exemplifies a thoughtfully designed integration of meaningful tasks in both settings. In this regard, Garrison and Vaughan (2008) identify three fundamental assumptions for designing blended learning. These assumptions are as follows : Carefully combining in-person and online learning. Essentially reconsidering the design to maximize student involvement. And finally, reorganizing and substituting conventional classroom hours (cited in Mondal, Majumder & Mandal, 2019).

Margie (2003) states that the concepts of "blended learning", "hybrid learning", "technology-mediated instruction", "web-enhanced instruction", and "mixed-mode instruction" are frequently used as synonymous in academic studies (cited in Zhang, 2021). In Gruba and Hinkelman's work (2012), Smith and Kurthen (2007) try to distinguish some of these concepts by using percentages. They define them as follows : web-enhanced learning involves courses that use a small quantity of online resources, such as sharing a syllabus and course updates. Blended learning includes courses that integrate important online tasks into face-to-face instruction, but not exceeding 45 percent. Hybrid learning comprises courses where online tasks substitute for 45-80 percent of face-to-face class sessions (cited in Tomlinson and Whittaker, 2013).

Finally, fully online refers to courses where 80 percent or more of the learning materials are delivered online (cited in Tomlinson and Whittaker, 2013). However, even with these apparent distinctions, Tomlinson and Whittaker (2013) believe that many of the concepts are interchangeable, and in the field of English Language Teaching (ELT), 'blended learning' is the most prevalent concept used to describe any mix of traditional classroom instruction with computer technology, encompassing both online and offline tasks and/or resources.

Atef and Medhat (2015) state that blended learning is often seen as a method of getting students ready for the modren workplace of the 21st century, which heavily relies on information and services. Compared to students in online courses, those in blended learning environments tend to be more engaged and interactive, as they interact more frequently with their peers, teachers, and external resources (Atef & Medhat, 2015). In addition, blended learning is expected to be much more prevalent than traditional face-to-face learning or online learning alone (Atef & Medhat, 2015). Lalima and Dangwal (2017) view blended learning as a modern notion that integrates the benefits of traditional classroom instruction with ICT assisted education, encompassing both offline and online learning.

Lalima and Dangwal (2017) argue that applying blended learning can be challenging. It necessitates essential preparations across all aspects of the teaching and learning process, including the teacher, student, content development, and infrastructure. They set the following prerequisites for an effective integration of blended learning :

Well trained teachers : Teachers need to have a solid understanding of blended learning and be thoroughly trained and proficient to combine traditional and technological modes. They should be trained to create digital content for online access. Additionally, they should possess

knowledge about internet browsing and terminology, and all the beneficial websites for online learning. Teachers should also know how to use tools like blogs, YouTube, Skype, Google Talk, and other software for video conferencing, as well as social networking platforms for educational use.

Teachers with scientific attitude : It is crucial for teachers to possess a scientific attitude. They should possess strong observational abilities, optimism, and problem-solving skills. This scientific attitude will enable teachers to handle setbacks positively that may arise while implementing this innovative notion and will aid in objectively analyzing situations. Such a proper scientific disposition will naturally transfer from teachers to students.

Teachers with wider outlook and positive approach towards change : blended learning requires teachers who have a broad perspective, are adaptable, willing to embrace change, and are highly creative and dynamic.

Complete facilities like well-furnished computer lab, internet connection, provision for video chatting : Blended learning heavily relies on infrastracture. Schools should possess good classrooms, fully equipped computer labs with an adequate number of computers for each student in a class, along with internet access, and ideally, a Wi-Fi enabled campus.

Students have access to internet at their private computers : Apart from schools having a completely ICT-supported campus, students should also have essential hardware resources to facilitate learning both online and offline at their homes.

Fully aware and agreed Parents : Parents need to be thoroughly informed about this modren teaching mode to prepare them to support their children in blended learning.

Flexibility in the system : Flexibility is the key for successful implementation of blended learning, encompassing flexible schedules and examination systems.

Formative evaluation and continuous internal assessment : School administrators and higher educational leaders should be prepared to fully incorporate continuous internal assessment and other formative evaluation methods, since summative evaluation is not compatible with blended learning. In addition, online exams should be offered to enhance the flexibility of the mode.

Blended learning has become more popular in higher education, resulting in a shift from traditional one-way teaching to an interactive student-centered approach that incorporates technology (Islam et al., 2021). In this vein, Anggawirya, Prihandoko, and Rahman (2021) claim that blended learning approach entails students being self-reliant learners, also known as

autonomous learners. Blended learning also places the student in the role of an active seeker of knowledge (Sharma, 2019).

However, in the context of blended learning, teachers play a crucial role in managing the traditional and online aspects of student education (Islam et al., 2021). Sharma (2019) states that in blended learning, the teacher's role evolves from being a provider of knowledge to that of a coach and mentor. This transition does not imply that teachers have a passive or diminished role in students' education (Sharma, 2019). On the contrary, blended learning allows teachers to possess the potential for an even greater impact and influence on student learning (Sharma, 2019).

Sajid et al. (2016), Shu and Gu (2018), and Vo et al. (2017) mention that various research works have shown that blended learning has a notable effect on students' learning and academic achievements across various subjects in comparison to traditional face-to-face learning (cited in Islam et al., 2021).

In this sense, Jennifer (2018) states that the success of blended learning depends on students' participation in online lectures, completion of self-guided lectures, and recognition of the importance of completing the self-guided tasks (cited in Anggawirya et al., 2021). Eduviews (2009) highlights that blended learning, the pedagogical approach that integrates instructional strategies from traditional in-person and online learning, is an established and quickly rising model that has demonstrated significant effectiveness in assisting educational institutions in overcoming obstacles relevant to student performance, resource constraints, and the demands of modern students (cited in Mondal et al., 2019).

1.7 Constituents of Blended Learning

Carman (2005) introduces five constituents of blended learning (cited in Mondal et al., 2019). These components are as follows :

-Live events

Live events involve synchronous and instructor led learning settings where all students participate simultaneously. For numerous students, there is no substitute for accessing the knowledge of a live teacher.

-Self-paced learning

Individual learning activities that students accomplish at their own speed and convenience including recorded live events, online or CD-ROM learning. It indicates learning when needed, with the speed being determined or regulated by the student.

-Collaboration

It indicates increased interaction among students, which promotes information exchange. Collaborative learning offers additional benefits that traditional teaching lacks, as a group can achieve effective learning and problem-solving skills than any student can on their own. It can be expanded beyond in-person class discussions to synchronous interactions in chat rooms or open discussion forums, as well as asynchronous interaction through email and threaded conversation.

-Assessment

It serves as a real-time and internet-based assessment of a learner's understanding, aiming to gauge previous knowledge and assess the application of learning.

-Performance Support

These are the resources that promote learning, memory, and application. They can include printed materials, multimedia learning tools that are downloaded, documentation, and more.

1.8 Blended Learning Models

Most blended-learning programs typically take the form of one of the following models: Rotation model, flex model, a la carte model, and enriched virtual model. The rotation model consists of four sub-models including station rotation model, lab rotation model, flipped classroom model, and individual rotation model (Jayanthi, 2019). These models are discussed in detail below:

-Rotation Model

A subject or course where students switch between different learning methods, including online learning, either on a fixed schedule or as decided by the teacher. Along with online learning, students may engage in activities like group projects, small-group or whole-class lessons, one-on-one teaching, and traditional tasks. The primary learning environment is the

actual campus, except for completing homework activities (Jayanthi, 2019). The sub-models of the rotation model are explaind as follows:

- Station rotation is a subject or course where students engage in the rotation model within a specific classroom or set of classrooms. The station rotation model is distinct from the individual rotation model as it requires students to cycle through all stations, rather than just those designated on their personalized timetables (Jayanthi, 2019).

- Lab rotation refers to a subject or course where students take turns going to a computer lab for the online-learning portion (Jayanthi, 2019).

- Flipped Classroom involves a subject or course where students engage in online learning outside the classroom instead of traditional homework, and subsequently attend traditional sessions at the actual school for teacher-led activities or projects. The main source of content and teaching is online, setting apart a flipped classroom from students who only accomplish online homework tasks in the evenings (Jayanthi, 2019).

- Individual rotation refers to a subject or course where every student follows a personalized playlist and may not rotate through every accessible station or learning method. Students' own timetables are assigned by an algorithm or teacher (Jayanthi, 2019).

-Flex model

Flex model refers to a subject or course where online learning shapes the core of student education, even though it may involve offline tasks occasionally. Students progress through a personalized and flexible timetable across various learning methods. The primary teacher is physically present, and students predominantly study at the actual campus, except for assigned homework (Jayanthi, 2019).

The primary teacher or other adults offer face-to-face assistance on adaptive and flexible schedule through tasks like group projects, small-group lessons, and one-on-one tutoring. Some versions offer extensive face-to-face assistance, while others provide limited assistance. For instance, certain flex models feature daily face-to-face support from certified teachers to complement online learning, while others offer limited face-to-face interaction. Alternatively, others may follow distinct staffing implementations (Jayanthi, 2019).

-A La Carte model

A la carte model involves a course that a student completes fully online along with other activities the student is engaged in at a physical school or educational centre. The online teacher is the primary teacher for the a la carte course. Students have the flexibility to take the a la carte course either at the actual campus or outside the campus. This model contrasts with full-time online learning as it does not constitute a complete school experience. Instead, students selectively combine a la carte online courses with traditional face-to-face classes at an actual campus (Jayanthi, 2019).

-Enriched Virtual model

Enriched virtual mode indicates a subject or course where students engage in mandatory face-to-face learning sessions with their primary teacher, followed by the flexibility to accomplish the rest of the coursework remotely. Online learning forms the foundation of student education when they are not physically present. Typically, the same individual acts as both the online and face-to-face instructor. Numerous enriched virtual programmes started as fully online schools and later incorporated blended programs to offer students traditional school practices. This model contrasts with the flipped classroom model as students in enriched virtual programs rarely have daily face-to-face interactions with their teachers. This model also differs from fully online courses as face-to-face learning sessions are obligatory rather than optional office hours or social gatherings (Jayanthi, 2019).

1.9 Advantages and Disadvantages of Blended Learning

Implementing blended learning can offer many advantages for both teachers and students. However, like anything else, blended learning may also come with its own set of disadvantages. These advantages and disadvantages are explored in the following subsections :

1.9.1 Advantages of Blended Learning

Gedik, Kiran, and Ozden, (2012) state that numerous advantages of blended learning have been mentioned in the literature, with flexibility emerging as the predominant and widely acknowledged benefit (cited in Shand & Farrelly, 2018). Balolong (2022) and Alvarez (2020) mention that blended learning enables students to learn according to their individual speed and schedule, catering to various learning styles and timetables (cited in Mustafa, 2023).

Moreover, Kwon et al. (2021), Srithar (2015), and Georgiadou and Siakas (2006) argue that this mode of learning permits students to study at their own speed, which can be especially

advantageous for individuals who require additional time to understand particular notions or for those who can advance at a faster rate (cited in Mustafa, 2023). Poon (2013) claims that blended learning caters to various learning styles (cited in Mustafa, 2023).

In this sense, Mustafa (2023) explains that certain students may favor the direct teaching and social engagement found in conventional classrooms, whereas others may excel in an online setting, allowing them to contemplate the content and engage in conversations at their own speed. Heilporn et al. (2021) states that blended learning provides flexibility regarding both the timing and place (cited in Mustafa, 2023). In this regard, Mustafa (2023) mentions that students have the convenience of accessing online resources at any time and from any location, which can be particularly beneficial for individuals who manage other responsibilities like work or family obligations.

Blended learning also offers flexibility for teachers. Kalapriva (2021) claims that education encompasses more than just academic studies; it also involves acquiring skills in time management and discipline. Using blended learning approach benefits both students and teachers by allowing them to progress at their own speed and on their own timetable (Kalapriva, 2021).

Additionally, Attard and Holmes (2020) and Kashefi et al. (2012) believe that blended learning enhances teachers' capacity to integrate information and digital technology into their teaching practices (cited in Tong, Uyen & Ngan, 2022). This means that the combination of traditional face-to-face instruction with online learning components help teachers become more adept at integrating digital tools and resources into their teaching methods. Blended learning provides opportunities for teachers to leverage technology effectively, engage students in interactive and multimedia-rich learning experiences, and adapt their teaching approaches to better meet the needs of 21st-century learners.

Balolong (2022) and Alvarez (2020) highlight that the online aspect of blended learning provides students with a variety of resources which improve their educational experience (cited in Mustafa, 2023). This is a significant benefit because it enables students to access a plethora of information that goes beyond what is typically available in face-to-face sessions (Mustafa, 2023)

Within blended learning setting, students have the opportunity to use a broad selection of digital materials like online databases, e-books, multimedia content, and educational websites. These materials offer varied and valuable information that can accommodate various

learning styles. For example, visual learners may find video content beneficial, while auditory learners may prefer audio lessons or podcasts (Mustafa, 2023). In addition, Şendağ and Odabaşı (2009) argue that using online resources can promote the development of autonomous learning and critical thinking abilities (cited in Mustafa, 2023). Students are motivated to investigate, assess, and use resources to assist their learning, thereby improving their research skills and capacity for self-directed learning (Mustafa, 2023).

Balolong (2022) and Alvarez (2020) claim that integrating traditional learning with online learning can result in heightened student engagement (cited in Mustafa, 2023). Mukhtaramkhon (2022) states that "… students enjoy a combination of face-to-face and online learning, resulting in greater engagement" (p.15). Blended learning increases students' engagement as it accommodates various learning preferences through a range of learning methods (Kilag et al., 2023, as cited in Mustafa, 2023).

Another reason is that blended learning encompasses both traditional and online environments, and this caters to diverse student preferences, as certain students may favor the immediate engagement of traditional classrooms, whereas others may flourish in the independent nature of online learning. Finally, online learning websites usually offers interactive elements like discussion forums, quizzes, and multimedia resources. These tools enhance student engagement and enjoyment in the learning process (Mustafa, 2023).

Another advantage that blended learning offers is personalized learning. Mustafa (2023) states that blended learning provides personalized learning as students can advance at their own speed, dedicate additional time to complex subjects, and swiftly navigate through easier material. This personalization can result in a more immersive and successful learning journey. Another key benefit of incorporating online learning elements is the instant feedback offered, aiding students in gauging their advancement and identifying areas for enhancement (Song et al., 2004, as cited in Mustafa, 2023).

This immediate feedback can inspire students to remain involved and seek for amelioration. As well, blended learning settings commonly offer chances for cooperative learning, like group assignments or conversations. These tasks can cultivate a feeling of belonging and enhance engagement (Mustafa, 2023).

1.9.2 Disadvantages of Blended Learning

The great dependence on technology in blended learning poses a major disadvantage in the form of technical issues. Students and teachers may face troubles with their devices including tablets, laptops, or smartphones, as well as the software they use for learning. These issues related to hardware and software may interrupt the learning process and lead to feelings of disappointment. Moreover, technical challenges can result in a loss of precious session time, as students and teachers might have to solve these issues or seek help to address them. The failure to reach essential educational materials or finish tasks because of these issues can hinder academic advancement and generate extra pressure for both students and teachers (Mustafa, 2023).

Blended learning necessitates a reliable and high-speed internet connection. Nonetheless, some students lack access to dependable internet, particularly in remote or deprived regions. In the absence of a reliable and high-speed internet connection, students can encounter challenges when trying to access online materials, engaging in virtual classes, or delivering tasks promptly. Temporary disruptions in internet service can also impede the learning process, emphasizing the significance of having a stable internet connection (Mustafa, 2023). In this vein, Liu (2021) views that this gap in digital access worsens educational disparities and handicaps the success of blended learning mode (cited in Mustafa, 2023).

A particular level of technical proficiency is required for both students and teachers to actively engage in blended learning (Tang & Chaw, 2016, as cited in Mustafa, 2023). These abilities encompass the capacity to use educational platforms, resolving typical technical problems, and efficiently using digital resources for learning purposes. The absence of these abilities may result in challenges when trying to access and interact with the educational content (Mustafa, 2023).

Additionally, there is also a rise in cybersecurity dangers as online learning is highly used (Saeed, 2023, as cited in Mustafa, 2023). Therefore, in a blended learning setting in which students participate in both online and face-to-face tasks, it is essential to give importance to cybersecurity measures to safeguard confidential data (Mustafa, 2023).

Afzal et al. (2023) argue that not every student possesses the same level of access to essential technology for online education, resulting in inequalities (cited in Mustafa, 2023). Nkoala & Matsilele (2023) mention that the problem of unequal access to the essential technology for online education, commonly known as the "digital divide", posing a major

obstacle in the incorporation of blended learning (cited in Mustafa, 2023). To illustrate, some students lack access to the essential devices like tablets, smartphones, or computers required for online education. This situation can lead to inequalities among students, placing those without access at a disadvantage. The digital divide encompasses not only access to hardware, but also internet connection and digital literacy proficiency (Mustafa, 2023).

Sustaining motivation in an online learning context may be challenging, particularly over extended durations. Certain students may find it challenging to remain involved in their studies due to the lack of constant in-person interaction with teachers and classmates that can enhance motivation. This absence of interaction can result in a sensation of loneliness and a reduced sense of responsibility. Also, without immediate feedback and guidance from teachers, students may find it difficult to maintain their progress and feel supported throughout their learning process. Another disadvantage is that studying at home or in unconventional contexts can introduce multiple distractions. Thus, students must possess a strong sense of self-discipline to manage household tasks, online distractions like social media, and their academic work (Mustafa, 2023).

Mustafa (2023) identifies misunderstandings and misconceptions as additional disadvantages of blended learning since students may encounter challenges in comprehending the content, forming misconceptions, and losing focus in their studies. The online educational contents can sometimes be complicated and hard to grasp, particularly for subjects that are conceptually demanding. Therefore, students might miscomprehend the content and form misconceptions due to the lack of instant access to a teacher for guidance. As well, feedback may be delayed in online settings, leading to the sustainability of misconceptions.

Furthermore, the online aspect of blended learning can introduce various distractions, ranging from other platforms and applications to household tasks and background noise. These distractions can result in a lack of concentration, which in turn can take part in forming misconceptions and misunderstandings. Misunderstandings can also emerge due to the absence of the subtleties of in-person interactions, which are often lacking in virtual communication (Mustafa, 2023).

1.10 Blended Learning in the Algerian Context

Blended learning is comparatively a new term in the field of education in Algeria, particularly when compared to other developing countries. Although the government has spent efforts to facilitate the transition to blended learning, Algerian higher education encounters

similar obstacles to those experienced in other nations. In this regard, it was noted before Covid-19 that both teachers and students were opposed to a blended learning approach due two major reasons (Laifa, Giglou & Akhrouf, 2023). First of all, Guessabi (2021) mentions that both teachers and students developed a fear towards technology as they were conscious of the challenges related to accessibility and the absence of technical support they would encounter (cited in Laifa et al., 2023). Rahmani and Zitouni (2022) state that students favored face-to-face interaction and involvement to facilitate discussions on the subject matter and prevent feelings of isolation (cited in Laifa et al., 2023).

When COVID-19 reached Algeria in March 2020, universities suspended every activity and stayed shuttered for six months for two major reasons. The first reason is that online learning alone is not feasible due to inadequate implementation of information and communication technologies. The second reason is that both faculty and students were not ready for a sudden transition to online learning practices. Therefore, Algerian establishments have chosen blended learning as a more moderate approach to preserve the academic year. According to the minister of higher education and scientific research in Algeria, blended learning is under consideration as a potential long-term strategy for Algerian higher education (Laifa et al., 2023).

The implementation of online learning is constantly increasing in the Algerian setting in the post-Covid-19 pandemic era (Rahmani & Zitouni, 2022). In this regard, Hamzaoui (2024) states that "… e-learning may be effective when it comes to academic achievement and success, and it can be complimentary to traditional learning" (p.41). Accordingly, educators and administrators are inclined to modify and adapt their teaching approaches to align with this form of learning in order to guarantee a high standard of education. Two essential teaching approaches are blended learning and flipped classrooms, which rely on the combination of online and in-person learning processes (Rahmani & Zitouni, 2022).

Moreover, Rahmani and Zitouni (2022) conclude that blended learning and flipped classroom significantly support learners in their educational journey. The flipped classroom is a valuable resource that significantly supports learners in engaging with online learning, and encourages them to take ownership of their learning. Thus, students become more autonomous and achieve improved academic results. In addition, blended learning helps learners overcome particular psychological barriers that impede their effective learning and enhance their educational journey.

Bara (2022) conducted a research study whose main objective is to investigate the implementation of blended learning in the Algerian universities, focusing on the advantages and drawbacks experienced by English as a Foreign Language (EFL) teachers and students. Results of this study indicate that the majority of teachers and students face challenges when using online platforms due to the lack of skills, training, equipment, etc. The primary challenges encountered by EFL teachers and learners in online learning revolve around technical problems and internet connectivity issues.

Furthermore, research has shown that online and blended learning necessitate careful attention to educational objectives and goals, along with systematic planning, design, and incorporation. The research findings also reveal that most students preferred blended learning as the most suitable educational model for future teaching practices in the Algerian institutions. Therefore, blended learning has the potential to offer optimal learning experiences to all individuals in a more flexible and comfortable manner (Bara, 2022).

1.11 Attitudes towards Blended Learning

The attitude of both students and teachers is essential for the successful continuation of the blended learning approach (Das, 2021). Weinburgh (1998) states that attitudes towards learning affects how students behave in their learning process (cited in Yuliani et al, 2023). In this regard, Yuliani et al (2023) highlight that attitudes play a significant role in determining whether students succeed or fail in their academic achievements. Moreover, students express their emotions and thoughts about the learning setting and process through behaviors that align with or deviate from the environment's expectations. They typically describe themselves using either positive or negative attitudes (Ağır, 2019).

Das (2021) argues that integrative motivation is considered an efficient attitude of teachers that can support students during the blended learning experience. In this vein, Ma'arop and Embi (2016) mention that teachers have the ability to create virtual classes that support teaching a large group of students simultaneously, as opposed to traditional teaching methods that are limited to a specific number of students per class (cited in Das, 2021). Teachers can maintain communication with students regardless of the time or location, offering them guidance and assistance based on their individual needs and challenges (Das, 2021).

In addition to instructing students via online platforms, teachers can also easily collaborate with other teachers to address any issues or questions without difficulty. This positive setting also inspires students to carry on further education in their chosen field and

eventually succeed in their learning (Das, 2021). Therefore, it is crucial to know the attitudes of students and teachers towards blended learning.

1.12 Conclusion

To conclude, this chapter has dealt with the concepts of attitude and blended learning. The definition of attitude and its components have also been discussed. The chapter has also introduced information and communication technologies and education. In addition, blended learning has been tackled through exploring its historical background, and introduced within the field of education. Moreover, the chapter has further highlighted the constituents of blended learning, its models, and its advantages and disadvantages. Finally, blended learning within the Algerian context and attitudes towards this teaching/learning mode have been, further, addressed. The next chapter will deal with the methodology followed in this study.

CHAPTER II

Research Methodology and Data Collection

Procedures

2.1 Introduction

The second chapter is devoted to the methodology and data collection procedures of the research study. The chapter encompasses the whole procedures dedicated to the empirical aspect of the current research work that seeks to investigate students' and teachers' attitudes towards a blended learning-based instruction. Therefore, this chapter presents, first, the aims and motivations behind conducting this research study. Second, the chapter discusses the research design, participants' profile, type of sampling, site of research. Moreover, this chapter describes the questionnaire and the interview targeted to students and university teachers. Finally, the chapter tackles the mixed methods approach including the quantitative and the qualitative approaches.

2.2 Aims of the Study

The current research work aims to investigate the students' and teachers' attitudes towards blended learning. Moreover, this research study seeks to determine the factors that influence the students' and teachers' attitudes towards this teaching and learning mode.

2.3 Motivations of Choice

The choice of this research topic is based on the fact that blended learning has been implemented at the University of Ain Temouchent for, approximately, five years since the start of the Covid-19 pandemic. However, the attitudes of both EFL students and EFL teachers towards this new mode of learning remain unknown ; that is why, we found it important to tackle the issue from this angle.

2.4 Research Design

Research design is the process that guides researchers in conducting a successful research study. Creswell & Creswell (2018) define research design as "a set of formal procedures for collecting, analysing, and interpreting data such as those found in a quantitative experiment or qualitative case study" (p. 309). In other words, research design serves as the blueprint for gathering, analyzing, and interpreting data, which ensures the effectiveness of tackling the research problem. Khanday and Khanam (2019) state that a research design is a systematic schema followed by researchers to address questions in a valid manner. The quality of research design relies on researchers' ability to obtain the responses to their research questions. Akhtar (2016) mentions that research design is described as the framework of research work, serving as the 'glue' that joins all components together. In essence, it outlines the blueprint for the

intended research study. Bhattacharyya (2006) and Thomas et al. (2011) define research design as a rigorous and methodical approach to adderssing issues and obtaining novel information (cited in Asenahabi, 2019).

Hakim (2000) argues that research design primarily focuses on the objectives, applications, goals, intentions, and strategies within the empirical limitations of place, time, budget, and the availability of the researcher (cited in Asenahabi, 2019). In this sense, Asenahabi (2019) claims that research design is a manifestation of a researcher's thoughts, which contributes to avoiding disappointment by uniting the research through a structured scheme that depicts how all main components of the research study operate harmoniously to tackle the research questions.

In this research work, we have adopted a case study to effectively investigate the attitudes of students and teachers towards a blended learning-based instruction. The case study involves EFL Master students studying at Belhadj Bouchaib University of Ain-Temouchent. A case study is a research approach that is used to obtain a detailed insight into a current problem or phenomenon within a specific system. Case study research involves a thorough examination of an individual, group, or incident to comprehend real-world phenomena. A case study can encompass various data sources like interviews, observations, or documents. The aim of case study research is to achieve an elaborated and nuanced comprehension of the case subject and to develop fresh theories or thoughts (Coombs, 2022).

The analysis of the data gathered in this study relied on what is known as a mixed methods approach. In this regard, Creswell and Creswell (2018) state that mixed methods approach refers to the combination of qualitative and quantitative approaches and data in a research study where qualitative data includes open-ended data without pre-established answers, and quantitative data encompasses closed-ended data. Moreover, initial ideas about the significance of using multiple methods, known as mixed methods, were based on the belief that all methods have their own biases and limitations, and combining both quantitative and qualitative data helps to overcome the limitations of each type of data (Creswell & creswell, 2018).

2.5 Sample Population and Site of Research

One of the most important steps in any research study is to clearly identify whom the research will focus on, how the participants will be chosen, and where the research will take place. Therefore, this section highlights the participants' profile, type of sampling, and site of research.

2.5.1 Participants' Profile

Any research study requires research participants from whom the data will be collected. Research participants are those individuals who make up a sample. A member of a particular population is known as an element, and a group of elements is called a sample (Lammers & Badia, 2013). In this vein, Lammers and Badia (2013) state that the concept of population refers to "all members that meet a set of specifications or a specified criterion" (p. 2).

The process of selecting the research participants is called sampling. Sampling is a procedure in which the researcher selects individuals who represent the population. Verma et al. (2017) explain the process of sampling as "the act, process, or technique of selecting a suitable sample, or a representative part of a population for the purpose of determining parameters or characteristics of the whole population" (p. 298). Therefore, sampling helps the researcher gather representative data that allows for the generalizability of findings to the entire population.

In the current research work, we have dealt with 51 out of 164 EFL Master students from both specialties, 'didactics and applied languages' and 'literature and civilization', as well as seven out of 24 EFL teachers at the Department of Letters and English language; Faculty of Letters, Languages and Social Sciences at the University of Ain Temouchent during the month of February during the academic year 2023-2024. The criteria that were taken into account for defining the population are : First, EFL Master students and EFL teachers have experienced the blended learning mode for at least four years. Therefore, they are expected to strongly develop attitudes towards blended learning. The second criterion behind selecting EFL Master students is that they are mature and wise enough to provide relevant answers.

2.5.2 Type of Sampling

There are different types of sampling available for researchers to choose from to form a sample for their study. Thus, in this study, we have opted for a simple random sampling type, where the questionnaire was randomly distributed, via Messenger and email, to 164 EFL Master students, and seven out of 24 EFL teachers were also randomly selected for interviews. In this sense, Bhardwaj (2019) mentions that in a simple random sampling, sample members are chosen randomly and entirely by chance, ensuring that each member has an equal opportunity to be selected, thus not affecting the sample's quality.

Simple random sampling is considered as a type of probability sampling, also known as random sampling or representative sampling. In probability sampling, each element in the population has a definite chance, not zero, of being chosen for the sample. The chances can be objectively allocated to every element of the population (Datta, 2018). Simple random sampling is a widely used sampling technique in scientific studies (Noor, Tajik and Golzar, 2022). It is a commonly used sampling technique in research which involves a large sample size (Noor et al., 2022). Simple random sampling is chosen for populations that are greatly homogenous in which research participants are randomly chosen to take part in the study (Bhardwaj, 2019, as cited in Noor et al., 2022). Sharma (2017) and Fink (2003) state that simple random sampling "is also an unbiased and impartial selection method" (cited in Noor et al., 2022, p. 80).

2.5.3 Site of Research

This study was conducted at the University of Ain Temouchent during the second semester of the academic year 2023/2024. To investigate the attitudes of students and teachers towards a blended learning-based instruction, EFL Master students and EFL teachers who were selected as a sample population for the present study perform their tasks in EFL classrooms within the Department of Letters and English Language, Faculty of Letters, Languages and Social Sciences.

2.6 Research Tools

In a given study, the researcher must use research tools in order to collect data from the selected sample. Oben (2021) states that a research tool is a scientifically and systematically designed instrument for gathering, measuring, and analyzing data relevant to research interests and objectives. He also points out that each of the research tools has its advantages and disadvantages. In this regard, Wilkinson & Birmingham (2003) mention that "no single research instrument is inherently superior to any other. All can be used well or poorly" (p. 3).

In the current research work, we have used two primary data collection tools, which are the questionnaire and interview. When researchers adopt primary data collection tools, they personally collect data to meet their research objectives. This data remains inaccessible to others until it is published, and both qualitative and quantitative approaches are used to achieve these research objectives (Taherdoost, 2021). Moreover, the questionnaire and interview are used in this research study to directly obtain students' and teachers' attitudes towards a blended learning-based instruction. The major interest lies in understanding how the participants

perceive the effectiveness of blended learning and its advantages and disadvantages. The aforementioned research tools will be explained in the subsequent subsections.

2.6.1 The Questionnaire

The questionnaire is a significant tool in a research investigation that assists the researcher in gathering pertinent data on the research subject. Questionnaire is a core of the survey that consists of a series of questions created to collect data from participants. The questions represent the transformed version of the information researchers require for their investigation, which can be tackled by using the responses of participants (Taherdoost, 2022). Moreover, the questionnaire is a widely used tool for gathering data, consisting of a set of questions and response options that respondants from a particular population complete to provide the researcher with necessary data for the research. These forms are effective for collecting both qualitative and quantitative data (Taherdoost, 2021).

The questionnaire, serving as the major and predominant method of gathering primary and quantitative data, standardizes the data collection procedure and enables comparability (Taherdoost, 2022). Therefore, Krosnick (2018) and Malhotra (2006) state that questionnaire can guarantee a quicker and more precise data collection procedure, while also easing data analysis (cited in Taherdoost, 2022).

It is crucial to ensure that the questionnaire design is structured to reduce errors. The convenient design of the questionnaire can influence the quantity and quality of the collected data, and ultimately affecting the survey findings. Additionally, a poorly designed questionnaire can result in biases and various errors, while a well-designed one can support participants to provide responses as accurately and thoroughly as they can (Taherdoost, 2022).

In the current study, a combination of closed-ended and open-ended questions has been used to formulate the questionnaire. Roopa and Rani (2012) explain that in close-ended questions, the respondents are restricted to a predetermined set of answers, while in open-ended questions, the predetermined answers are not provided, and the respondents are free to answer in their own words without being limited by a fixed set of potential answers.

The combination of closed-ended and open-ended questions indicates the quasi-structured type of questionnaire. Quasi-structured questionnaire is the combination of structured and unstructured types of questionnaire. It is a questionnaire that uses mostly structured questions, with a small number of unstructured questions included. In this sense,

structured questionnaires involve the use of a defined and obvious structure with sequential questions. They are pre-programmed and used in in most data collection procedures. The fixed nature of responses in structured questionnaires facilitates data collection. While unstructured questionnaires utilize open-ended questions along with opinion-based questions. There are numerous potential responses, and they can not be readily pre-programmed (Taherdoost, 2022).

2.6.2 The Interview

The interview is another research tool that we have used to achieve the objectives of the study. Fox (2009) defines the interview as "an important data gathering technique involving verbal communication between the researcher and the participant" (p. 4). The interview is a discussion aimed at collecting information. The research interview includes an interviewer and an interviewee. The former manages the discussion procedure and poses questions whereas the latter answers these questions. Interviews can take place in person, over the phone, or online through the internet (Easwaramoorthy and Zarinpoush, 2006). Moreover, Taherdoost (2021) points out that it is worth mentioning that interviews are valuable for obtaining both qualitative and quantitative data through the use of open-ended and closed-ended questions. Accordingly, open-ended questions were used to construct the interview for the current study.

Interviews are suitable tool for gathering detailed insights into individuals' viewpoints, ideas, experiences, and emotions. Interviews are valuable when the research topic involves problems that demand intricate questioning and thorough investigation (Easwaramoorthy & Zarinpoush, 2006). However, the quality of the data gathered from an interview relies on both the interview structure and the interviewer's proficiency. For instance, a poor-structured interview can encompass improper questions or queries that are not comprehensible to the participant. An ineffective interviewer can intentionally or unintentionally affect the answers given by the participant, leading to a negative impact on the research results (Mathers, Fox & Hunn,2000).

A semi-structured interview was conducted in this study. Taherdoost (2021) states that semi-structured interviews follow a formal structure and are guided by a set of questions. While questions are primarily framed according to a predetermined guide, additional data can be sought during the interview by extending the discussion based on the initial set of questions. Easwaramoorthy and Zarinpoush (2006) state that in semi-structured interviews, the interviewer can investigate aspects with regard to the participants' responses or pose complementary questions to obtain illustration. Semi-structured interviews are beneficial when

there is a requirement to systematically gather detailed data from a number of participants or interviewees such as instructors and society leaders.

2.7 Data Collection Procedures

In this study, we have developed different questions for both the questionnaire and the interview, and we have followed particular procedures to collect the necessary data. Therefore, the following subsections will discuss the questionnaire, the interview, and the process of administering them.

2.7.1 The Students' Questionnaire

The questionnaire used in this study was created via Google Forms and distributed via Messenger and email. The questionnaire was saved on Google Drive to preserve data for analysis. Then, it was shared online with the targeted population after generally introducing the research topic, and informing the participants that their identities would remain confidential and anonymous. The participants were also informed that they could ask any question regarding the questionnaire.

However, before starting to gather data, a pilot study was conducted to test the effectiveness and the usability of the questionnaire. Arain et al., (2010) define a pilot study as a preliminary investigation created to assess different elements of the methods designed for a greater, more accurate, or validating research study (cited in Lowe, 2019). Polit and Beck (2017) state that the main aim of a pilot study is not to address particular research questions but to prohibit researchers from initiating a large-scale investigation without sufficient understanding of the intended methods (cited in Lowe, 2019).

In this regard, Baker (1994) mentions that a pilot study is the pre-testing or 'trying out' of a specific research tool (cited in Teijlingen & Hundley, 2002). Essentially, a pilot study is carried out to avoid the emergence of a critical error in a research that can be both time-consuming and expensive (cited in Lowe, 2019). Generally, researchers employ pilot studies to assess the suitability of their designed methods and procedures (Polit & Beck, 2017, as cited in Lowe, 2019).

The questionnaire proceeds with a brief definition of blended learning. It is divided into three sections. The first section of the questionnaire is devoted to the background information of EFL Master students. This section of the questionnaire is made up of two questions. The first question is a multiple-choice question that seeks to determine the gender of the participants.

The second question is also a multiple-choice question ; however, it is about the specialty of the participants.

The second section of the questionnaire is dedicated to the students' use of technology. This section is composed of five questions. The first question is a multiple-choice question where the participants can select more than one answer. This question is about the electronic devices that the students use for learning purposes. The second question aims to identify the applications and platforms the students use for learning purposes. In this question, the participants can also choose more than one answer. The third question seeks to know the difficulties the students face during the use of the chosen electronic devices, applications, and platforms. This question allows the participants to select more than one option as well. The fourth question is a yes/no question related to the students' attendance of virtual classes. Finally, the fifth question seeks to know more about the respondants' level of satisfaction with attending virtual classes.

The third section is devoted to the use of blended learning. It consists of nine questions. The first one is related to the recognized effectiveness of blended learning. The second question seeks justifiction for the previous question. The third question is a multiple-choice question in which the participants can select more than one response. This question involves six options including increased flexibility, comfort, enhanced engagment, time managment, others, and none. These options indicate the perceived advantages of blended learning.

This question is followed by an option for the participants to mention other perceived advantages in case they select 'others' from the options. The fourth encompasses six options including unequal access to online resources, misunderstandings in online environments, decreased motivation in online environments, discomfort, others, and none. These choices are related to the perceived disadvantage of blended learnning. This question is also followed by an option for the participants to state other perceived disadvantages in case they choose 'others' from the choices.

The fifth question offers two statements for the participants to select one of them, to determine whether they believe the advantages outweigh the disadvantages or vice versa. The sixth question is presented in the form of yes/no question related to knowing about the extent of effectiveness of blended learning compared to using of face-to-face learning alone. The seventh question is an open-ended question that aims to obtain justification for question six. The eighth question is a yes/no question about the the extent of effectiveness of blended

learning in comparision to the use of online learning only. The last question tries to determine the reason behind the previous choice.

2.7.2 The Teachers' Interview

A face-to-face interview was conducted with the participants after introducing the research topic and problem, and obtaining their permission to record the sessions for subsequent analysis. The participants were also informed that their identity would remain confidential and anonymous. Face-to-face interview is the most commonly employed research tool. Face-to-face interviews require a lot of effort, but they can be the most effective method for gathering reliable data. Face-to-face interviews are favored when the research topic is highly sensitive, the questions are complicated, or the interview is expected to be prolonged (Mathers et al., 2000).

In comparison to other data collection methods, face-to-face interviews provide a higher level of flexibility. In this sense, a proficient interviewer can demonstrate the objective of the interview, motivate potential participants to collaborate, address questions, adjust miscomprehension, provide cues, investigate answers, and pursue new thoughts in a manner that is unattainable through alternative methods (Mathers et al., 2000).

In the present study, individual interviews were conducted with each participant. The interviews have lasted from 10 to 12 minutes with each participant. Individual interviews are useful for obtaining in-depth insights from every respondent in a specific environment regarding the significance of an incident, situation, or social setting. Individual interviews are suitable when the subject matter is delicate, when a participant may be hesitant to share particular areas of their experiences in a group setting, or when there is a risk of one person's narrative influencing others' stories, requiring private interview settings (Mathers et al., 2000).

The interview includes eleven questions. The first question aims to determine the use of blended learning among teachers and the way they implement it in their teaching strategies. The second question aims to determine the electronic devices, applications, and platforms teachers use when teaching online. The third question is related to the previous question, striving to know whether teachers face difficulties while using the mentioned tools or not. It also aims to identify these difficulties. The fourth question is about the obstacles teachers encounter while teaching online. The fifth question seeks to know the way teachers perceive the effectiveness of blended learning. The sixth question tries to detect the challenges that the teachers face when using the blended learning mode.

The seventh question is about the recognized level of effectiveness of blended learning in comparison to the use of face-to-face learning only. The eighth question is related to determining the perceived extent of effectiveness of blended learning compared to using online learning alone. The ninth question aims to reveal the recognized advantages and diadvantages of blended learning among teachers. The tenth question checks whether the teachers view whether its advantages outweigh its disadvantages or vice versa. The last question is designed to create the opportunity for teachers to offer suggestions on improving the blended learning mode.

2.8 The Mixed- Methods Approach

Enosh, Tzafrir, and Stolovy (2014) state that using a mixed-methods approach allows researchers to address research questions with adequate depth and breadth (cited in Dawadi, Shrestha & Giri, 2021), and facilitates applying findings of the studied problems to the entire population (Dawadi et al., 2021). Bryman (2006), and Tashakkori and Teddlie (2010) claim that different terms including "integrating synthesis", "quantitative and qualitative methods", "multimethod", and "mixed methodology" are used to describe the mixed methods approach. However, in modern literature, the concept widely used is "mixed methods" (cited in Hafsa, 2019).

Even though researchers have been integrating qualitative and quantitative data for a long time, the modern perceptions of mixed methods research only began to develop in the 1980s (Azorín, 2016). Denscombe (2008) argues that mixed methods research has witnessed rapid growth in recent years, standing out as a research approach with a well-known name and unique characteristics (cited in Azorín, 2016), particularly in certain disciplines like education, psychology, health sciences, and sociology (Azorín, 2016).

In this regard, Johnson & Onwuegbuzie (2004) and Tashakkori and Teddlie (2003) believe that in these disciplines, mixed methods approach is acknowledged as the third research approach, beside qualitative and quantitative approaches (cited in Azorín, 2016). Tashakkori and Creswell (2007) mention that mixed methods is described as a research that involves gathering and analyzing data, combining the results, and making conclusions by using both qualitative and quantitative approaches within one study (cited in Doyle, Brady & Byrne 2009). Therefore, the following subsections will discuss quantitative and qualitative approaches in detail.

2.8.1 The Quantitative Approach

Creswell (1994) affirms that quantitative research indicates exploring phenomena by gathering numerical data that is analyzed using mathematical methods, often incorporating statistical analysis (cited in Xiong, 2022). Bryman (2012), on his part, argues that quantitative research underlines the use of quantification in the collection and analysis of data (cited in Xiong, 2022). Thus, Xiong (2022) concludes that numerical data or quantification is essential in quantitative research. Moreover, the use of quantitative approach allows researchers to gather data from a large sample size, enhancing the potential to apply the findings to a broader population (Dawadi et al., 2021).

Burns and Grove (2005) state that quantitative research is a formal, objective, meticulous, deductive method, and systematic approach to developing and enhancing knowledge for solving issues (cited in Mohajan, 2020). Best (1981) mentions that quantitative research approach involves methodical observation and depiction of the attributes or features of things or incidents to uncover connections between an independent (predictor) variable and a dependent (result) variable across a population (cited in Mohajan, 2020).

In quantitative research, researchers determine the research topic, pose precise and focused questions, gather measurable data from sample, analyze this data using statistical methods, and carry out the investigation in an impartial and objective way. The quantitative research data is gathered by using closed-ended questions. This data is numerical in nature, including percentages, statistics, graphs, and similar formats. The data is used to create and apply models derived from mathematical models, theories, and hypotheses to achieve the intended outcome (Mohajan, 2020). Williams (2007) highlights that the results of quantitative research can be anticipatory, elucidative, and affirming (cited in Mohajan, 2020).

The quantitative research approach is viewed as having a scientific essence. The use of statistics in research descriptions and analysis decreases the time and effort that researchers would have, otherwise, spent explaining their findings (Eyisi, 2016). Numeric data, including numbers, percentages, and measurable quantities, can be calculated by a computer using statistical software like statistical package for social science (Gorard, 2001; Connolly, 2007, as cited in Eyisi, 2016), leading to significant savings in both effort and resources (Eyisi, 2016).

By using scientific methods for gathering and analyzing data, generalization becomes achievable with this approach. The interactions conducted with one group could be generalized

(Eyisi, 2016). Likewise, Williams and May (1998) state that the explanation of research results should not be viewed as a random occurrence (cited in Eyisi, 2016).

Eyisi (2016) believes that quantitative approach allows for replicability. In this vein, Shank and Brown (2007) state that the research conducted with this particular research tool is carried out in a broad or public manner due to its explicit goals and guidelines, allowing it to be replicated at any other time or location with consistent findings (cited in Eyisi, 2016).

Denscombe (1998) defines quantitative research as a research approach characterized by "researcher detachment" (cited in Eyisi, 2016). When the researcher is in indirect contact with respondents including gathering data through telephone, internet, or paper questionnaires, the potential for bias in data collection or analysis is greatly reduced (Eyisi, 2016). Moreover, various researchers including Muijs (2004), Litchman (2006), Bryman (2012), and Creswel (2009) belive that the researcher's objectivity will remain intact. Additionally, this approach can ensure the anonymity of participants (cited in Eyisi, 2016).

Researcher detachment from respondents is also a drawback of quantitative research approach. This kind of connection between researcher and respondents makes it very challenging to conduct a thorough investigation of phenomena within their natural environments (Eyisi, 2016). Both quality and quantity play significant roles in every educational research, as research serves as a tool for bringing about change (Eyisi, 2016). However, in quantitative research, respondents do not have the opportunity to participate in the research; instead, the researcher takes the lead role (Bryman, 2001, as cited in Eyisi, 2016).

Various scholars including Denscombe (1998), Bryman (2012), Creswell (2009), and Christensen and Johnson (2012) state that a quantitative research approach is identified by its structured nature, with predefined variables, hypotheses, and design (cited in Eyisi, 2016). Therefore, De Vaus (1996) claims that due to the use of pre-established tasking methods, this approach does not necessitate or support imaginative, creative, and critical thinking (cited in Eyisi, 2016). All data gathered aims at either confirming or refuting the pre-established theories. This indicates that the tool is efficient for investigating existing knowledge rather than aiding in uncovering the unknown and renewing the known (Eyisi, 2016).

Quantitative research methods produce a large amount of numerical data that must be summarized, described, and analyzed. The data can be analyzed and depicted through the creation of graphics and charts, the conduct of cross-tabulations, as well as the calculation of

averages and standard deviations. Subsequent analysis would be based on these initial results, aiming to identify themes and connections within the data (Lacey & Luff, 2007).

2.8.2 The Qualitative Approach

Denzin and Lincoln (1994) define qualitative research as an approach that emphasizes interpreting phenomena within their natural environments to understand them with regards to the significance individuals attribute to these contexts (cited in Relacion, 2019). Bryman (2008) defines qualitative research as a research approach that typically focuses on words rather than numbers when gathering and analyzing data (cited in Hammersley, 2013).

Strauss and Corbin (2008) and Levitt et al. (2017) mention that qualitative research involves an inductive approach, where the researcher examines meanings and insights within a particular setting (cited in Mohajan, 2018). The goal of qualitative research is to systematically depict and explain problems or phenomena based on the perspective of people or sample under study, as well as to develop novel notions and theories (Mohajan, 2018).

The qualitative approach allows for a more thorough comprehension of the problem under examination, respecting the perspectives of the involved sample (Dawadi et al., 2021). Tong et al. (2012) believe that qualitative approach seeks to offer a comprehensive insight into human behaviors, feelings, attitudes, and experiences (cited in Mohajan, 2018). Zohrabi (2013) mentions that qualitative research uses interviews, journals, diaries, classroom observations, and immersive experiences, as well as open-ended questionnaires to collect, analyze, and interpret data (cited in Mohajan, 2018).

The process of data collection in qualitative research approach is viewed as distinct and special (Eyisi, 2016). In this sense, Johnson and Christensen (2012) state that the dependence on gathering non-numeric primary data like words and images by researchers, who acts as a tool themselves, makes qualitative research ideal for offering actual and descriptive data (cited in Eyisi, 2016). In qualitative research approach, theories are developed based on the data collected. The development of theory from data enables the researcher to create and modify theories as required, using the data they have gathered, rather than assessing data produced by other researchers (Eyisi, 2016).

Nevertheless, qualitative research approach faces challenges related to replicability (Eyisi, 2016). Atkins and Wallac (2012) mention that it is thought that qualitative research approach may not provide reliable and constant data in comparison to quantifiable data because

this approach emphasizes emotions and subjective accounts (cited in Eyisi, 2016). The avoidance of numerical data in the qualitative approach complicates and prevents the simplification of the results and observations (Eyisi, 2016).

Leedy and Ormrod (2014), on their part, state that qualitative researchers think that the social realm including phenomena and experiences is multifaceted, leading to clarifications that rely on the researcher's interpretations (cited in Eyisi, 2016). In this regard, Williams and May (1998) claim that an appropriate explanation is challenging to provide as it relies on the researcher's interpretation, which may vary among various researchers. Therefore, the research cannot be replicated by another researcher elsewhere and obtain similar results (cited in Eyisi, 2016).

When conducting qualitative data analysis, the extensive amount of words obtained from interviews or observational data must be described and recapitulated. The inquiry might prompt researchers to look for connections among different topics that have been determined, or to link behavior or thoughts to personal features of participants like age or gender. Data analysis may lead to policy or practice recommendations, or offer insight into previously confusing results from preceding research (Lacey & Luff, 2007).

2.9 Conclusion

This chapter has provided a clear description of the methodology and the research design followed in this research work. It has outlined the aims of the present study and the motivations behind choosing the research topic under investigation. Moreover, the chapter has provided a comprehensive overview of the research design, participants' profile, type of sampling and the site of research. The research tools employed in this research study have also been defined and described. The chapter has further discussed the mixed methods approach involving the quantitative approach, and the qualitative approach. The next chapter will be completely devoted to the presenrtation and analysis of the data collected for this study.

CHAPTER III

Data Collection and Analysis

3.1 Introduction

The current chapter starts with the analysis of the results obtained from the questionnaire and the interview. It also provides a geneeral interpretation of the main results. The chapter also presents some useful suggestions and recommendations for students, teachers, and policy makers. Finally, the limitations of this study are further tackled.

3.2 Data Presentation and Analysis

This section is devoted to presenting and analysing the data gathered from the questionnaire and the interview. Therefore, the data collected are analysed both quantitatively and qualitatively. The following subsections depict these data in details.

3.2.1 Students' Attitudes towards Blended Learning

In this study, fifty-one (51) EFL Master students have answered the questionnaire composed of three sections. The first section is concerned with the background information of the participants. The second section is devoted to the students' use of technology. And finally, the third section deals with the use of blended learning.

Section One : Background information
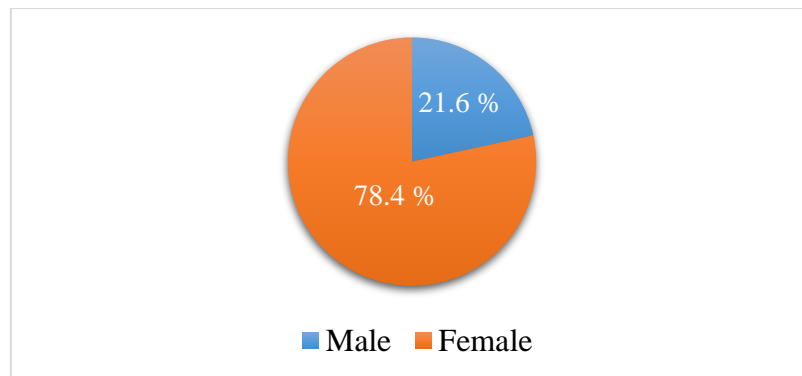
Question One : Gender

Figure 3. 1 : Gender of the Participants

In Figure 3.1, the results show that 78.4% of the participants are females, and 21.6% of the participants are males. This indicates that the majority of the participants are females.

Question Two : Your specialty
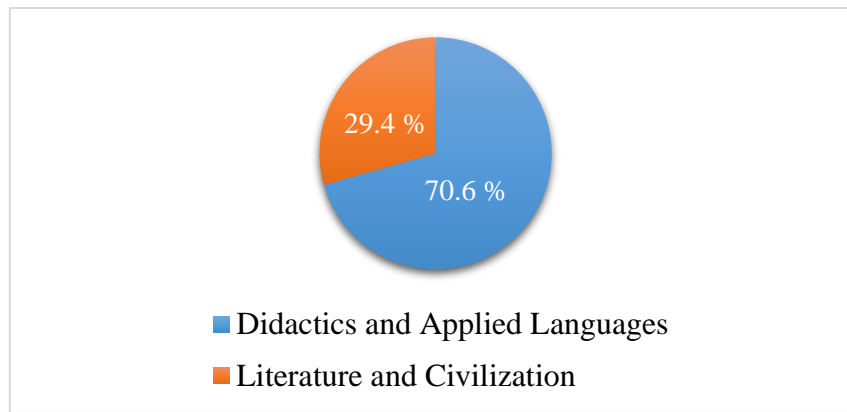
Figure 3.2 : Specialty of the Participants

Figure 3.2 indicates that 70.6% of the participants are specialized in 'Didactics and Applied Languages', while 29.4% of the participants are from 'Literature and Civilization' Master's specialty. This illustrates that most of the participants are from 'Didactics and Applied Languages' specialty.

Section Two : Students' use of technology

Question One : What sort of electronic devices do you use for learning purposes ?
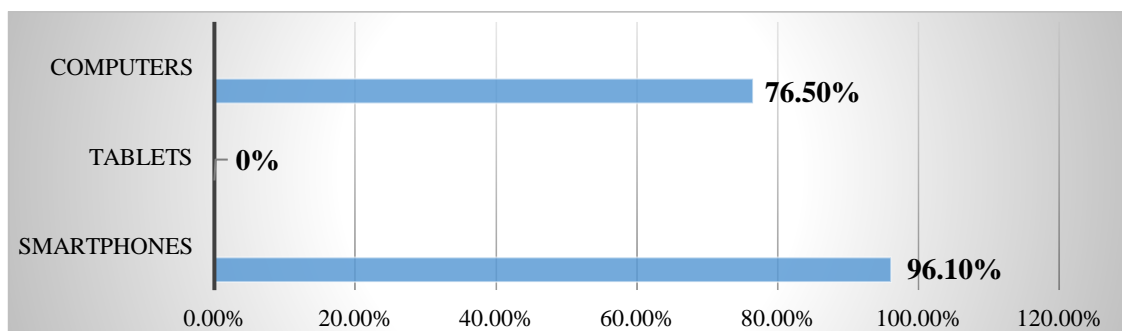
Figure 3.3 : Electronic Devices that Students Use for Learning Purposes

Figure 3.3 shows that 96.1% of the participants used smartphones for learning purposes, 76.5% used computers for learning purposes, and none of the participants used tablets for learning purposes. This demonstrates that most of the participants in this study relied heavily on smartphones to learn.

Question Two : Which applications and platforms do you use for learning purposes ?
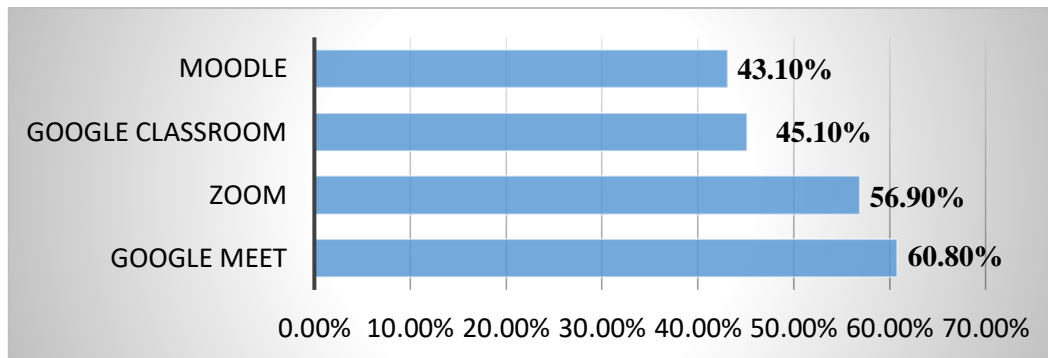
Figure 3.4 : Applications and Platforms that Students Use for Learning Purposes

Figure 3.4 depicts that 60.8% of the participants used Google Meet for learning purposes, 56.9% used Zoom, 45.1% used Google Classroom, and 43.1% used Moodle. This reveals that all of the participants used different applications and platforms for learning purposes, with Google Meet being the most used application among them.

Question Three : Which difficulties do you face during the use of these electronic devices, applications, and platforms ?
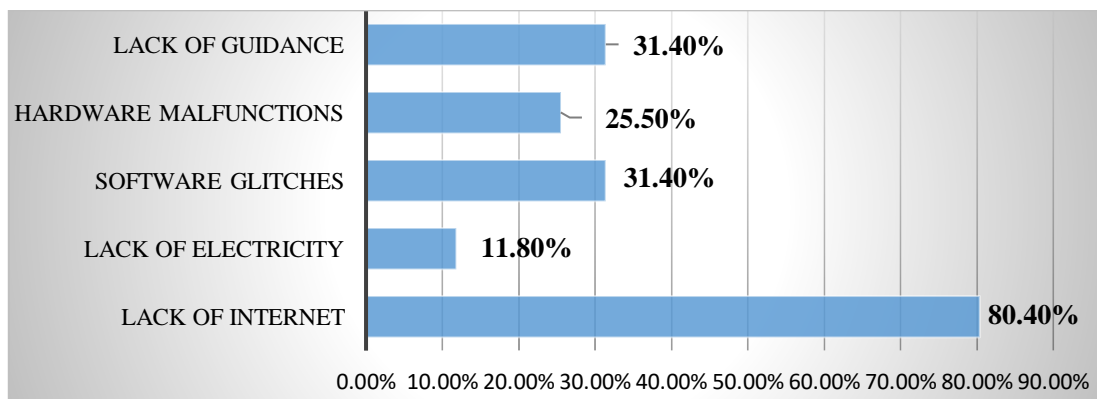
Figure 3.5 : Difficulties that Students Face when Using the Different Electronic Devices, Applications, and Platforms

Figure 3.5 indicates that 80.4% of the participants faced lack of internet when using electronic devices, applications, and platforms, 31.4% encountered software glitches, another 31.4% encountered lack of guidance, 25.5% faced hardware malfunctions, and 11.8% faced lack of electricity. This shows that all of the participants encountered various difficulties while using electronic devices, applications, and platforms. However, the lack of internet was the most prominent difficulty faced.

Question Four : Have you ever attended a virtual class ?
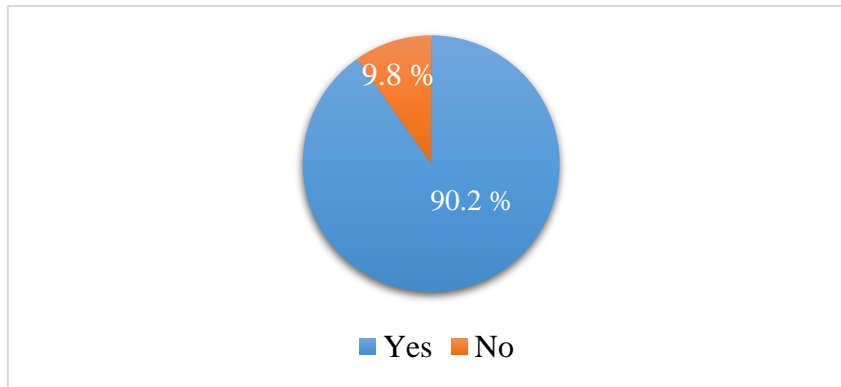
Figure 3.6 : Virtual Class Attendance

Here, the results indicate that 90.2% of the participants attended a virtual class, whereas 9.8% did not attend it. So, the majority of the participants attended an online class.

Question Five : If yes, how satisfying was the experience ?
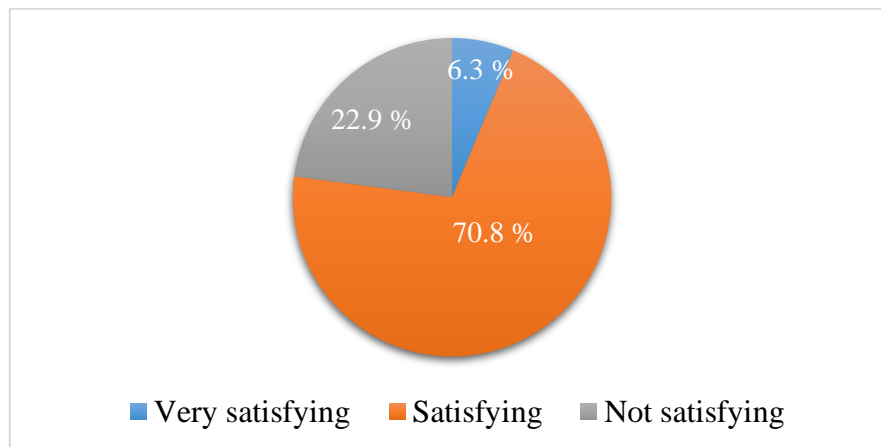
Figure 3.7 : Level of Satisfaction with the Experience

The results stated in Figure 3.7 indicate that 70.8% of the participants found the experience of attending a virtual class satisfying, 22.9% found the experience not satisfying, and 6.3% found it very satisfying. This means that most participants were satisfied with virtual classes.

Section Three : The use of blended learning

Question One : How effective do you think blended learning is ?
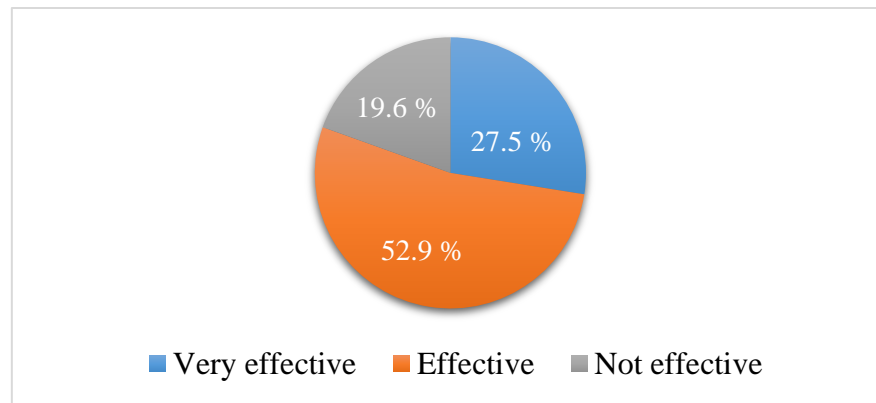
Figure 3.8 : Effectiveness of Blended Learning

The findings obtained from this question show that 52.9% of the participants found blended learning effective, 27.5% described it as very effective, and 19.6% found blended learning not effective. It is observed from these results that most participants met the effectiveness of blended learning.

Question Two : Justify your previous choice.

The second question is part of the first question of the third section. It was set to know the reasons behind the previous choices. The participants who viewed blended learning as 'effective', justified their answers by mentioning that blended learning offers flexibility, comfort, multiple opportunities for learning, and various learning resources. The participants also stated that it increases students' engagement, enhances their motivation, saves time and energy, breaks the routine, prevents boredom, meets students' expectations of using technological tools, and traines them to effectively deal with technological devices and online programs. However, some participants stated that in order for blended learning to be more effective, more knowledge, guidance, and simple and accessible platforms should be provided to all students.

The participants who described blended learning as 'very effective', stated that blended learning offers flexibility, comfort, and extra time ; it facilitates learning ; it also fosters personlized learning experiences ; and it further enhances students' engagement. They admitted that blended learning provides good experiences in online environment, offers the advantages of both traditional and online learning, and allows them to adapt to different situations and to use different materials.

The participants who viewed blended learning as 'not effective', justified their choices by stating that blended learning reduces interaction and offers ethical issues. They also found it

not effective due to the use of low quality-learning materials, lack of concentration, lack of information, noises, lack of motivation and engagement, lack of understanding, and lack of access to online resources.

Question Three : According to you, what are the advantages of blended learning ?
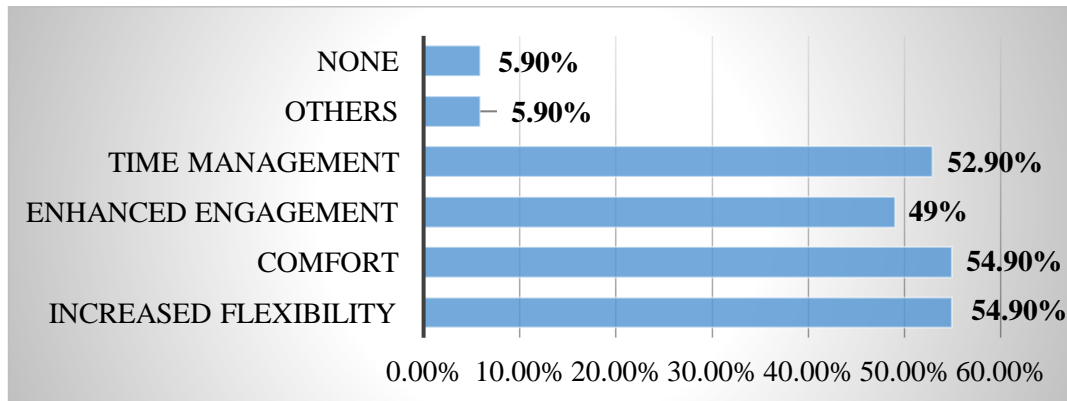
Figure 3.9 : Advantages of Blended Learning

Figure 3.9 illustrates that 54.9% of the participants found that blended learning increases flexibility, another 54.9% mentioned that blended learning offers comfort, 52.9% viewed that it contributes to time management, 49% found that it enhances engagement, 5.9% received other advantages which are offering extra time and improving learning outcomes, another 5.9% did not receive any advantages by engaging in blended learning mode. This indicates that nearly all the participants received the advantages of blended learning, with increased flexibility and comfort being the most equally received advantages.

Question Four : According to you, what are the disadvantages of blended learning ?
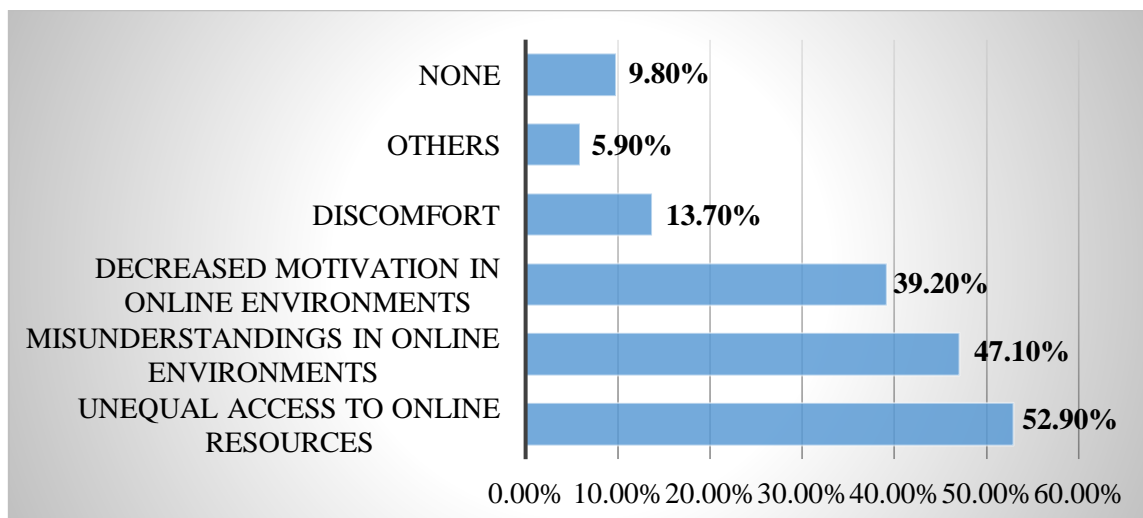
Figure 3.10 : Disadvantages of Blended Learning

The results mentioned in Figure 3.10 reveal that 52.9% of the participants encountered the disadvantage of unequal access to online resources when engaging in the blended learning mode, 47.1% encountered misunderstandings in online environments, 39.2% faced decreased motivation in online environments, 13.7% encountered discomfort, 9.8% did not face any disadvantage when engaging in the blended learning mode, and 5.9% faced other disadvantages including internet problems due to its bad quality and financial issues, alongside the lack of awareness among students and teachers of how certain online resources function. The results indicate that nearly all participants encountered the disadvantages of blended learning, with unequal access to online resources being the most encountered disadvantage.

Question Five : Select the appropriate answer based on your own experience

- The advantages of blended learning outweigh its disadvantages
- The disadvantages of blended learning outweigh its advantages
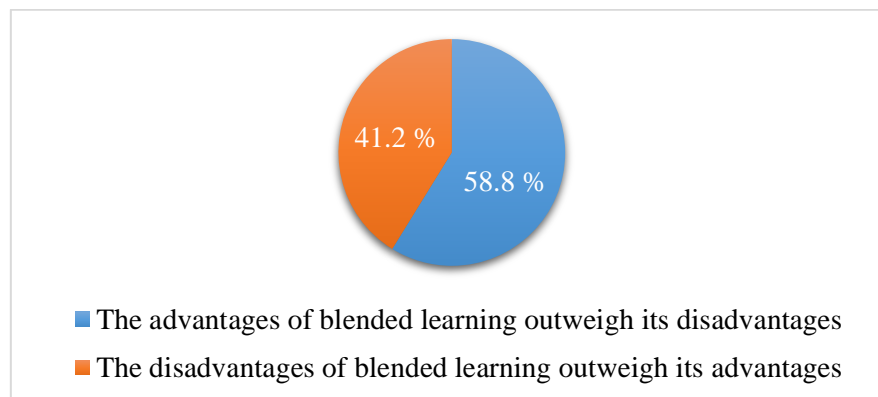
Figure 3.11 : Students' Experiences of the Advantages and Disadvantages of Blended Learning

In Figure 3.11, the results show that 58.8% of the participants believed that the advantages of blended learning outweighed its disadvantages, while 41.2% believed that its disadvantages outweighed its advantages. This indicates that the advantages of blended learning were highly recognized among the participants than its disadvantages.

Question Six : Do you think that blended learning is more effective than the use of face-to-face learning only ?
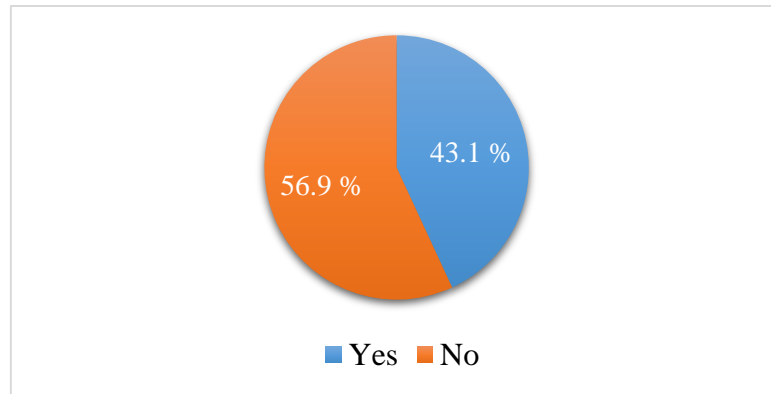
Figure 3.12 : Effectiveness of Blended Learning Compared to Face-to-Face Learning

Figure 3.12 indicates that 56.9% of the participants viewed blended learning as less effective than the use of face-to-face learning alone, whereas 43.1% considered blended learning as more effective than the use of face-to-face learning alone. This depicts that according to the participants, blended learning is slightly less effective than face-to-face learning.

Question Seven : Justify your previous answer.

The participants who described blended learning as less effective than face-to-face learning, motivated their answers by stating that face-to-face learning offers more interaction, engagement, motivation, concentration, easy access to information, and good understanding. Some participants mentioned that face-to-face learning facilitates classroom management compared to the online component of blended learning environment. Other participants stated that face-to-face learning offers a high level of responsibility for learning compared to the online component of blended learning. Others stated that blended learning is less effective than face-to-face learning due to internet problems and unequal access to online resources.

The participants who viewed blended learning as more effective than face-to-face learning, mentioned that blended learning enhances traditional learning by incorporating online resources. Some participants stated that face-to-face learning alone is boring and old approach to learning. Some participants also justified their responses by stating that blended learning offers flexibility, comfort, and personalized learning ; it increases autonomy, motivation, interaction, time management, and engagement ; it saves time ; reduces confusion ; and tailores to various learning styles. In this regard, they believed that the advantages of blended learning surpass that of face-to-face learning. One participant stated that blended learning helps students learn online teaching techniques. Another participant said that "blended learning preserves the

traditional way of teaching while also keeping up with modern changes". Another one mentioned that "online and face-to-face learning complement each other to create a flexible learning atmosphere".

Question Eight : Do you think that blended learning is more effective than the use of online learning only ?
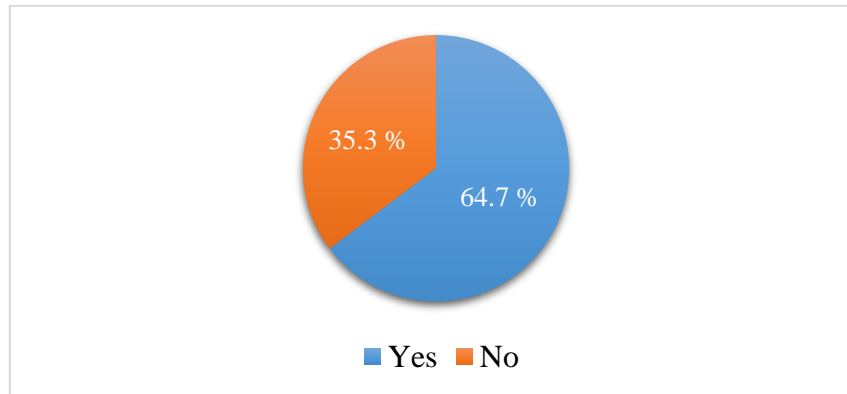
Figure 3.13 : Effectiveness of Blended Learning Compared to Online Learning

The results show that 64.7% of the participants viewed blended learning as more effective than the use of online learning alone, while 35.3% viewed blended learning as less effective than the use of online learning alone. This indicates that the majority of participants found blended learning more effective than online learning.

Question Nine : Justify your pevious answer.

The participants who viewed blended learning as more effective than online learning, stated that online learning might lack interaction, immediate feedback, effective communication, and engagement. Other participants mentioned that online learning is difficult due to internet and access problems. Another participant mentioned that online learning can cause misunderstanding. Other participants illustrated that blended learning offers more advantages than online learning including flexibility, motivation, time management, multiple learning resources, tailores learning experiences, and increases understanding and interaction. One participant stated that "blended learning meets students' expectations of learning by using the internet ; yet, it preserves the traditional learning". Another participant mentioned that "blended learning ensures the effectiveness of teaching learning proccess". Still another one mentioned that "blended learning trains learners and educators for any situation like Covid-19". Another one claimed that "blended learning combines the advantages of both face-to-face and online learning".

The participants who described blended learning as less effective than online learning, justified their answers by mentioning that online learning was easy and more guided, and it offers freedom. One participant stated that "blended learning causes confusion due to poor planning". Another one viewed online learning as more effective than blended learning due to personal preference.

3.2.2 Teachers' Attitudes towards Blended Learning

The interview was conducted with seven EFL teachers working at the Department of Letters and English Language, University of Ain Temouchent. The interview involves eleven questions that aim to elicit the teachers' attitudes towards a blended learning-based instruction. The interview's questions were analysed and are presented as follows:

Question One : Have you ever used the blended learning mode in your teaching strategies? If yes, how ? If no, why ?

Teacher One : Yes, I have used it during the Covid-19 pandemic. I delivered lectures online and then recapitulated what was virtually done in the classroom.

Teacher Two : Yes, I used it during the Covid-19 pandemic. I explained the lessons online, and I asked my students to solve activities in the online environment. I also gave them asynchronous assigments to submit online. And then, we moved to the classroom to revise what was done online.

Teacher Three : Yes, I used it during the Covid-19 pandemic. I taught online, then we moved to teaching in the classroom.

Teacher Four : Yes, I used it during Covid-19. I explained lectures online, and then moved to the classroom to do the activities.

Teacher Five : Yes, I already tried to teach literature for L3 students using blended learning mode. It was during Corona health crisis. I used the Moodle platform of the university. I kept contact with my students via email.

Teacher Six : Yes, well, I taught (face to face) and tested students online.

Teacher Seven: Yes, I explained lectures online, and then did a revision in the classroom.

Question Two : Which electronic devices, applications, and platforms do you use when teaching online ?

Teacher One: I use Zoom, and my computer to teach online.

Teacher Two: I use Google Classroom, Zoom, Facebook, Messenger, Email. Concerning the electronic devices, I use my computer.

Teacher Three: I use Zoom, Google Classroom, Moodle, Google Meet, and my computer.

Teacher Four: I use Zoom, Google Meet, and my computer.

Teacher Five: I use my smartphone and PC. For the platforms, I use Zoom, Google Meet and Moodle.

Teacher Six: I use the computer, and Zoom.

Teacher Seven: I use Google Classroom, Google Meet, and Moodle and my computer.

Question Three: Do you face any difficulties in using them ? If yes, what are these difficulties ?

Teacher One: Yes, I face difficulties, mainly lack of material and lack of training.

Teacher Two: Yes, technical problems always happen, electricity problems, and network cuts.

Teacher Three: Yes, the internet connection is expensive, and we have never been trained to teach online.

Teacher Four: Yes, the difficulties were related to network problems, and the sound quality; sometimes I can not hear the one who talks.

Teacher Five: Yes, the only difficulty I encountered is internet low debit.

Teacher Six: I rarely face difficulties, but the main one is internet problems.

Teacher Seven: Yes, I have found it hard to deal with. Lack of competence, lack of help, and availability of materials.

Question Four: What sort of obstacles do you encounter while teaching online?

Teacher One: Lack of motivation among students and lack of interaction in online environment.

Teacher Two: The difficulty I really faced and still face is with the students ; they are not aware and not motivated to work online.

Teacher Three: We do not know how to attract the attention of the learners,

Teacher Four: The main difficulties are related to the students' availibility, not all students can join the meeting as the time fixed. The problem is also with the students' engagement, not all students are engaged and also, the noises in students' settings.

Teacher Five: Well, the obstacles are anxiety caused by the work online, time constraints, many students do not possess electronic devices, technical difficulties that students face on Moodle; it is also difficult to evaluate students' works online, the big number of students decreases the quality of interaction online, and the lack of interaction seems to kill enjoyment in teaching literature.

Teacher Six: Internet problems.

Teacher Seven: Bad internet connection, bad command from teachers' and students' parts.

Question Five: How would you describe the effectiveness of blended learning in the teaching/ learning process?

Teacher One : It is good, it is effective, I would say it is supportive.

Teacher Two: Blended learning is effective, because it helps us during the pandemic, it facilitates the teaching/learning process and it saves the teaching/learning process.

Teacher Three: I don't think it is really effective, it is complementary. I prefer teaching in class, using the old methods. The problems related to internet handicaps the blended learning.

Teacher Four: Blended learning offers different spaces for learning and helps learners and teachers to keep in touch. I found it very effective.

Teacher Five: It can be beneficial only in the best conditions as it completes greatly traditional teaching.

Teacher Six: Blended learning is effective by offering flexibility, personalized learning experiences, and access to a variety of resources. It caters to diverse learning styles, promotes self-paced learning, and fosters increased engagement through the integration of technology.

Teacher Seven: It is effective since it motivates learners, facilitates teaching and learning, and attracts attention.

Question Six: Which challenges do you encounter when using the blended learning mode?

Teacher One : I face problems with students' attendance in an online environment, only a few students attend the online classes.

Teacher Two : To motivate students is really challenging, besides technical and internet problems.

Teacher Three: Well, the challenges are the difficulties I face during the use of the technological tools and the ones I face in the online setting.

Teacher Four: To keep engaged, sometimes it is hard to find the right time, atmosphere, and context to allow sessions to take place.

Teacher Five: The challenges are mainly the ones I encountered in online environment.

Teacher Six: Maintaining students' engagement.

Teacher Seven: The same as the difficulties related to using apps I previously mentioned.

Question Seven: Do you think that blended learning is more/ less effective than face-to-face learning only? Why?

Teacher One: Blended learning is less effective than face-to-face learning, nothing will change the tradition of teaching in class.

Teacher Two: Blended learning is less effective than face-to-face learning, face-to-face communication in general being it learning or something else is important.

Teacher Three: Blended learning is less effective than face-to-face learning because we were not prepared, and we were not effective and motivated to teach online. In face-to-face teaching, you can go to your students, motivate them one by one, talk to them, check who is really working on the activities, but while teaching online there is not this interaction and control.

Teacher Four: I will not use more, though there is some effectiveness in having face-to-face teaching coupled with online teaching, however, the difficulties I mentioned earlier hinder the blended learning mode.

Teacher five: Yes, I think it is more effective because it increases the time of teaching and learning the subject matter.

Teacher Six: Blended learning combines between face to face and online, so, online serves as an addition to face to face, so it is more effective than just face to face learning.

Teacher Seven: Blended learning is less effective than face-to-face learning, it is new but not better than face-to-face. Students are not habitual with that sort of learning.

Question Eight: Do you think that blended learning is more/ less effective than online learning only? Why?

Teacher One: Personally, I find both of them effective because technology is an effective strategy to use in teaching, it is beneficial for me to use it in my class.

Teacher Two: Online learning is less effective in our context, the Algerian context.

Teacher Three: Blended learning is more effective than online since there is this face-to-face contact with students, there will be this touch.

Teacher Four: Blended learning is more effective than online. Face-to-face can be better if we incorporate online teaching, but online alone, I'm not really in favor of it because students are not really engaged in online environment.

Teacher Five: I don't think it is less effective. Online learning can be as effective as blended or face-to-face learning if all conditions are available.

Teacher Six: Since blended learning combines both face to face and online, so it is more effective than just online learning.

Teacher Seven: Blended learning is more effective than online learning because online learning offers more disadvantages.

Question Nine: According to you, what are the advantages (if you receive any) and disadvantages (if you receive any) of blended learning?

Teacher One: If we talk about the advantages, it is a new way of teaching; it makes the teacher creative in his teaching strategies. The new generation of students who prefer using mobiles etc., it is beneficial for them to adapt their learning with such new ways of teaching. When we talk about the disadvantages, we talk about the difficulties faced in online environment and when using the apps.

Teacher Two: Concerning the advantages, students can understand the message you are delivering, increased motivation. I didn't experience any disadvantages.

Teacher Three: Well the advantages, to remedy when one of the modes has failed, blended learning offers more time to students for participation. The disadvantages can be a kind of waste of time. Students may be lost, if students are used to their teacher, if there is an already installed

set up method or approach used by the teacher inside the class then moving to online, students may feel a little bit lost.

Teacher Four: The continuity of what is done in the classroom and online keeps students engaged. It offers space for learners who do not take part in what takes part in the classroom to participate through the platforms used. I have not recorded any disadvantage.

Teacher Five: Advantages include more learning time and opportunities, more interaction, more flexibility, practice of digital skills, improved students' engagement, diverse learning resources are used. Disadvantages, I can say technology challenges, it requires a strong self-discipline, and reduces face to face interaction.

Teacher Six: Flexibility allows for a combination of in-person and online learning, accommodating diverse schedules and learning preferences. Cost-Effectiveness, it can be cost-effective compared to traditional classroom-only approaches, reducing expenses associated with materials and travel. Regarding the disadvantages, I didn't receive any.

Teacher Seven: The advantages, I would like to say blended learning is motivating, fast and easy, and modern. I didn't encounter any disadvantages.

Question Ten: Do you think its advantages outweigh its disadvantages or vice versa?

Teacher One: Neutral, I cannot decide whether the advantages are more or not, according to what I know blended learning is essential now, and we need it in our teaching.

Teacher Two: More advantages since I didn't receive any disadvantage.

Teacher Three: I will stay neutral here.

Teacher Four: The advantages are higher.

Teacher Five: Yes, I think its advantages outweigh its disadvantages.

Teacher Six: It is debatable, it depends on the teacher and the feedback of learners.

Teacher Seven: Advantages are more than the disadvantages.

Question Eleven: What do you suggest to improve the blended learning mode?

Teacher one: They should provide us with materials, and training. There must be interaction between the teacher and his students, this relation will lead the student to attend even in online

sessions. The use of technology in our class either virtual or in the class. Cooperation, we should cooperate and collaborate with specialty teachers, those who know about technology.

Teacher Two: Be interactive, especially in oral expression module, use more activities to motivate, entertain, and engage students, to improve the teaching learning process in general including blended learning.

Teacher Three: Training for teachers, providing teachers a well as learners with good materials, with good internet, and passion.

Teacher Four: Try Google Classroom, lightening the teaching learning hours at the university and making the additional compulsory online hours, it can create a certain balance. Taking into account students' feedback concerning blended learning encourages teachers to further using it.

Teacher Five: Providing teacher training, and modernize educational technology.

Teacher Six: Offering internet.

Teacher Seven: Train teachers, train students, and provide materials.

3.3 General Interpretation of the Main Results

In this study, we used two research tools: a questionnaire for students, and an interview for teachers. They were conducted in order to investigate students' and teachers' attitudes towards the advantages and disadvantages of blended learning, also to identify the factors that affect their attitudes. This section interprets the main results obtained from the research tools used in this research work.

We proposed two hypotheses to conduct the current research study. We suggested as a first hypothesis that students display positive attitudes towards blended learning because of its flexibility. While, teachers show negative attitudes towards this new mode, for they believe it triggers low quality teaching and learning. However, after analysing the data collected from students' questionnaire and teachers' interview, the current study partially validates this hypothesis because the majority of students and teachers emphasized the effectiveness of blended learning and confirmed that using it offers more advantages than disadvantages. Therefore, both students and teachers display positive attitudes. Indeed, while engaging in a blended learning mode, students under investigation believe that a blended learning-based

instruction offers increased flexibility, comfort, time management, multiple learning resources, and digital skills training.

Moreover, they are of the opinion that it enhances engagement, improves learning outcomes, and increases both understanding and interaction. Whereas teachers believe that blended learning offers flexibility, cost-effectiveness, more time for participation and learning, diverse learning resources, and practice of digital skills. They are also of the idea that it increases understanding, motivation, engagement, interaction, and teachers' creativity. Teachers further state that blended learning meets students' expectations of using technology.

Accordingly, the results of this study are in partial alignment with the research findings of Mokrani and Aiech (2021). In fact, in their research, they found out that teachers have positive attitudes towards blended learning, for they believe that blended learning improves learning, and it is a very effective approach to teaching. They also support the idea of incorporating it into their teaching strategies, even with potential challenges. However, students showed negative attitudes towards this educational mode because of implementation issues.

For the second hypothesis, we hypothesised that the major factors that affect students' and teachers' attitudes towards blended learning involve flexibility, training, motivation, and comfort. This study has proved that this hypothesis is true since teachers and students demonstrated that flexibility, training, motivation, and comfort can form either the advantages or disadvantages of blended learning, and consequently, influencing their attitudes towards this educational mode. The research findings further detected other factors including electricity, internet connection, materials, guidance, engagement, and self-discipline.

Finally, to improve blended learning, both teachers and students should be provided with materials, training, good internet connection, and passion. According to the results obtained, a successful implementation of blended learning also entails: interaction between teachers and students, the use of interactive activities, the use of technology in both traditional and virtual classes, the use of Google Classroom, modernization of educational technology, consideration of students' feedback on blended learning, cooperation with technology teachers, and reduction of lecture time in the classroom along with compulsory online sessions.

3.4 Suggestions and Recommendations

Following the results of this study, we propose some valuable recommendations and suggestions that would maintain students' and teachers' positive attitudes towards blended

learning, overcome the factors and problems that negatively influence their attitudes, and ultimately improve this educational mode. These suggestions and recommendations are targeted to students, teachers, and policy makers.

On the one hand, students should respect the time devoted to online sessions. They should also be more engaged and involved in both face-to-face and online sessions. To reduce usage issues, students are counseled to train themselves to use online learning platforms such as Zoom, Moodle, Google Classroom and so on, through watching videos. In this regard, they should also initiate extensive use of online learning applications and platforms. Moreover, students should keep in touch with their classmates and teachers to overcome guidance issues. When attending an online class, they should choose a quiet place, and mute other app notifications. Additionally, they are recommended to ask for clarifications when necessary, especially in online environment. Students should further be responsible for their learning either in traditional or online classes.

On the other hand, teachers should collaborate with their colleagues to pose- to policy makers- the challenges they encounter when using blended learning. Teachers should also engage in self-training regarding blended learning. In addition, they are recommended to motivate their students and keep them engaged in both environments. Teachers should carefully plan the online sessions with their students to ensure their attendance. They should also educate their students about their own responsibility for their learning. Furthermore, they should conduct surveys for their students to learn the ways they prefer the implementation of blended learning.

The various problems that students and teachers struggle with, during the process of blended learning, entail the intervention of policy makers. These latters should equip universities with the necessary materials. They should reduce the price of ICT tools for students, particularly those with financial issues, or use partial payments. Policy makers should also cooperate with the Algerian Ministry of Post and Communication to provide a special offer for students and teachers that includes good and less expensive internet. Finally, they should organize days to train teachers and students on blended learning, and to identify their concerns regarding this educational mode.

3.5 Limitations of the Study

Like any other study, the current research work faced some limitations. One of the limitations that we encountered is the low number of males as well as literature and civilization

students who participated in the questionnaire, which prevented relating the research findings to gender and specialty. Another limitation is the insufficient sample size of students to make more reliable statistical measurements, even though we asked the participants multiple times to answer the questionnaire. Moreover, in open-ended questions some students were not helpful, for they provided meaningless answers.

3.6 Conclusion

The current chapter has treated the empirical side of this study. First of all, the chapter has analysed the results obtained from the two research tools used in this research work including the questionnaire and the interview. Moreover, this chapter has presented a clear interpretation of the main results. The chapter has also proposed some beneficial suggestions and recommendations that would preserve the students' and teachers' positive attitudes towards blended learning and overcome- or at the least minimize- the problems that affect their attitudes. Finally, the chapter has ended up by discussing the limitations encountered while conducting this study.

General Conclusion

The heavy reliance on ICTs in education during and after the Coronavirus pandemic has led to the widespread adoption of online learning in the educational institutions around the world, and Algeria is no exception. Introducing online learning into the teaching/learning process ensures the use of 'blended learning', an approach to learning that integrates traditional face-to-face learning and online learning. This educational mode has become an important part of teaching and learning in the Algerian universities, including the University of Ain Temouchent. Moreover, understanding how students and teachers evaluate and judge blended learning is necessary to evaluate and improve this innovative approach. Therefore, this study aimed to investigate students' and teachers' attitudes towards blended learning, along with the factors affecting their attitudes.

The current research work proposed two hypotheses. The first hypothesis suggested that students show positive attitudes towards blended learning because of its flexibility, while, teachers exhibit negative attitudes towards this new mode because they believe it triggers low quality teaching and learning. This hypothesis is partially confirmed since both students and teachers affirmed that they had positive attitudes towards a blended learning-based instruction.

In this sense, most of them asserted the effectiveness of this innovative approach and confirmed that using it offers more advantages than disadvantages. On the one hand, the results indicated that the students believed blended learning offers increased flexibility, comfort, time management, multiple learning resources, and digital skills training. Additionally, they viewed that this educational mode enhances engagement, improves learning outcomes, and increases both understanding and interaction.

On the other hand, the results revealed that the teachers believed blended learning offers flexibility, cost-effectiveness, more time for participation and learning, diverse learning resources, and practice of digital skills. They also supported the idea that it increases understanding, motivation, engagement, interaction, and teachers' creativity. Teachers further mentioned that blended learning meets students' expectations of using technology.

The second hypothesis proposed that the main factors that influence students' and teachers' attitudes towards blended learning include flexibility, training, motivation, and comfort. This hypothesis is correct because these latters could shape the advantages or

disadvantages of blended learning which in turn affected the attitudes of teachers and students towards this educational model. The results also spotted other factors which are electricity, internet connection, materials, guidance, engagement, and self-discipline.

This study can contribute to acquire deeper knowledge of blended learning, alongside students' and teachers' experiences with this educational mode. The study also has theoretical significance as the results could be useful to researchers interested in blended learning. This research work can further contribute to the success of this educational mode since it provides some useful suggestions and recommendations.

The present study can also be used to improve the quality of blended learning and ensures its success and sustainability in the Algerian universities. The implementation of blended learning in Algeria is still in its early stages, which necessitates a thorough understanding of its nature in the Algerian context. Thus, further research can investigate the impact of other aspects like gender and specialty on students' and teachers' attitudes towards a blended learning-based instruction.

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Appendices

Appendix A: **Students' Questionnaire**

Dear students,

You are kindly invited to answer this questionnaire, which is part of a research study that investigates the attitudes of students and teachers towards blended learning. The questionnaire is anonymous and your answers remain confidential. Thank you in advance for your cooperation and for the time devoted to answer it.

NB. Blended learning refers to a teaching mode which combines the traditional classroom practices and online learning.

Section One : Background information

1_ Gender :

    ○ Male

    ○ Female

2_ Your specialty :

    ○ Didactics and Applied Languages

    ○ Literature and Civilisation

Section Two : Students' use of technology

1_ What sort of electronic devices do you use for learning purposes ? (You can select more than one answer)

    ○ Smartphones

    ○ Tablets

    ○ Computers

2_ Which applications and platforms do you use for learning purposes ? (You can select more than one answer)

    ○ Google Meet

○ Zoom

○ Google Classroom

○ Moodle

3_ Which difficulties do you face during the use of these electronic devices, applications and platforms ? (You can select more than one answer)

○ Lack of internet

○ Lack of electricity

○ Software glitches

○ Hardware malfunctions

○ Lack of guidance

4_ Have you ever attended a virtual class ?

○ Yes

○ No

5_ If yes, how satisfying was the experience ?

○ Very satisfying

○ Satisfying

○ Not satisfying

Section Three : The use of blended learning

1_ How effective do you think blended learning is ?

○ Very effective

○ Effective

○ Not effective

2_ Justify your previous choice.

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3_ According to you, what are the advantages of blended learning ? (You can select more than one answer)

    ○ Increased flexibility

    ○ Comfort

    ○ Enhanced engagment

    ○ Time managment

    ○ Others :……………………………………………………………………………………

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    ○ None

4_ According to you, what are the disadvantages of blended learning ? (You can select more than one answer)

    ○ Unequal access to online resources

    ○ Misunderstandings in online environments

    ○ Decreased motivation in online environments

    ○ Discomfort

    ○ Others :……………………………………………………………………………………

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    ○ None

5_ Select the appropriate answer based on your own experience :

    ○ The advantages of blended learning outweigh its disadvantages

    ○ The disadvantages of blended learning outweigh its advantages

6_ Do you think that blended learning is more effective than the use of face-to-face learning only ?

    ○ Yes

○ No

7_ Justify your previous answer.

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8_ Do you think that blended learning is more effective than the use of online learning only ?

○ Yes

○ No

9_ Justify your previous answer.

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Appendix B: **Interview with Teachers**

Dear teachers,

You are kindly invited to answer these interview questions, which are part of a research study that investigates the attitudes of students and teachers towards blended learning in order to evaluate and improve it. The interview is anonymous, and your answers remain confidential. Thank you in advance for your cooperation and for the time devoted to provide answers.

1_ Have you ever used the blended learning mode in your teaching strategies ? If yes, how ? If no, why ?

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2_ Which electronic devices, applications, and platforms do you use when teaching online?

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3- Do you face any difficulties in using them ? If yes, what are these difficulties ?

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4_ What sort of obstacles do you encounter while teaching online ?

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5_ How would you describe the effectiveness of blended learning in the teaching/ learning process ?

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6_ Which challenges do you encounter when using the blended learning mode ?

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7_ Do you think that blended learning is more/ less effective than face-to-face learning only ? Why ?

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8_ Do you think that blended learning is more/ less effective than online learning only ? Why ?

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9_ According to you, what are the advantages (if you receive any) and disadvantages (if you receive any) of blended learning ?

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10- Do you think its advantages outweigh its disadvantages or vice versa ?

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11-What do you suggest to improve the blended learning mode ?

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ملخص

أصبح التعلم المدمج شائع الاستخدام في الجامعات الجزائرية منذ تفشي فيروس كورونا. يعتمد التقييم والتحسين المستمر لهذا الأسلوب التعليمي على فهم كيفية تقييم الطلاب والمعلمين له والحكم عليه. لذا تهدف هذه الدراسة إلى التعرف على اتجاهات الطلاب والمعلمين نحو التعلم المدمج، بالإضافة إلى العوامل التي تؤثر على اتجاهاتهم. ولتحقيق هذه الغاية، تم استخدام أداتين للبحث، بما في ذلك استبيان موجه لطلاب ماستر اللغة الإنجليزية كلغة أجنبية، ومقابلة أجريت مع معلمين اللغة الإنجليزية كلغة أجنبية من قسم الآداب واللغة الإنجليزية بجامعة عين تيموشنت. يتكون مجتمع العينة من 51 طالب ماستر في اللغة الإنجليزية كلغة أجنبية وسبعة معلمين للغة الإنجليزية كلغة أجنبية. يعتمد تحليل البيانات التي تم جمعها على نهج الأساليب المختلطة. وبناء على ذلك، أشارت النتائج المحصل عليها أن معظم الطلاب والمعلمين لديهم اتجاهات إيجابية نحو التعليم القائم على التعلم المدمج لأنهم يحصلون على مزايا أكثر من مساوئ من هذا الأسلوب التعليمي، وأن هذه الاتجاهات تتأثر بعدة عوامل مثل المرونة، التدريب، التحفيز، والمشاركة. علاوة على ذلك، واجهت الدراسة الحالية بعض القيود، وقدمت مجموعة من الاقتراحات والتوصيات التي تساهم في تبني التعلم المدمج بشكل فعال.

الكلمات المفتاحية: التعلم المدمج، الاتجاهات، العوامل، الطلاب، المعلمين.

Abstract

Blended learning has been commonly used in the Algerian universities since the outbreak of coronavirus. The evaluation and constant improvement of this educational mode depend on understanding how students and teachers evaluate and judge it. Thus, this study aims to investigate students' and teachers' attitudes towards blended learning, in addition to the factors that affect their attitudes. To this end, two research tools are used including a questionnaire targeted to EFL Master students, and an interview conducted with EFL teachers from the Department of Letters and English language at the University of Ain- Temouchent. The sample population consists of 51 EFL Master students and seven EFL teachers. The analysis of the data collected relies on a mixed methods approach. Accordingly, the results obtained indicated that most students and teachers have positive attitudes towards a blended learning-based instruction as they receive more advantages than disadvantages from this educational mode, and that these attitudes are affected by many factors like flexibility, training, motivation and engagement. Moreover, the present study has encountered some limitations, and presented a set of suggestions and recommendations that contribute to the adoption of blended learning in an effective way.

Keywords: Blended learning, attitudes, factors, students, teachers.

Résumé

L'apprentissage mixte est couramment utilisé dans les universités algériennes depuis l'apparition du virus Corona. L'évaluation et l'amélioration constante de ce mode éducatif dépendent de la compréhension de la manière dont les étudiants et les enseignants l'évaluent et le jugent. Ainsi, cette étude vise à enquêter les attitudes des étudiants et des enseignants à l'égard de l'apprentissage mixte, en plus des facteurs qui affectent leurs attitudes. A cet effet, deux outils de recherche sont utilisés dont un questionnaire destiné aux étudiants du Master Anglais comme Langue Étrangère, et un entretien réalisé avec des professeurs d'Anglais comme Langue Étrangère du Département de Lettres et de Langue Anglaise de l'Université d'Ain-Temouchent. La population échantillonnée est composée de 51 étudiants en Master d'Anglais comme Langue Étrangère et de sept enseignants d'Anglais comme Langue étrangère. L'analyse des données collectées compte sur une approche de méthodes mixtes. Par conséquent, les résultats obtenus indiquent que la plupart des étudiants et des enseignants ont des attitudes positives à l'égard d'un enseignement basé sur l'apprentissage mixte, car ils en reçoivent plus d'avantages que d'inconvénients de ce mode éducatif, et que ces attitudes sont affectées par de nombreux facteurs tels que la flexibilité, la formation, la motivation, et l'engagement. De plus, la présente étude s'est heurtée à certaines limites et a présenté un ensemble de suggestions et de recommandations qui contribuent à l'adoption efficace de l'apprentissage mixte.

Mots clés : Apprentissage mixte, attitudes, facteurs, étudiants, enseignants.