### People's Democratic Republic of Algeria Ministry of Higher Education and Scientific Research



# University of Tlemcen Faculty of Letters and Languages Department of English

The Impact of The COVID 19 on The Algerian Educational System: Case of Master 1 Students in The Department of English Tlemcen

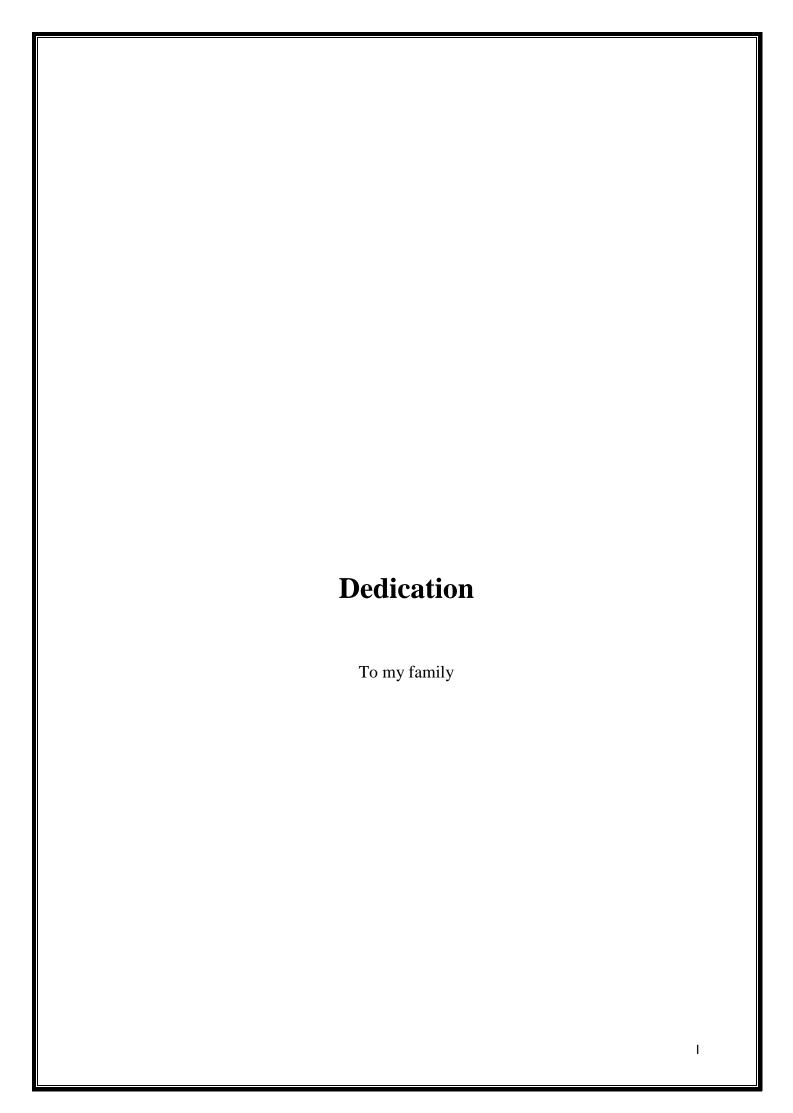
Dissertation submitted to the Department of English as a partial fulfilment of the requirements for the degree of Master in Didactics

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#### Abstract

The CORONAVIRUS (COVID-19) pandemic presents unprecedented global challenges with profound implications on education, health, everyday life and economy around the world. The pandemic has changed education forever. COVID-19 has resulted in the closure of many institutional settings around the world. All school pupils and university students had left the classroom. Correspondingly, education has changed immediately, with the notable shift to e-learning, whereby teaching is undertaken remotely and on digital platforms. The University of Tlemcen is one of the universities that witnessed a significant increase in online learning during the outbreak spread in March. All the departments including the Department of English Language started using E-learning platforms and TEAMS to deliver online courses. The purpose of this work is to explore to what extent was the online learning effective as well as to investigate the problems encountered by students and teachers when starting the new approach. To reach this end, a case study research was conducted in the department of English including 37 Master's students relying on number of resources and research instruments for data collection (a questionnaire for students and an interview with teachers). Qualitative and quantitative analyses of data revealed that both students and teachers were not prepared to carry on their learning/teaching process through online platforms due to the lack of equipments and t training. To conclude, this work demonstrated how educational system was unprepared and unaware to deal with this situation.

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### **List of Abbreviations and Acronyms**

ICT: Information and Communication Technologies

VLE: Virtual Learning Environments

D-Learning: Digital Learning

M-Learning: Mobile Learning

Wi-Fi: Wireless Fidelity

LS: Linguistic Sciences

LC: Literature And Civilization

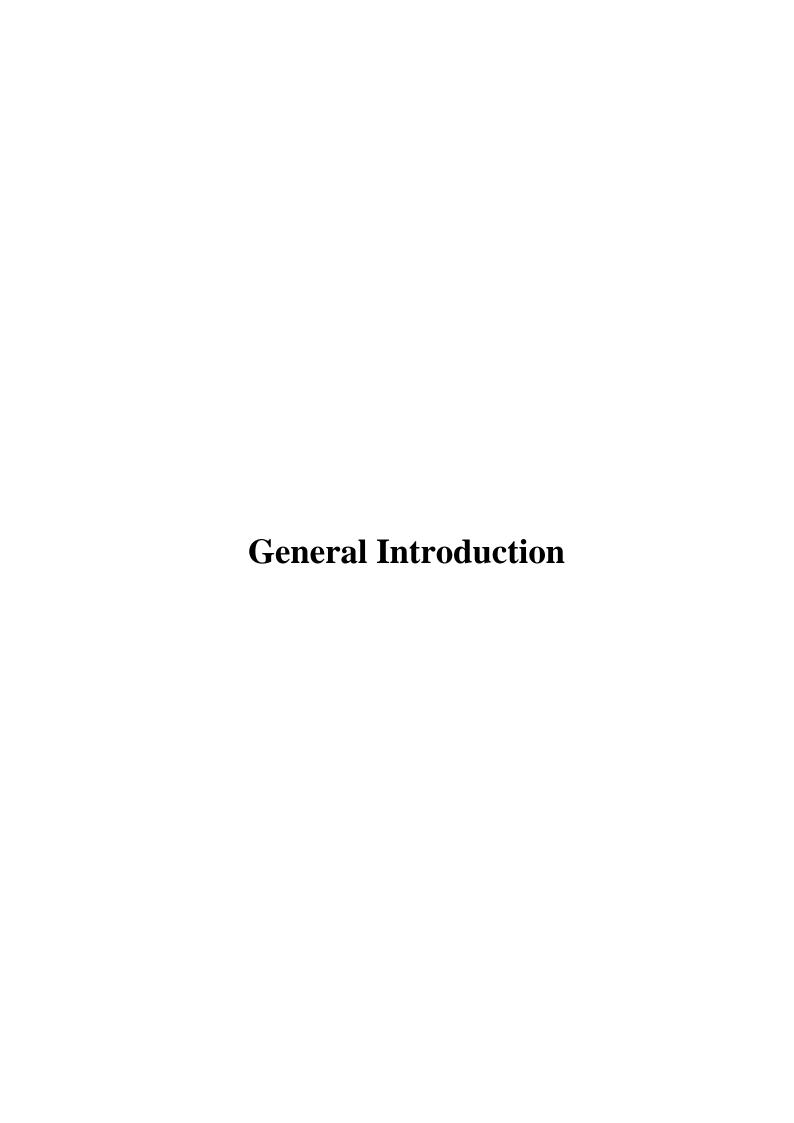
DAELE: Didactics and Assessement of English Language Education

E-Learning: Electronic Learning

H:Hypothesis

**PPT: Power Point** 

PDF: Portable Document Format



### **General Introduction**

The COVID-19 pandemic started in Wuhan, China in December 2019 and spread rapidly around the world within few months. As the world gets closer, so do the risks humanity face. The COVID-19 pandemic does not stop at borders. It has affected people no matter what Nationality, education, income or gender. The infectious disease has affected all areas of life, including education. In addition, educational institutions around the world (192 countries) have either temporarily or partially closed, affecting some 1.7 billion students worldwide. As the situation worsened, the global lockdown eventually led to the closure of educational institutions. Many universities around the world have postponed or canceled all oncampus events to minimize gatherings and thus reduce the spread of the virus. The closure of schools, colleges and universities has put pressure on educational administration and severely limited opportunities. The Ministry of higher education has announced online courses to continue the learning process in a safe manner. Within days, all universities switched to online learning. The massive unplanned shift from traditional learning to an all-online learning setting has changed the way institutions deliver courses to students.

The CORONAVIRUS has had a severe impact on higher education as universities close their premises while countries are closing borders in response to lockdowns aspect. Since all institutional settings have stopped face-to-face teaching, it becomes necessary for students to switch to online teaching. This form of learning offers an alternative way of minimizing contact between students or between students and lecturers. However, due to the economic and digital divide, many students do not have access to online teaching due to lack of means or tools. Although universities were quick to replace traditional learning with online learning School closures affect study and exams and Safety and legal status of international students host country. Most importantly, the crisis is deepening Questions about the offered value of higher education that includes networking and social opportunities educational content. Additionally, universities must reshape their learning environment to digital extend and complement students, teachers and others relation.

For this work, the researcher selected the following research questions:

Q1: How did the outbreak affect the learning process?

Q2: How did the adoption of the new method (online learning) arise challenges and difficulties for the students and teachers?

The research questions are interpreted into the following hypotheses:

H1: the closure of educational institutions due to ongoing COVID-19 Pandemic causes unplanned shift from traditional to online learning. This shift from traditional classroom instruction to online learning expanded the use of ICT's and affected every aspect of educational practice.

H2: Educational systems around the world are facing many unprecedented challenges and difficulties after school closures mandated as part of public health efforts to stop the spread of COVID-19. One of the major solutions to ensure the continuity of curriculum based study was to start delivering the courses online. This method was ambiguous for students which resulted the appearance of new challenges for both students and teachers.

This research work consists of two chapters, a theoretical one and other practical. The first chapter is considered as theoretical, it deals with the definition of many concepts that have relation with online learning as well as a definition of the traditional learning. Also it deals with the spread of the pandemic and its impacts on the Algerian educational system. Then, it discusses the major barriers and obstacles that faced students while studying online.

The second chapter is considered the practical part of this research, examining in a practical way the impact of the pandemic on the Algerian educational system, the attitudes of students towards ICT Technologies, the difficulties that faced both students and teachers as well as the lacks that hinder students from carrying their studies. Therefore, the current study was conducted to investigate the impact of Covid-19 pandemic on Algerian educational system. The research conducted in this chapter concern the educational background of Master students in the English Department at Tlemcen University. The aim was to collect data through

students' questionnaires and teachers' interviews with the aim of answering the two research questions listed above and discussing the main findings, culminating in some solutions and recommendations that are considered important for mediating relevant teaching/learning situations.

**Chapter One: Literature Review** 

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### 1.1 Introduction

The first chapter is the literature review. It aims to define online learning and other related terms as well as face-to-face learning. Additionally, it deals with COVID-19 and its impacts on the educational system. It also aims to understand teacher-student interaction in online learning and each one's role in this new approach. Besides, it deals with ICT and online learning as well as barriers in this approach.

In recent decades, the use of ICT has witnessed a significant increase in the educational domain. It has been assumed that computers will play an essential role in the current evolution and development. Additionally, one of the major results of school and university closures during the Covid-19 pandemic has been the rise of online learning. Studies in this area have examined the benefits and difficulties of the rapid shift from face-to-face to online education as a consequence of the unpredicted conditions.

### 1.2. Online Learning

Online learning is part of the new dynamic that distinguishes educational systems at the present time. Online education is a concept that constantly changes. According to Nasution et al (2021, p.2) Online learning is the use of the Internet to access learning material; interact with course content, teachers, and students; and to get support and gain knowledge. Online learning can be defined as "learning that takes place partly or totally over the Internet" U.S. Department of Education (2010, p. 9).

Online learning was first introduced in the 1990s as a reaction to technological advancements, online learning is most widespread in higher education. Thus, students from different geographical areas will be allowed to engage with an educational institution and other students to learn effectively for their degree certifications.

There are many terms that could be used interchangeably with this concept:

### 1.2.1. Virtual Learning

Due to Modern technology, learning can be similarly achieved from home, not as in the traditional one; the instructor uses online resources to connect with Learners to deliver the content rather than Gathering it in the classroom. According to Barajas et al (2000, p. 40) the Virtual Learning Environment (VLE) is a learning technology that combines face-to-face and virtual meetings.

VLE is a web-based learning platform that combines the traditional education concept with the virtual method. However, It is more formal, Interactive, and flexible. Moreover, it is carried out using internet-based platforms. It is generally related to online courses in which teaching activities are achieved online whereas the instructor and the learner are physically separated in terms of place, time, and location. It ensures that the instructor and the learner are connected in real-time.

Virtual learning environments are very practical in terms of availability and accessibility since this new method of learning does not require living near an educational setting. The Learner needs only a computer and account associated with University or the institution. In addition, whenever the students are prepared to learn, of course, materials are available and accessible anytime and everywhere. Accordingly, it is useful as long as the content is delivered efficiently and can be updated easily when required.

On the other hand, the rise of this new type of learning has expanded the needs of students. Yet, one of the bigger issues in Virtual learning is that the investment in technology could be taxing; each student needs his laptop or computer with access to a reliable internet connection. In addition to the access students and teachers, were unfamiliar with this new technology, it was a hard task to adopt it. Also, in a standard classroom, teachers advance new plans to decrease interruption and increase learning. Another important point is that in a virtual classroom, students are connected from different locations.i.e., students face countless interruptions and distractions like: social media, TV, pets, parents, etc...

### 1.2.2. Distance Learning

This term is often equated with the concept of e-learning. Yet, both of the terms cannot be synonyms. Distance Education is defined as institutional-based, formal education where the learning group is divided, and where telecommunications systems are used to connect and gather learners, course materials, and teachers (Schlosser & Simonson, 2010, p. 1)

Distance learning, this term has been around for 100 years, it refers to studying remotely from institutional setting. In this situation, the learning is more individual and differs according to speed and timeline which reflects students' availability. It varies from other learning types in terms of interactions, intention, and location. Concerning the interaction, it relies completely on digital forms of communication like messaging apps video calls; It doesn't involve interaction with the instructor. Then, concerning the intention, it is important to keep in mind that distance learning is a method for delivering instruction and it is not about teaching Style. Subsequently, concerning the location, distance teachers' role is to assign work and check digitally while the students work online.

Distance learning allows students to learn without being physically present in a regular classroom. Immediately this new method of learning increases students' productivity needs i.e., many students lack concentration in the morning. yet, they explode abilities and learn better in the afternoon. Furthermore, technical skills, computer savvy individuals are in increased demand in the workplace.

Through distance learning, students' technical skills can develop and expand to have enough technological knowledge through the use of online research, word process, and social networks. Also, cheaper education is an optional choice for students who aim to save money. Even though distance learning is useful practical and functional, distance learners may face problems.

### 1.2.3. E-Learning

E-learning is considered as a new learning model as well as a new approach to teaching and learning. Is generally referred to as the conscious use of information communication technologies (ICT) in the teaching and learning process. Ellis et al

(2009, p.1) state that E-learning is being introduced as a fundamental part of the student learning experience in higher education. It is used to connect teachers and students who are physically separated. It involves the use of multimedia to increase learning.

"E-learning is learning that focuses on information and communication technologies in relation with pedagogical interconnection between participants and content" González-Videgaray (2007, p.84). E-learning platforms are offered anywhere, anytime with uncomplicated access to enhance knowledge and skills. It allows sharing material in all kinds of data such as videos, ppt, word documents, and pdfs. Meetings (live online classes) also allow learners to communicate with the instructor via chat and message forums. Moreover, E-learning allows students to be thinkers/learners/risk-takers in a protected environment. Students are not required to rely on the instructors, They can be independent. Unlike classroom teaching Lectures can be repeated any number of times, This is especially needed at the time of the revision for the exam.

### 1.2.4. Digital Learning

Digital learning is a term that is continuously replacing e-learning, it refers to the practical solution that support teaching and studying activities. According to Kumar et al (2018, p.195) the term "digital learning" refers to any classroom practice that effectively uses technology to enhance students' learning experience, including a wide range of tools and practices. In fact, it is the process in which the learners use digital media to accomplish the learning activity.

The term 'd-learning' means any educational practice that effectively utilizes technology to expand a student's learning experience. It means that learners can learn by using some digital teaching material contents like e-books, digitalized data, or contents introduced with other digital methods.

### 1.2.5. Mobile Learning

M-learning is considered to be an addition to e-learning, however, the quality of m-learning can be carried with the consciousness of particular limitations and benefits of mobile devices. Masoud Hashemi et al. (2011, p. 2478) agreed that:

Mobile learning can take place in any location, at any time, including traditional learning environments such as classrooms as well as in workplaces, at home, in community locations and in transit. Mobile technologies include mobile phones, smartphones, PDAs, MP3/ MP4 players (e.g. iPODs), handheld gaming devices (e.g. Sony PSP, Nintendo DS), Ultramobile PCs (UMPCs), mini notebooks or netbooks (e.g. Asus EEE), handheld GPS or voting devices, and specialist portable technologies used in science labs, engineering workshops or for environmental or agricultural study. Mobile learning involves connectivity for downloading, uploading and/or online working via wireless networks, mobile phone networks or both, and linking to institutional systems e.g. virtual learning environments (VLEs) and management information systems (MIS).

Mobile learning is defined as a method to access learning content from any mobile device. M-Learning is an auto-learning instructional strategy that utilizes digital online content through mobile devices. The content contains apps, social interactions, games, and more. It's also reachable anywhere and anytime 24/7. However, it aims to simplify the creation of knowledge and supply students with problem-solving abilities, social skills, and other competencies that are not related to traditional teaching. It enables learners to move comfortably over many settings and to connect up learning in different areas.

### 1.3. Face-To-Face Learning

Nasution et al (2021, p.1) explain that Face-to-face learning is learning in class that relies on the presence of teaching lecturers to teach in class, on face-to-face learning, students are involved in unconscious oral communication in a permanent physical environment.

Face-to-face education is also known as traditional classroom learning. Students who study at a face-to-face learning institute attend a regular class that differs from early morning to afternoon classes. Students are offered the option to study part-time that takes place in the evenings. A traditional classroom is a popular

method of learning all around the world. Traditional learning is an educational setting where the teacher delivers the material to the learners. It combines different ways of learning involves writing, reading, discussion, presentations, projects, and group work.

In traditional learning, students have the opportunity to feel more comfortable and concentrate more on learning with less interruption and to complete the course successfully with the instructor i.e., this type of learning creates stronger academic experiences for learners. Face-to-face learning helps learners to form stronger connections through face-to-face interaction with the instructor or learners.

### 1.4. Covid 19 Background

Across the ages, human beings have witnessed many epidemics that have forever changed the educational, social, and economical life of societies.

Since December 2019, the world has suffered the tragic consequences of the new human disease the coronavirus. This disease (COVID-19) is an infectious disease caused by the SARS-CoV-2 virus that can spread from an infected person's mouth or nose in small liquid particles when they cough, sneeze, speak, sing or breathe. The first reported cases of this pandemic were discovered in Wuhan, China. Due to its exponential transmission, more than 290 million cases were detected with more than5 a million deaths since the first reported case in China. Significantly, it has spread like wildfire to create real confusion all over the world. The COVID-19 pandemic has not stopped at national frontiers. It has affected people despite their nationality, level of education, income, or gender.

Undoubtedly, Algeria is one of the countries that is still fighting against the proliferation of the pandemic. According to worldometer, Algeria has marked 220,000 positive cases and more than 6,200 cases from the first appearance of the endemic until January 2022.

Algeria, for instance, responded to the disease by a partial lockdown. Yet, the first lockdown has been announced on March 23, 2020. Educational settings such as universities and institutions were commanded to close. Accordingly, education has

witnessed a significant move from traditional face-to-face learning to online learning. (Dignan, 2020) claims that due to Covid-19. It is online learning's jump towards a big transition in education, replacing the classical system. The epidemic has forced schools and universities to close which expands the use of technology and setting online teaching plans using various tools and platforms.

In normal conditions, Algerian students were unfamiliar with managing online platforms and software. The COVID-19 has created great difficulties for the higher education community worldwide like the unpredicted demand for earlier face-to-face courses to be delivered online (Rapanta et al; 2020, p.923).

### 1.5. The Impact of COVID-19 on Education

The covid-19 pandemic has affected the educational system worldwide, leading to the closure of almost all educational settings and the rise of the new mode of delivery distance learning.

### 1.5.1 Educational Settings Closure

In an attempt to control the spread of COVID-19, many countries around the world have decided to impermanently cancel face-to-face learning and move to a remote learning mode of delivery. Nearly every country closed all school campuses to restrict social gatherings and continued education to online platforms. As reported by UNESCO, many educational institutions shut down in 186 countries by the end of April 2020, affecting approximately 74% of registered Learners. In many countries, studies have been interrupted and temporarily canceled from the beginning of March 2020(e.g. Like UK, Algeria, and Morocco), whereas in others (e.g. Like China and South Korea) face to face classes had been already postponed since January 2020. Institutions choose distance education for many reasons like accessing learning, updating skill advancement, expanding cost usefulness, increasing the quality of instructional structure, developing the system of education, adjusting the differences between age categories, providing education and emergency case learning to specific target groups, connecting family and working life with education and adding a global extent to education.

### 1.5.2 The Rise of Online Education

Online learning or E-learning is a field of education that focuses on the pedagogy, technology and design of instructional systems that are effectively integrated to provide education to students who are not receiving education onsite. Instead, teachers and students can communicate asynchronously (at a time of their own choosing) by exchanging print or electronic media or through technology that enables them to communicate in real time. Distance learning courses that require an on-site in-person presence for any reason, including taking exams, are considered AS hybrid or hybrid courses or programmes.

Online education is a process of organized teaching-learning that takes place in various settings from the standard learning place and involves communication and a certain collective organization through technologies. Algeria is a developing economy and is steadily working to have a completely digital world. Yet, Several platforms are being used to manage classes (e.g. Zoom and Google Meet).

### 1.5.2.1. The Pedagogy for Continuing Education Through Online Platforms

The impact of the COVID-19 pandemic has resulted in the temporary interruption of academic activities in the university. University students are in an unpredictable situation. Online learning and continuing education have become a dilemma for this unprecedented universal epidemic, despite the challenges posed to both educators and learners. Online learning has the opportunity to change the education system by increasing educational opportunities and encouraging the development of new pedagogical methods, making the learning activity more reliable, effective, and less stressful for the two teachers and students.

The shift from traditional learning to online learning is a totally different experience for the learners and the teachers which they must adapt and adjust to with no other solutions available. The educational system and the teachers have adopted "Education in Emergency" by the use of many online platforms and are obliged to adopt a system that they are not familiar with and not prepared for.

The imposition of the shutdown has increased the use of technology in the education sector. Students are being taught through the online mode of delivery using

either online or recorded classes. E-learning tools have played a pivotal role during the closure of universities and schools by facilitating student learning (Subedi et al., 2020)

# 1.5.2.2. Student Readiness Towards Online Learning During The COVID-19 Pandemic

Since the beginning of the COVID-19 pandemic, educational institutions in almost all countries have transmitted their learning and teaching activities from a physical mode to the online one. Accordingly, researchers have been working to understand and control the factors that could affect the readiness of students towards this new mode of delivery. Du et al. (2020, p.10) conducted a study to establish the aspects that can affect students' readiness towards online learning during the COVID-19 epidemic and they found that four aspects can impact their level of readiness:

- A) Basic preparedness and motivation for online learning course
- B) Self-awareness about online learning,
- C) Self-directed online learning
- D) Support for online learning.

However, Readiness in adopting online learning is related to capability to learn, preparation of the online learning experience, device and connectivity, self-efficacy, and previous experience with technology. Furthermore, the readiness of students and teachers towards online learning can be determined through their capability to access and utilize technology, their e-learning self-efficacy, self-reliance in completing a given task, and their skills for applying e-learning.

Students with positive aspects of online learning tended to be ready for this approach whereas students with strong desires for traditional face-to-face learning tended to be less excited and ready for the approach (Lui;2013, p.95). Many students may not be ready to learn through online learning because they still relied on teachers' guidance while others are able to promote self-directed learning.

### 1.6. Teacher-Student Interactions in Online Learning

Online learning becomes a new worldwide trend of education. It has emerged as a result of the combination between education and the internet to provide people with the opportunity to gain new skills.

Online learning applies modern technologies to promote the processes of teaching, learning, and communication between participants in education. This form of education can widely provide education and extend it to anyone teachers, students and parents. It ensures a creative atmosphere and a suitable environment to present new ideas and up-to-date information that represents the learners' interest.

In normal circumstances, the typical role of students is mainly to receive education; online learning requires students to take on various roles, to a certain extent, to those expected of them in traditional learning. However, the teachers' major roles are guiding students by supporting and managing their learning process and on planning and designing the content and coming up with a suitable strategy for an effective teaching process. There are three main types of interaction within online education. These three types of interaction were introduced as learner-content interaction, learner-instructor interaction, and learner-learner interaction.

### 1.6.1. Teachers' Role

Many teachers assert that online learning technologies change the role of the educator into a deliverer of corporate values and objectives. The role of the teacher in the technological era is not a new matter in the sector of rhetoric and composition. An online teacher needs to play the role of a guide to conduct students through many online learning experiences that have been designed and planned long before the course starts. Studying online can make learners feel isolating and discouraging. Thus, an effective online teacher needs to make more efforts to motivate and encourage learners by providing constructive feedback and by finding feasible ways to promote positive messages along with the required criticism. Most importantly, teachers need to help learners develop a high level of confidence by being good role models. For instance, online teaching techniques can change often so online teachers need to be good lifelong learners. In addition, in an online learning environment,

teacher-to-student and student-to-teacher communication play a key role. Effective communication between the participants helps in building an engaging community of the online classroom.

### 1.6.2. Students' Role

Online learning has made the learning process easier and uncomplicated. In distance education, the most important role of students is to learn. In that process, the student has various and multiple roles according to the traditional learning process. As the students take courses at home alone, learning, in this case, is more private and varied in terms of schedule and time they are associated with. The student needs to prepare a daily schedule to start learning and to set a fixed time for daily studies. A student should choose a suitable, calm, and comfortable place in order to decrease interruption from the environment and increase learning. Besides, verbal teacher-student interactions play a significant role in student learning and motivation i.e. Students should keep constant communication with the teacher.

### 1.7. ICT and E-learning

Information and communication technologies play a key role in the future development of higher education Institutional and represents a catalyst for innovation, quality and excellence in the sector. At the national level, Integrating ICT with e-learning to promote innovation and quality in higher education should be a priority for all participating institutions. An overall strategy should be developed at the university level, focusing on the integration of ICT for e-learning. Technical literature is one of the skills required in today's knowledge-based society and ICT and e-learning have a significant impact on educational processes and systems, research and learning programmes, especially in the University. ICT strategies and investments clearly benefit higher education institutions, even if ICT does not replace classroom-based learning or teaching methods.

For successful and effective use to improve teaching quality through ICT, policy makers need to be aware of this development Technology may have the greatest value education system, where it must: Policy environment and frameworks

to support the integration of ICT in education at the national level system. ICT can provide better access for different target learners and has become a rich tool Teaching experience, especially for remote teachers and learners who are separated in time and space. Universities have to face the difficulties of increasing access to higher education and improve the quality of higher education against the stark reality of reducing resources.

### 1.8. Barriers in Online Learning

While the benefits and relevance of distance learning, such as increased flexibility, mobility and affordability, are equally easy to spot, it is important to recognize the potential challenges distance learning poses to students. E-learning at all ages must overcome barriers unique to virtual education, such as Asynchronous communication and ubiquitous opportunities for time-wasting distractions. E-learning learners also face challenges that, while often present in traditional classrooms, can be amplified in virtual environments, such as delayed or unclear feedback from teachers. The educator needs to understand the challenges students face in online education and help implement effective solutions. While e-learning can present certain difficulties for students, it also creates exciting educational opportunities.

### 1.8.1. Personal Barriers

Many posts and topics discussed personal barriers to distance learning activities and barriers related to distance learning activities during the COVID-19 outbreak. The theme includes four sub-Problems: (1) lack of training and qualifications, (2) lack of technology Expertise, (3) inadequate communication with professionals, and (4) lack of effective planning and time management. Parents seem to have many perceived personal barriers that Affect the standard and quality of online learning for children Experience. It is obvious that parents lack their own education Technology and materials for dealing with distance learning. Besides, Not all parents can handle the Technology required for removal Learn what prevents them from being productive at home. In the end, parents resolve their own eligibility. Less educated parents feel unable to support their children in certain subjects and the use

of necessary technology. Moreover, in a face-to-face setting, communication is immediate, making it easy for students to get answers and clarify ambiguities. In an e-learning environment, communication is asynchronous, which means there is a gap between teachers and students. In addition, Time management is associated with better academic performance and less student anxiety. Unfortunately, many students struggle to find a balance between study and everyday life. Besides, Inefficient time management creates many results such as "poor sleep patterns" and "increased stress levels". Effective time management can be difficult in a distance learning environment, and students are challenged to set their own pace without peer support.

### **1.8.2. Technical Barriers**

Many students do not have strong internet connections required for online classes, so they can not catch up with their virtual classmates; their monitors are weak, they struggle to follow the course management system, and their learning experience becomes a problem. Also, most of them live off-campus, making it difficult to keep up with the technical requirements of their chosen major. Some students do not even have a computer, and instead turn to the Learning Resource Center for technical support. The only way to fix this is to know exactly what kind of technological support they need before they enroll in a particular course, and to properly equip themselves to successfully complete the course. Many students feel that they are falling behind in online and digital education because of the wi-fi lag. They find themselves in challenging and stressful situations and have scary thoughts that their grades can suffer greatly and affect their overall grades. It is clear that online learning is not a good substitute for in-person classes. Lagging Wi-Fi means losing blocks of conversation when the internet freezes. Since virtual learning environments are not the same as sitting in a classroom and exchanging notes with classmates, the lack of high-speed internet is a concern for students.

### 1.8.3. Logistical Barriers

Students face many logistical barriers when starting the use of the online platforms. Logistical barriers are categorized into three main sub-barriers: (1). difficulties in using distance learning and inadequate student preparation. (2) dissatisfaction with the new online mode. (3) inability of online mode to meet

student's needs. Many students lack the computer literacy and the skills needed to study through distance learning and are unhappy with the online learning. Whether students are surfing the web or picking up paper packs, ensuring the accessibility of materials can be a major challenge. If students are not familiar with the system used, they may avoid it. It takes time to establish norms and practices with new systems especially when it comes to technology. It is hard to measure engagement when both student and teacher still learning how a new system works.

In some cases, content presented in a new way prevents learners from accessing it. For example, students who have difficulty processing auditory information may experience difficulty in video lessons. Students who need more visual support may encounter extensive textual instructions and materials. English language learners can have difficulty accessing content without the support they typically get in your brick-and-mortar classroom.

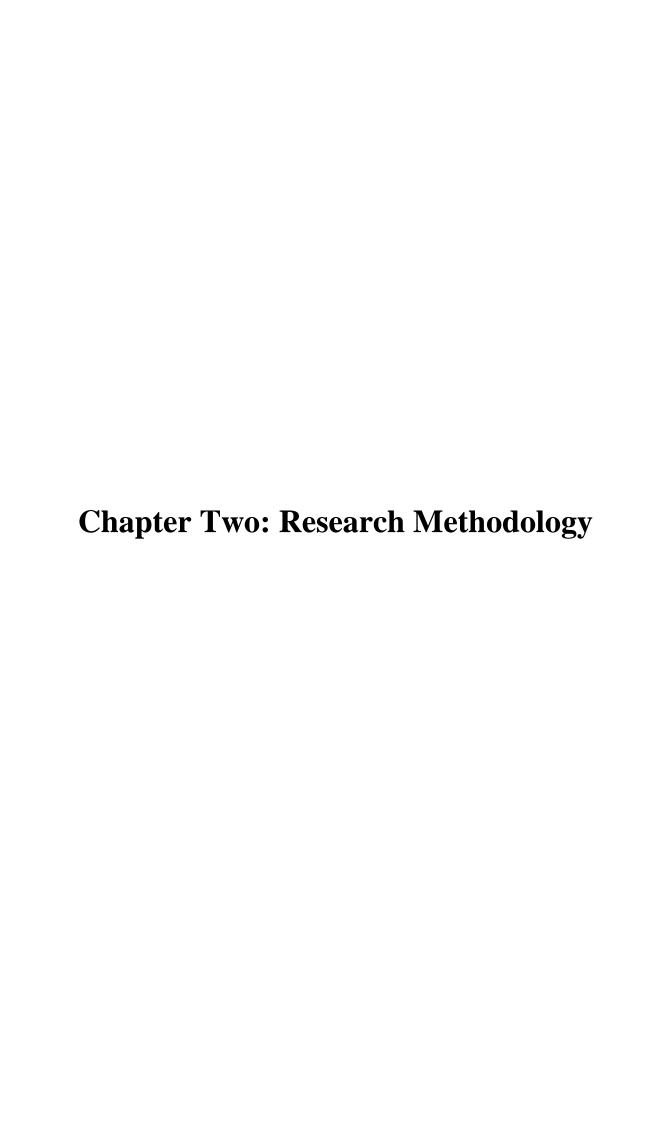
### 1.8.4 Financial barriers

All financial issues are divided into two subtopics: (1) inability to buy technology and (2) inability to pay for internet service. It is very difficult to pay for an expensive laptop and technologies required for effective distance learning. Also, some posts draw attention to the fact that the Internet is not Free and data usage is not unlimited. In other words, parents have to pay for the internet and when their children need to spend more time on the internet for learning purposes, this requires more money. Many lectures and Tasks in various disciplines require high-quality internet Connections or large amounts of data, both of which increase costs Online distance learning.

### 1.9. Conclusion

The closure of educational institutions due to the Covid 19 pandemic caused unplanned shift from traditional to online learning. The COVID-19 pandemic has and will continue to affect the transfer of knowledge and skills at all levels of education. Although many children and adult learners may make up for this disruption of traditional educational products and adapt to new ways. To sum up, it is clear that

the widespread use of e-learning at the university level is seen as a long-term strategy for Algeria.



## **Chapter Two: Research Methodology**

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### 2.1. Introduction

Various methodological tools are used to obtain the necessary data in order to conduct a comprehensive study of the subject. This chapter represents the practical phase of the current research effort, giving meaning to the theoretical concepts introduced in the previous chapter and putting them into practice. It also includes a description of the research tools used. For this reason, this practical part focuses on the different research methods used, such as: study design, sample population, instruments involved, and qualitative and quantitative analysis of the results, discussion of the main results and suggestions and recommendations.

### 2.2. The Aim of Research

The major aim of this research work is to investigate the impact of the COVID-19 on the Algerian educational system. As well as to analyse the difficulties and challenges that face learners and teachers while using E-learning to complete their institutional activities and principally to investigate the students' attitudes towards ICT technologies. To reach this aim, a questionnaire was designed and implemented to Master 1 students of the University of Tlemcen to conduct the study on, more precisely the Department of English in the academic year of 2021/2022. and an interview to teachers at the same university. The purpose behind the questionnaire was to highlight all the difficulties that students face while studying online and their attitudes while dealing with ICT technologies. In addition, an interview was designed to the teachers at the Department of English. Teachers were asked about the impacts of the pandemic and its effect on their own teaching as well as the difficulties they faced while delivering the course online. The results obtained were analysed quantitatively and qualitatively.

### 2.3. Research Methodology

A research methodology is an outline of how a particular study will be conducted. It defines techniques or procedures for identifying and analyzing information relevant to a particular research topic. Therefore, research methods are related to how researchers design their studies to obtain valid and reliable results and achieve their research goals.

Research design refers to an overall strategy that can be chosen to integrate the different components of a study in a coherent and logical manner. This is done to ensure that research questions are addressed effectively. A study design represents a blueprint or roadmap for collecting, measuring, and analyzing data. Muyembe (2019, p.78) pinpoints that:

Research design always determines the kinds of analysis that are to be done so as to get the desire results. It articulates what data is required, what methods are going to be used to collect and analyze the data and how it is going to answer the research questions

Research design is a comprehensive framework that explains how research is conducted from start to finish. Exploratory research is used to generate possible explanations by generate ideas and insights. Descriptive research designed for The problem and its solution, it helps to study the problem or scenario. An experimental research design is a more focused and targeted investigation designed to do this Establish a causal relationship. Usually, it takes the form of an experiment. Questions in the study prompted researcher to choose exploratory research design. The main goal is to provide insights and understanding and develop hypothesis, it is more focused and targeted investigations

Any research needs to study certain methods and stick to certain methods. In this part of the work, researcher relies on the use of case studies as an appropriate method to obtain valid information. Case studies are suitable for examining specific situations and can provide insight into specific phenomena. A case study is defined as "an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident" Yin (1994, p. 13). The researcher has developed two questions which have controlled this research. These research questions revolve around the impact of the CORONAVIRUS on the Algerian educational system. Furthermore, for this case study, data were collected from different sources using a mixed methods

paradigm. Both quantitative and qualitative methods were used to deepen the results. The following sections are dedicated to describing the different tools used in this case study.

### 2.4. The Research Instruments

As mentioned before, the purpose of this study was to examine valid data on the shift to online learning which can only be achieved through a case study. Various research tools can be used to collect data. The practical aspects of this research will be carried out through the use of two valuable tools: questionnaires and interview.

### 2.4.1. Questionnaire

In order to collect various information about people's knowledge and beliefs, a very obvious way is asking. A questionnaire is a data collection tool with multiple advantages. It is useful for gathering a lot of information in a short period of time. Brown (2001, p.6) explains that "A questionnaire is a written tool that asks a respondent a series of questions or statements they should answer by writing down their answers or Select from existing answers". Referring to questionnaire as a "document that is filled out in writing (or electronically) by the informant". (Wray& Bloomer, 2006, p.152).

In this sense, the questionnaire includes three types of questions, namely: close ended, multiple-choice and open-ended questions. About the first type Questions require respondents to select the appropriate option that meets their interests. For example:

Did you have enough technical training and support to start studying online?

Yes No

As for the second type of questions, it requires from the respondents to choose the appropriate option that meets their interest.

Which virtual learning tools do you use?

University platforms/ Online classes/ Educational websites/ YouTube videos/ PDF lectures.

The third type of question asks participants to state their point of view regarding the issue raised in the question.

What are the common problems associated to online learning?

Questionnaires can and do collect qualitative and quantitative data suitable for a range of research questions, including those requiring multiple types of questions information. This research instrument was designed for students because it makes it easy for the researcher as a tool for data collection while dealing with a considerable number of students. Its purpose was to have an idea about the situation in question and collect both qualitative and quantitative decent data for researcher to conduct this research.

### 2.4.1. Interview

In fact, researchers should not be satisfied with any research work by Using only one research tool, because one cross-check tool is not enough, and provides reliable data on all topics of interest. The interview is another research tool that allows researchers to collect data. A job interview, as the name suggests, is a face-to-face verbal conversation between researchers and participants, with the aim of discussing and obtaining different views on the respective subject. "Interviews" involve researchers orally present questions to informants and record answers written notes or audio recordings for later transcription and analysis. Interviews vary in clarity and structure from very open to very structured interviews.

To this point, interviews embody at least one type, including structured interviews. For this type, it takes the form of a questionnaire, i.e. asking respondents answered the same questions using the same wording. So Follow the format of the questionnaire but take it orally. in the structured Interview, the results are easy to analyze because the questions are the same respondents were not asked to add additional information. Another type is unstructured interview, it is a non-directive interview in which questions are not prearranged.

### 2.5. Sampling

Sampling is considered as a fundamental procedure in research as it acts as a source for gathering information from the target population. There are various types of sampling that can be recognised and selected according to the purpose of the case studied. Bhardwaj (2019, p.168) defines sampling as a procedure to select a sample from individual or from a large group of population for certain kind of research purpose.

# 2.5.1. Students' profile Section One: Students' Profile

The researchers selected a sample of Master 1 students from the English department to conduct her research.

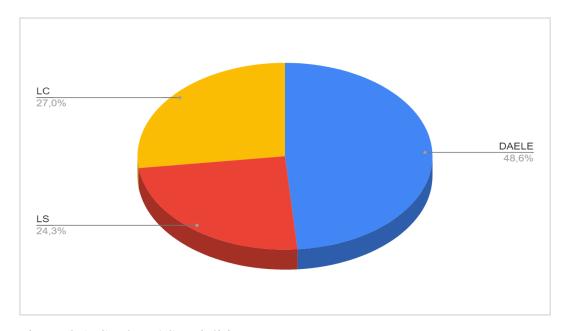


Figure 2.1: Students' Specialities.

This sample population has a variety of ages as it is shown below.

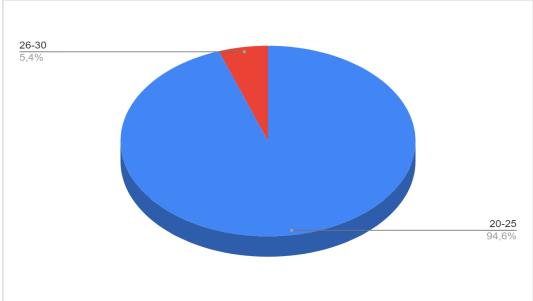


Figure 2.2: Students' Ages.

The population consists of 34 female and 3 male students of various ages.

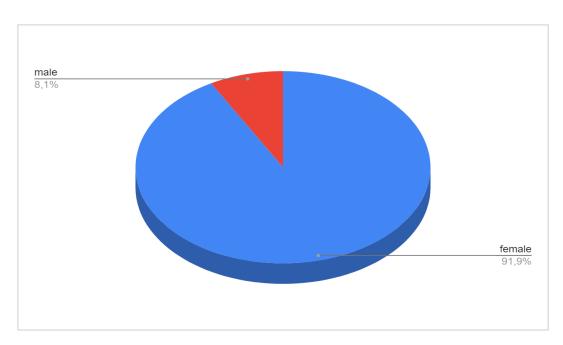


Figure 2.3: Students ' Gender

The following graphic shows that the students lives in different places, (2.7 %) belong to rural areas whereas (48.6%) live in urban areas and (48.6%) come from sub-urban areas.

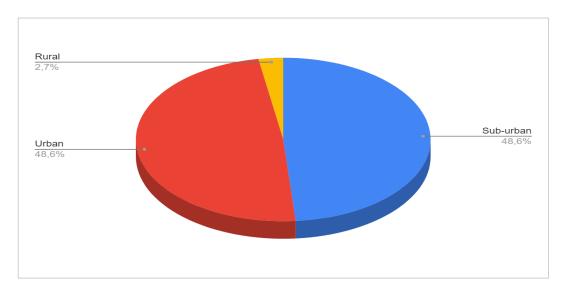


Figure 2.4: Students' Place of Living

## 2.5.2. Teachers ' Profile

In this research work, the researcher also selected in addition to thirty seven students, three teachers from the department of English from the three specialties that can be found in Master level of the Department (language Sciences "LS", literature and Civilization "LC" and Didactics "DAELE"). Their experience of teaching English varies. During their teaching experience they taught different modules: Linguistics, Grammar, Phonetics, Oral production and written expression. Two teachers have the grade of doctors and one of them is a professor.

#### 2.6. Data Analysis

To obtain the purpose of this work and to reach the desired conclusion, a process of data analysis is to be used. The data obtained from the learners' questionnaire and teachers' interview will be analyzed and discussed qualitatively and quantitatively.

### 2.6.1. Questionnaire's results

## Section Two: Attitudes Towards ICT TECHNOLOGIES

The first question was designed to know if students were using ICT Technologies in their educational activities before the appearance of the pandemic. The majority 37.8% (14 students) declared that they were using ICT Technologies sometimes, 35.1% (13 students) claimed that they always used the later, 24.3% (9

students) stated that they rarely used ICT's and only 2.7% (1 student) said that she never used the later before.

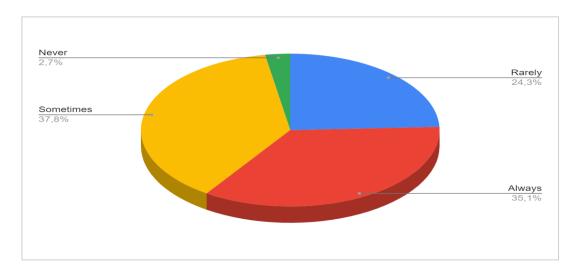


Figure 2.5: The Use of ICT's.

The second question was concerned with the devices students used during online classes. 62.2% (23 students) used their mobile while studying online, 32.4% (12 students) states that used laptops and 2.7% (1 student) used tablet while 2.7% (1 student) used other device.

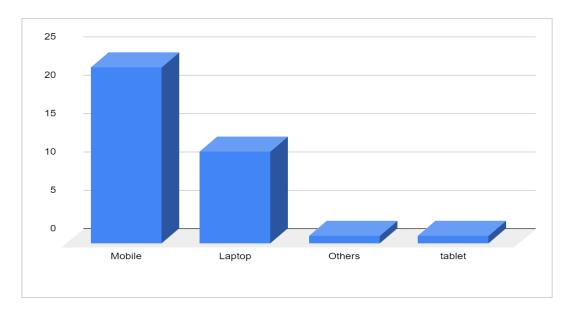


Figure 2.6: Devices Students Used During Online Classes.

The next question attempts to know whether interacting with ICT technologies require more mental effort. The majority 66.7% (24 students) answer yes while the

minority 33.3% (12 students) found that interacting with the later does not require more mental effort.

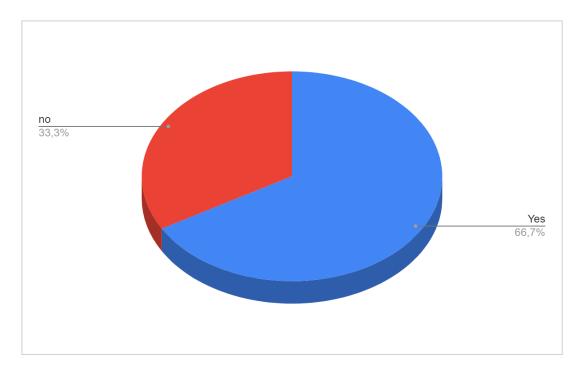


Figure 2.7: ICT Technologies and Mental Efforts.

For the sake of knowing what virtual learning students use, this question was asked. The findings reveal that 24% (9 students) selected PDF lectures, 21.3% (8 students) chose university platform whereas 20% (7students) selected YouTube videos while 18.7% (6 students) used educational websites and only 16% (5students) used online classes.

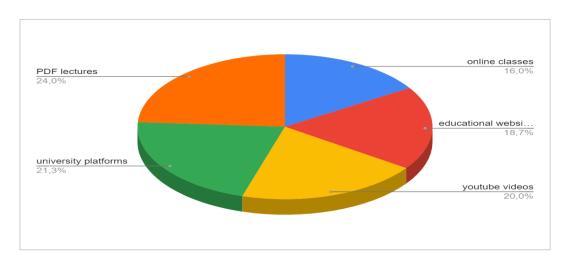


Figure 2.8: Virtual Learning Tools Used By Students.

The next question attempts to know whether students had enough technical training and support to start studying online. The result shows that the majority (21 students) had some technical problems while dealing with the online classes and answered no while the others (16 students) had enough technical training and support to study online and answered yes.

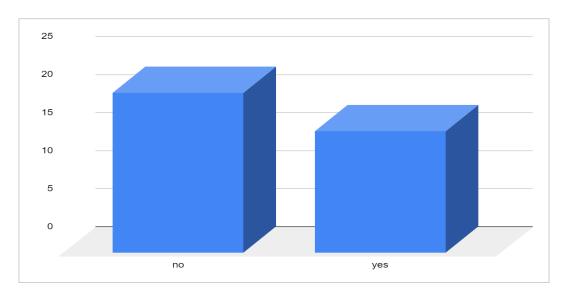


Figure 2.9: Students' Technical Training and Support.

The next question in the questionnaire was devoted to detect which way of learning students prefer. The findings show that majority of students (26 students) 70.3% prefer the traditional way of learning whereas (11 students) 29.7% prefer the old way of learning.

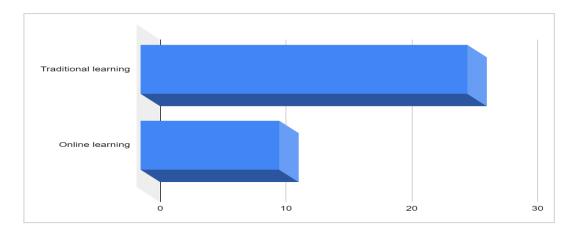


Figure 2.10: Learner's Preferable Way of Learning.

The last question in the second section tried to figure out whether students were satisfied or dissatisfied with the online learning. The following figure will show the result:

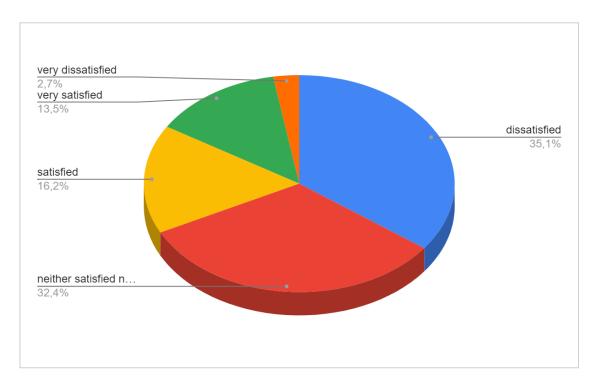


Figure 2.11: Students' Satisfaction.

As it is shown from the graph, 13.5% (5 students) were very satisfied while 16.2% (6 students) were satisfied and 32.4% were neutral i.e., 12 students were neither satisfied nor unsatisfied. the figure also shows that 35.1% (13students) were dissatisfied whereas 2.7% (1 student) was very dissatisfied.

### **Section Three: The Difficulties**

The first question in the third section aims to understand if 1h 30min was enough for students to learn through online classes. The results show that 20 students (54.1%) consider this time is not enough for better understanding. In the other hand 1h 30 min was enough for 17 students (45.9%) to complete their learning activity.

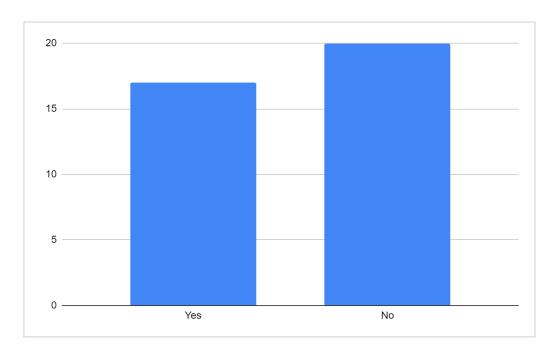


Figure 2.12: The Time Involved to Learn.

In the second question, the researcher intends to learn about the net quality. As it is shown below 37.8% (14 students) declared that the quality of the later was poor, 29.7% (11 students) found it fair, 27% (10 students) said it was good and the others found it excellent (5.4% of students).

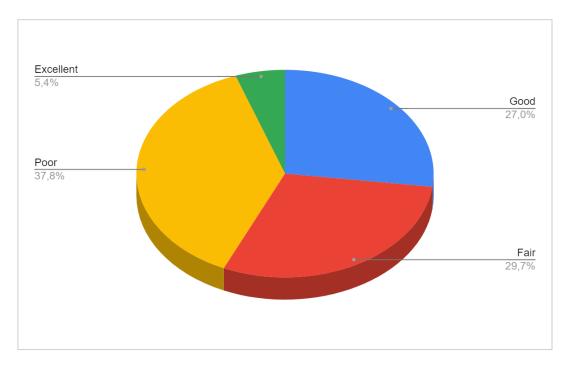


Figure 2.13: Internet Quality.

The third question, aims to understand whether student faced distraction from their family members while studying. the result is shown in the following graphic:

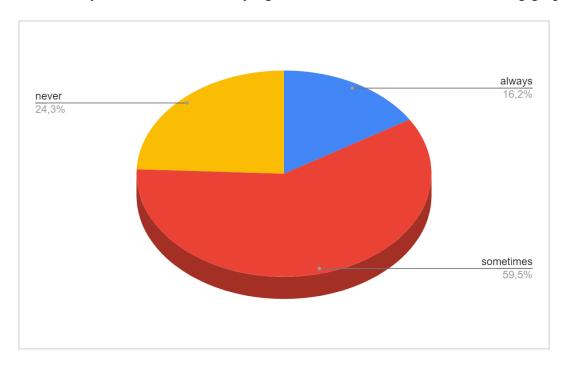


Figure 2.14: Distraction from The Family Members.

59.5% (22 students) declared that they had distraction from their family members sometimes, 24.3% (9 students) said they never face from the later while 16.2% (6 students) always face distractions.

The following question attempts to know if students had enough materials to start online classes. As it shown in the graphic, 67.6% (25 students) said yes while 32.4% (12 students) answer with no.

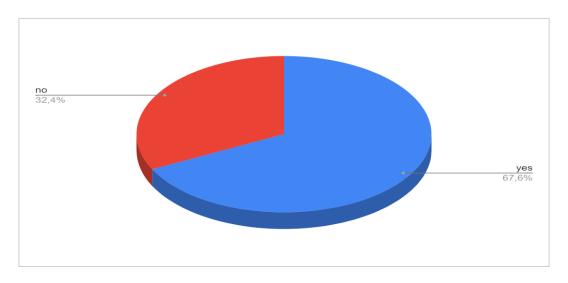


Figure 2.15: Students' Technical Materials.

The last sub-question in the third section was addressed to know what problems and barriers students' faced during their online classes. The majority said that they suffer from the internet accessibility, poor connection, Technical problems of sound and accessibility of technology besides the lack of training. Others suffer from their teachers' unfamiliarity with ICT's as well as the lack of interaction with their teachers.

# section four: lacks

This question aims to analyze what hinder students from learning online. The following bar-graph shows that 86.5% (32students) had problems with lack of technology while 13.5% (5 students) had no problem with lack of technology. Additionally shows that 75.7% (28 students) lack technical support and respond with yes whereas 24.3% (9 students) answered with no. The third bar is related to the lack of internet access and services. The figure shows that 91.9% (34 students) answered with yes while 8.1% (3 students) said no. Also, The fourth bar shows that 64.9% (24 students) lacked motivation and 35.1% (13 students did not. In the next part, it appears that 75.7%(28 students) said yes to lack of communication between teachers and students while 24.3% (9 students) answered with no. This figure also shows that 54.1% (20students) said yes to lack of effective subject matter content whereas 45.9% (17 students) answered with no.

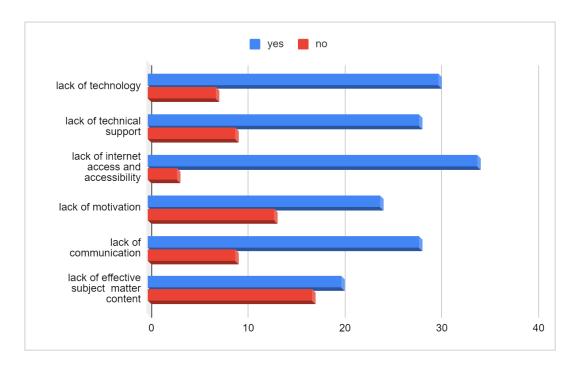


Figure 2.16: lacks.

#### 2.6.2. Interview Results

At the beginning of the interview teachers were asked about the serious impacts of the COVID-19 on the educational system. The 1<sup>st</sup> teacher said that the main impact of the later is that students became passive. The 2<sup>nd</sup> teacher said that she never expected a situation like that but she believed that we can always find positiveness even in darkness. The 3<sup>rd</sup> teacher said the later had affected the educational system and it caused a closure in all educational levels for several months. She believed that it compelled faculty members, teachers, students, pupils into a novel and challenging teaching/learning situation that they have not experienced before.

In the next question, the interviewees were questioned on how the pandemic is affecting the approach of educational institutions. The 1<sup>st</sup> teacher said that working online is new way and believed that face to face teaching is better. The 2<sup>nd</sup> teacher said that the later is affecting in a way that the educational institutions found themselves obliged to change their way of teaching. The 3<sup>rd</sup> teacher mentioned that it has affected educational institutions in a way that resulted in good and poor deals and skills on faculty members, teachers and students. These can involve: learning to manage teaching schedule and planning exams in difficult situations; having non

trusty excuses with internet connectivity and distance when in online teaching and insite-learning respectively; getting to learn more computer skills than before, building automous learning inside and outside the classroom because of time constraints, tending to learner-centred approaches than to teacher-centred approaches in teaching.

The third question was about the major changes that can arise in the educational system. The 1<sup>st</sup> teacher said that changes should happen in the way of teaching as well as evaluating and testing. The 2<sup>nd</sup> teacher said that changes should happen at the level of ICT's. The 3<sup>rd</sup> teacher said that changes can happen through providing teacher and student training programmes to online learning as well as funding and providing students and teachers' with professional internet connectivity and technology tools for online learning. Also, through thinking of ways that would help both teachers and students reduce their stress and anxiety rate and not to focus on finishing the programme and dealing with exams.

In the next question, the interviewees were questioned about the major obstacles teachers face during the shift to online learning. The 1<sup>st</sup> teacher said that the majority of teachers are not accustomed to this way of teaching and are not trained. The 2<sup>nd</sup> teacher said that she face problems with internet connection and the absence rate among students. The 3<sup>rd</sup> teacher stated that she faced problems with unstable internet connectivity and lack of training.

The 1<sup>st</sup> teacher said that the online mode was adapted by obligation. The 2<sup>nd</sup> teacher believed that higher education adapt the new mode by introducing new tools. The 3<sup>rd</sup> teacher said it was adapted at all of a sudden with no prior training.

The last question was about the effects of the online mode on their teaching. The 1<sup>st</sup> teacher said that even that she masters the use of Teams but it affected her teaching since students became passive and refuse to attend online lectures. The 2<sup>nd</sup> teacher said that teacher should adapt themselves to a new situation then new ways of teaching. The 3<sup>rd</sup> teacher said that the online mode reduced teachers' input to students.

# 2.7. Discussions and Summary of the Main Results

Regarding the first research question, the researcher assumes that the closure of educational institutions due to ongoing COVID-19 Pandemic causes unplanned shift from traditional to online learning and also expands the use of ICT's. The finding obtained from questions 5, 6,7,810 and 11 of the student's questionnaire and questions 2,5 and 6 of the teachers' interview prove the validity of the first research question and show that the COVID-19 has affected the learning/teaching process since it caused an unplanned shift from face-to-face learning to the new online mode as well as it raised the use of ICT's. The findings do confirm the first hypothesis since many students were using ICT's from time to time unlike the case when the pandemic make it compulsory. Additionally, most of them were using their mobiles to complete learning activities through PDF lectures and university platforms in most of the time for the reason that teachers deliver their courses in a PDF form in the university website to make it easier for students to reach their courses. Yet, many students prefer the traditional learning method and were dissatisfied with the new method since faceto-face classes help them interact with their colleagues, be more disciplined, and to stick to a regular schedule. Face-to-face classes allow students to share their views directly with the teacher as well as to answer immediately on questions. Furthermore, this sudden shift was unfamiliar for teachers too and they were very confused while facing this new situation since a lot of them have no enough technical skills, knowledge and training to start using ICT's and virtual learning tools. Many teachers were unprepared for such a situation, they had no previous training or knowledge to manage and control an online class.

Concerning the second research question, the researcher also assumes that adopting the new learning method resulted in many barriers. The results obtained from questions 9, 12, 13, 14, 15 and 16 from the students' questionnaire and question 1, 2, 3 and 4 from the teachers' interview approve the validity of the second research question and confirm the effectiveness of the second hypothesis. The results show that the major obstacles students have face in online learning during the crisis are with the internet accessibility since many of them lives in sub-urban areas. Eventhough Internet service is becoming increasingly common in all areas, it differs

in the speed from one area to another and then it becomes very challenging for students to follow with their teachers. In addition, many students consider 1h30min not enough for an online course because they spend most of the time trying to fix technical issues like the sound, internet disconnection and also to stop distraction; this point proves that they do not have enough technical training to take an online class. In addition, all instructors agree that the outbreak had affected their teaching. The result obtained from the last question from students' questionnaire indicates that participants' perceptions of online learning tend to be mostly negative as a result of various factors such as lack of technology, lack of technical support, lack of motivation, lack of interaction between students and teachers and lack of effective subject matter content. Besides, all the previous factors had major impact on participants' levels of engagement in online learning.

# 2.8. Suggestions and Recommendations

The spread of the virus has forced the government to close all universities and schools. Later, the administration has launched a new method (online learning) to ensure the continuity of the academic year. Online courses were among the solutions to replace face-to-face courses. For the sake of teaching in an online learning environment, both teachers and students need to have certain additional competencies unlike in traditional learning environment. The ministry of education should put more focus on students and teachers' ICT competencies to face any unprecedented situation like the current one; the administration should rise the coefficient of the ICT module to be more than 1 to get the desired concentration and to provide teachers with certain training programmes to online learning. Furthermore, The government must consider an adequate budget for all universities Learning for infrastructure development and promoting its ICT facilities and other learning opportunities management system.

Moreover, because teacher illiteracy and lack of experience was identified as a major factor, it is recommended that the ministry of education enhances their abilities by devising regular training programs. These training sessions should be oriented

towards: 1. Professional courses Enable educators to acquire sufficient knowledge and platform and 2. pedagogy courses that allow them to conduct online courses and assess learners in a modern way. These processes can be adopted by developed countries Practice it.

Besides, Schools need to organize workshops and seminars to familiarize the learners with how to use digital platforms in a healthy manner without distractions. There is a lot of information online and students might lose track while doing all their learning activities from their devices. Therefore, a lot of training is required to beat the challenges that come with internet use such as privacy issues, manipulation, bullying, among others.

The government should also provide students and teachers with professional internet connectivity, students during online classes face many problems like disconnection issues, very low internet speed and lack of internet coverage. Also, government should improve internet connections to avoid these internet connection problems. All students, from big city students to small villages should be provided with the required internet access with the least possible interruption. Some students and teachers lack electronic devices to access teaching materials. Therefore students must be provided with digital devices such as tablets and laptops or find cheaper sources from companies like Huawei and Samsung.

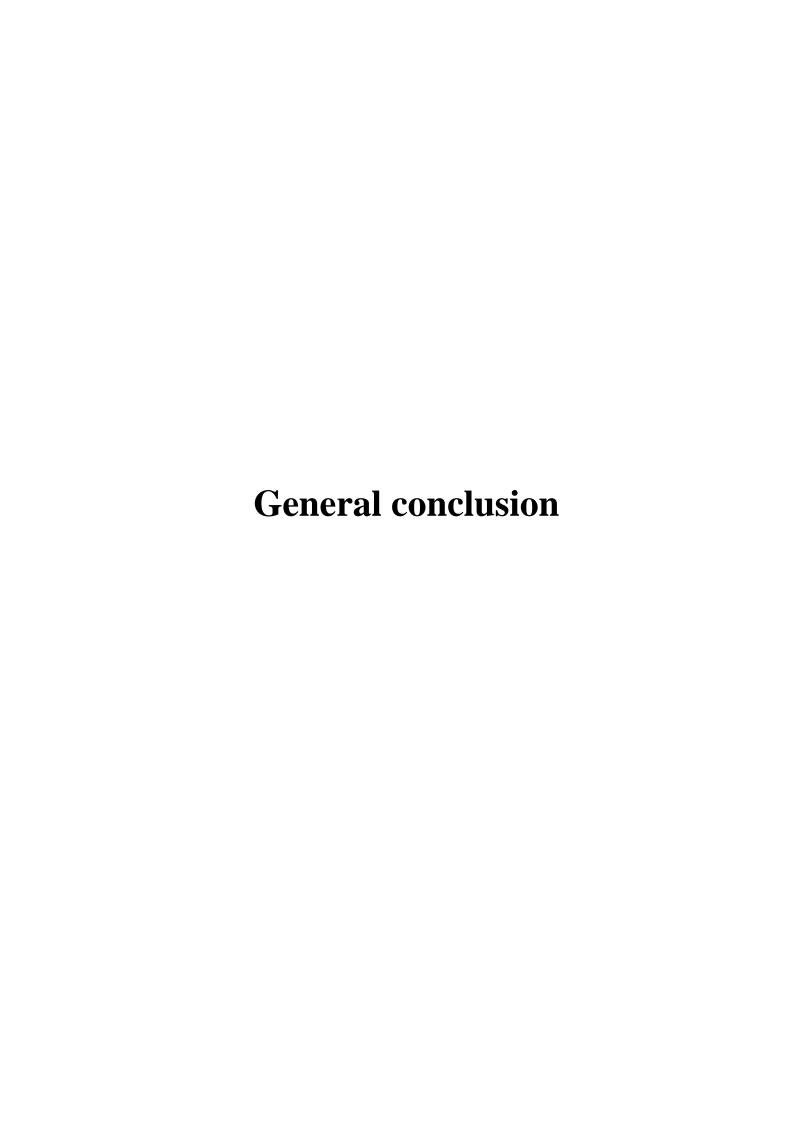
Education systems can also aim to strengthen the communication and the interaction between students and teachers through certain activities for the sake of increasing students' level of engagement and motivation.

#### 2.9. Conclusion

This research work investigates the impact of the CORONA virus on the Algerian educational system. The chapter starts with the aims of the research paper and a description of the sample and the research instruments used. The beginning of this chapter represents the students' questionnaire and teachers' interview tool by

which the research has been carried. Then a representation of the findings along with a complete, detailed analysis illustrated with graphics.

To sum up, the whole findings of this research represent how the Algerian universities were negatively affected by the pandemic and what problems students and teachers have faced. The second chapter also consists of a number of recommendations for further research.



### **General Conclusion**

The core of this research is to shed light on the serious impact of the COVID-19 and its effects on the educational system. It has identified the impact of the outbreak issue of the educational system and approaches of universities for offering learning through other mediums. It aims to cover all the barriers students faced from the beginning of the implementation of the new approach (online learning).

The main intention of the first research question 'how did the outbreak affect the educational system?' is to show that the closure of the educational institutions due to the COVID-19 pandemic causes an unprecedented shift to the new approach (online learning). This shift expanded the use of ICT's and affect many aspects of educational practice.

Concerning the second research question 'does adopting the new method arise challenges and difficulties for the students and teachers?' its aim was to discuss the main challenges both students and teachers faced during this unplanned shift. It shows how they could not adopt the new mode due to many reasons.

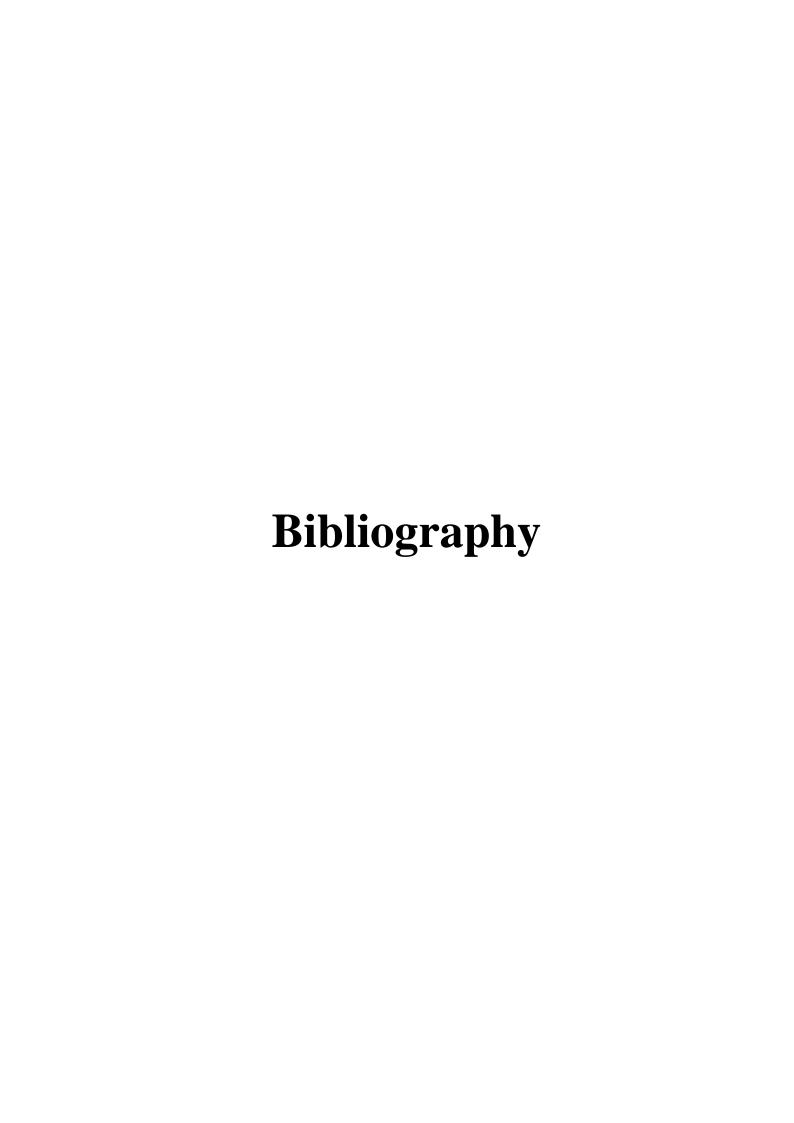
In the first chapter, the researcher defined the term online learning and some various concepts related to the later as well as the traditional method (face-to-face learning). The researcher also gave a brief definition of the new concept the COVID-19 and this includes a brief background and the appearance of the first case in Algeria. The first chapter also includes the impact of the pandemic on education and its effects. In this concern the researcher discussed educational settings closure, the rise of online learning, pedagogy for continuing education through online platforms, student's readiness towards online learning, teachers and students' interaction as well as teacher and students' role in online education. The first chapter dealt with the role of ICT in E-learning. At the end, it dealt with the major obstacles and barriers that students could face.

In the practical part, a combination of qualitative and quantitative data was used in order to reach the results assumed from the researchers' hypotheses. This included a students' questionnaire and a teachers' interview which revealed the following findings:

- 1. The findings show that students' perception to online learning seems to be negative because of various factors that could be marked as weaknesses of the new method. Besides, students still prefer the offline learning over online learning because in the later they had to have a very good internet connection and more technical support offered from university to deal with the new apps (such as TEAMS) used in studying through online. They also need a better interaction with their teachers to be more motivated to learn. The finding also confirmed that this shift increased the use of ICT's among students and teachers. These findings confirm the validity of the researchers' first hypotheses.
- 2. Concerning the second finding, it was revealed from students' questionnaire and teachers' interview that both faced many problem while dealing with the online approach and these findings confirm the second hypotheses.

Based on the findings of this research, the researcher provided some suggestions to improve the implementation of online learning and to decrease the number of problems that students suffer from.

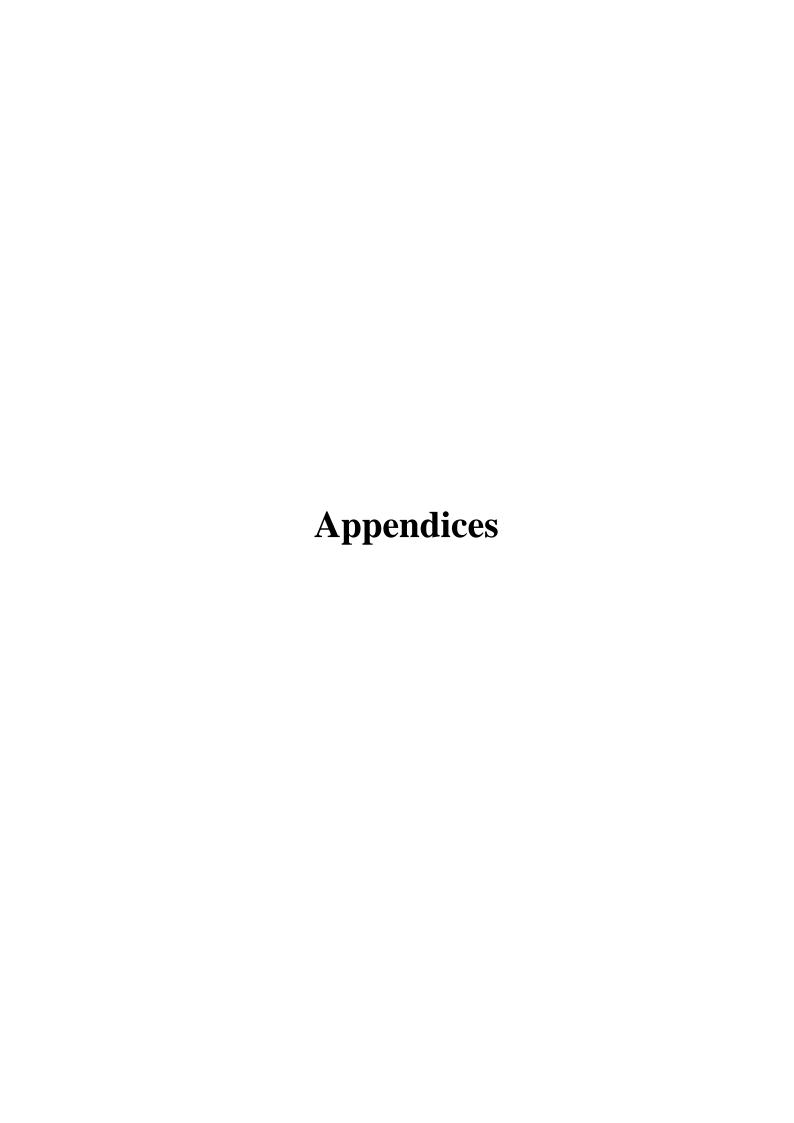
Finally, this research work may open the door for further researches that may be handled in different ways and tackled from different angles and may conduct other new suggestions in attempts to limit the difficulties of online learning.



- Abuhammad, S. (2020). Barriers to distance learning during the COVID-19 outbreak: A qualitative review from parents' perspective. Heliyon, 6(11). https://doi.org/10.1016/j.heliyon.2020.e05482
- BARAJAS, M. (2000). Implementing virtual learning environments: Looking for holistic approach. Educational Technology & Society3(3) 2000 ISSN 1436-4522.
- Bhardwaj, P. (2019). Types of sampling in research. Journal of the Practice of Cardiovascular Sciences, 5(3), 157. https://doi.org/10.4103/jpcs.jpcs\_62\_19
- Callo, E. C., & Yazon, A. D. (2020). Exploring the factors influencing the readiness of faculty and students on online teaching and learning as an alternative delivery mode for the new normal. Universal Journal of Educational Research, 8(8), 3509–3518. https://doi.org/10.13189/ujer.2020.080826
- Dašić, J., Dašić, P., & Šerifi, V. (2012). EVOLUTION OF E-LEARNING. 7th International Conference "Quality, Management, Environment, Education, Engineering".
- Dignan, L. (2020, March 22). Online learning gets its moment due to COVID19 pandemic: Here's how education will change. Retrieved May 31, 2020, from ZNnet Between the Lines: <a href="https://www.zdnet.com/article/online-learning-getsits-moment-due-to-covid-19-pandemic-heres-how-education-will-change/">https://www.zdnet.com/article/online-learning-getsits-moment-due-to-covid-19-pandemic-heres-how-education-will-change/</a>
- Du, X., Naji, K. K., Tarlochan, F., Ebead, U., Hasan, M. A., & Al-Ali, A. K. (2020). Engineering students' readiness to transition to emergency online learning in response to COVID-19: Case of Qatar. Eurasia Journal of Mathematics, Science and Technology Education, 16(10). https://doi.org/10.29333/ejmste/8474
- Ellis, R. A., Ginns, P., & Piggott, L. (2009). E-learning in higher education: Some key aspects and their relationship to approaches to study. Higher

- Education Research & Development, 28(3), 303–318. https://doi.org/10.1080/07294360902839909
- Frutos, M. barajas, & owen, martin. (2020). Implementing Virtual Learning Environments: Looking for Holistic Approach. Educational Technology & Society, 3(3).
- González-Videgaray, M. C. (2014). Evaluación de la reacción de alumnos y docentes en un Modelo Mixto de Aprendizaje Para Educación Superior.
   RELIEVE Revista Electrónica De Investigación y Evaluación Educativa, 13(1). https://doi.org/10.7203/relieve.13.1.4214
- Hashemi, M., Azizinezhad, M., Najafi, V., & Nesari, A. J. (2011). Retracted:
   What is mobile learning? challenges and capabilities. Procedia Social and
   Behavioral Sciences, 30, 2477–2481.
   https://doi.org/10.1016/j.sbspro.2011.10.483
- Kara, M. (2020). Distance education: A systems view of online learning.
   Educational Review, 72(6), 800–800.
   https://doi.org/10.1080/00131911.2020.1766204
- Kaushal, N. (2020). E-LEARNING: MEANING, IMPORTANCE, PRINCIPLES AND RELEVANCE IN HIGHER EDUCATION.
- Kumar Basak, S., Wotto, M., & Bélanger, P. (2018). E-learning, M-learning and D-learning: Conceptual definition and comparative analysis. E-Learning and Digital Media, 15(4), 191–216. https://doi.org/10.1177/2042753018785180
- Liu, J., Zhu, Q., Fan, W., Makamure, J., Zheng, C., & Wang, J. (2020). Online mental health survey in a medical college in China during the COVID-19 Outbreak. Frontiers in Psychiatry, 11. <a href="https://doi.org/10.3389/fpsyt.2020.00459">https://doi.org/10.3389/fpsyt.2020.00459</a>
- Muyembe A, B (2019). Basics of Research Design: A Guide to selecting appropriate research design. International Journal of Contemporary Applied Researches 6, (5), 76-89.

- Nasution, A. K., Surbakti, A. H., Zakaria, R., Wahyuningsih, S. K., & Daulay,
   L. A. (2021). Face to face learning vs blended learning vs online learning
   (student perception of learning). Journal of Physics: Conference Series,
   1783(1), 012112. https://doi.org/10.1088/1742-6596/1783/1/012112
- Pauline Chitra, A., & Antoney Raj, M. (2018). E-learning. Journal of Applied and Advanced Research. https://doi.org/10.21839/jaar.2018.v3is1.158
- Rapanta, C., Botturi, L., Goodyear, P., Guàrdia, L., & Koole, M. (2020).
   Online university teaching during and after the COVID-19 crisis: Refocusing teacher presence and learning activity. Postdigital Science and Education, 2(3), 923–945. https://doi.org/10.1007/s42438-020-00155-y
- Schlosser, L. A. & Simonson, M. (2009). Distance Education: Definition and Glossary of Terms. 3rd Edition. U.S.:Information Age Publishing.
- Subedi, S., nayaju, S., subedi, S., shah, S. kumar, & shah, J. mathias. (2020).
   Impact of E-learning during COVID-19 pandemic among nursing students and teachers of Nepal. International Journal of Science & Healthcare Research., 5(3), 68–76.
- Tang, C. M. (2013). Readiness for blended learning: Understanding attitude of university students. International Journal of Cyber Society and Education, 6(2), 79–100. https://doi.org/10.7903/ijcse.1086
- Terzi, serdal, & ÇELİK, A. (2005). TEACHER-STUDENT INTERACTIONS IN DISTANCE LEARNING. The Turkish Online Journal of Educational Technology, 4(1), 54–55.
- Wray, A. & Bloomer, A. (2006). Projects in Linguistics. A Practical Guide to Researching Language, London: Arnold Hodder.
- Yin, R. K. (1994). Discovering the future of the case study. method in evaluation research. Evaluation Practice, 15(3), 283–290. https://doi.org/10.1177/109821409401500309



# Students' Questionnaire

The COVID-19 pandemic affects all levels of education system. Educational institutions around the world (192 countries) temporarily or partially closed, affecting approximately 1.7 billion students worldwide. This questionnaire aims to find out to what extent the coronavirus affected the Algerian educational system. Filling out the questionnaire bellow should take only 5-10 minutes. I truly appreciate your valuable time and effort in helping me with this research.

<b>Rubric1</b> : stud	lents' profile					
1) Gender: $\square$	male $\square$	female				
2) Age: □ 20-25 □ 26-30 □ 31-more.						
3) Place of settlement : □ urban □ sub-urban □ rural						
<b><u>Rubric2</u></b> : Attitudes toward ICT technologies						
1) Did you use ICT technologies before the covid-19?						
never [	☐ rarely	☐ sometimes [	□ always			
2) which type of ICT technologies do you use while studying online?						
☐ Mobile ☐	□ laptop	$\Box$ others				
3) Does interacting with ICT technologies require more mental effort? Why?						
4) Which virtual learning tools do you use?						
□ online classes	S					
☐ educational websites						
YouTube videos						
☐ university platforms						
☐ PDF lectures	<b>;</b>					
5) Did you have enough technical training and support to start studying online?						
☐ Yes ☐	no					
6) What type of learning do you prefer, online or traditional learning?						
Online learning						

	Traditional learning
7)	Are you satisfied while using this new approach?
	very satisfied
	satisfied
	neither satisfied nor dissatisfied
	dissatisfied
	very dissatisfied
Rubr	ic3: difficulties.
1)	Is 1h 30mins enough to understand the course? If no, why?
	yes
	no
2)	How was your internet accessibility?
	Excellent
	Good
	Fair
	poor
3)	Do you face any kind of distraction from your family members during online
	lectures?
	Never
	Sometimes
	always
4)	Did you have enough materials to start studying online?
	Ves

∐ No						
5) what are the common problems associated to online learning?						
	•••••	•••••	•••••			
Rubric 4: lacks						
1) what would hinder students from learning online?						
	Yes	No				
lack of technology						
lack of technical support						
lack of internet access and services						
lack of motivation						
lack of communication between teachers and students						
lack of effective subject-matter content						

# **Teachers' Interview**

- 1) Do you agree that COVID-19 is having a serious impact on the educational system? If yes, what are these impacts?
- 2) How is it affecting the approach of educational institutions?
- 3) What are the major changes that can arise in the educational system and functions in institutions?
- 4) What are the major obstacles teachers face during the shift to online mode?
- 5) How did higher education adapt the new mode?
- 6) How did it affect your own teaching?



Summary

Due to the rapid spread of the COVID-19 disease, educational institutions had to shut

down and make a shift from traditional learning to online learning. Most Teachers in

Algeria were accustomed to traditional face-to-face and online teaching came as a

challenge. Like most countries, Algeria was not prepared for the sudden changes from

face-to-face to online learning.

**Keywords:** COVID-19, Online learning, Face-to-face learning, Education.

Résumé

Dû a une propagation rapide du virus du Covid-19, les institutions scolaires ont dû

fermer et passer de l'enseignement traditionnel a l'enseignement en ligne. La plupart

des professeurs en Algérie étaient habitués aux cours en présentiel, l'enseignement

en ligne est alors devenu un challenge. Comme la plupart des pays, l'Algérie n'était

pas préparée à des changements aussi soudains dans l'éducation.

Mot clé: COVID-19, Apprentissage en ligne, Apprentissage en face à face, Eduction.

ملخص

بسبب الانتشار السريع لفيروس كورونا، اضطرت المؤسسات التعليمية إلى الإغلاق والتحول من التعلم التقليدي

إلى التعلم عبر الإنترنت. اعتاد معظم المعلمين في الجزائر على التعليم التقليدي وجهاً لوجه وكان التدريس عبر

الإنترنت يمثل تحديًا. مثل معظم البلدان ، لم تكن الجزائر مستعدة للتغييرات المفاجئة من التعلم وجهًا لوجه إلى

التعلم عبر الإنترنت.

الكلمات المفتاحية : كوفيد 19 الدراسة عن بعد الدراسة وجها لوجه التعليم