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The Use of ICT to Overcome the Contemporary Learning Challenges: Second Year English students

*Dissertation Submitted to the Department of English Language and Literature in
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Dedication

In the name of Allah the most gracious most merciful all the praise is due to him alone.

To the soul of my father my Angel “**Abdelkader**” may Allah have mercy upon him
I would like to dedicate this work to my Mother “**Malika**” for all her love and support that
made me who I am today.

To my beloved sisters: **fatna** and **Kenza** for your love and support.

To my oldest sister **Halima** for being the father I needed in my life.

To all my family my siblings and my brothers for the kind-hearted words.

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A special thanks to my soulmate and sister **Khawla** for being there all the time. It’s an honour
to finish this journey with you overwhelmed with unforgettable memories.

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A special thanks to all those. Who assisted me in finishing this humble work.

List of Abbreviations and Acronyms

ICT: information Communication Technology

EFL: English as Foreign Language

ELT: English Language Teaching

FL: Foreign Language

L2 : Second Language

MCQ : Multiple Choice Questions

SLA : Second Language Acquisition

TL: Target Language

3rd AM: Third Year Middle School

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Abstract

Nowadays, Technology plays a vital role in every aspect of human life it facilitates the way we live, work, and learn. The term “information and communication technologies” (ICT) refers to a broad range of technological resources and techniques that are used to create, transfer, store, share, and exchange information. ICT in education is required to develop a learning environment that is student-centered. ICT resources bridge the gap between learner- and teacher-centered settings. Additionally, ICT allows for easy access to a variety of material, which satisfies each student’s particular educational needs. Through tests and quizzes, teachers can evaluate how well students are using this knowledge. With the rapid outbreak of the COVID-19 epidemic in 2019 information communication technology has become a crucial necessity in the educational field. Teachers and learners tend to shift to the virtual mode to cope with the current situation, model platforms were used as an alternative solution to continue the instructional process and to solve the learning hindrances that came across students while learning. This paper aims to highlight the use of ICT to overcome learning challenges. In addition; the researcher clarifies some suggestions and recommendations for both EFL learners and teachers towards the use of ICT. Moreover, qualitative and quantitative methods were applied to collect the needed data besides a questionnaire for both teachers and learners to have an insight into their perception toward ICT use. The findings of this research answered the research question and confirmed the hypothesis also revealed that the use of information and communication technology facilitates the teaching-learning process, and boost learners’ creativity, motivation and autonomy.

Key words: Information communication Technology (ICT), COVID-19, learning challenges.

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General Introduction

General Introduction

Nowadays, in the in the last few decades technology has marked a significant development in every aspect of human life. The 21st century is frequently seen as a technological era. Today technology is and essential parts of our lives it is regarded as the cornerstone of economy expansion due to how much easier and faster has made our work. Undoubtedly education is one of the main fields touched by this technological revolution.

The conversions of COVID-19 epidemic in 2019 restricted the educational lifestyle as we know it, the rapid outbreak of such disease led to the closure of all educational institutions around the world such as schools, universities, academic institutions.. etc

The corona virus outbreak has caused disturbances in education and raised issues with global health that have been exceedingly challenging for international health institutions to handle, moreover just a few months after the disease emergence it has significantly uttered everyone's way of living forcing billions of people to stay at home observe self isolation and work and learn from home Algeria like many other countries it was no exception. The governments compelled people to follow strict measures to decrease the spread of the disease. the ministry of higher education and scientific research declared the use of online platforms as an alternative way to continue the instructional process this letter lead to the adaptation of ICT in the Algerian universities, teachers and learners were obliged to adapt with the new techniques of learning using Moodle platforms, Facebook groups, Google meets, etc. therefore the recent research aimed at investigating the use of ICT in the educational system planning As well as shedding light on the obstacles that face learners and teachers concerning their experience toward using the virtual mode in addition to the will to find solutions to guarantee the effective use of ICT mainly in Dr. Moulay Tahar Saïda University At English department to accomplish the current study investigation two main questions were asked:

1. What are the challenges that traditional learning contains?
2. How can the implementation of ICT help in overcoming the learning challenges?

The research questions revealed two main hypothesis learners:

1. It is hypothesized that traditional learning contains different challenges such: as limited time, limited knowledge, anxiety during the learning sessions, and the lack of comfort.
2. It is hypothesized that the use of ICT can solve various problems by facilitating the way of teaching and learning for EFL students, as well as developing their autonomy and creating a motivated atmosphere.

The researcher Include both quantitative and qualitative methods to collect data in addition to a main research tool which is solid questionnaire for both teachers and learners the aim of this investigation was to shed light on the importance of technology mainly ICT platforms to create a better teaching learning environment.

This study is divided into three main chapters.

The first chapter includes ICT definition, history in education importance and attitude as well as the challenges in integrating ICT in the educational field. Furthermore the role of COVID-19 as a push factor in implementing ICT in the Algerian universities.

The second chapter is dedicated To the methodology used in this study it covers a detailed description of both quantitative and qualitative methods besides the research tools used and the target population.

The third chapter introduced the data analysis and interpretations in addition to the general conclusion that gives a detailed summary of this study ending with a pedagogical recommendation and suggestion.

Chapter I

Literature Review

Introduction

Learning is such a significant process, yet, it is becoming of a great interest when it is concerning a foreign language. Traditional teaching and learning is no more the only way to collect information, gathering knowledge, or being cultivated. Online learning start playing a big role and start replacing the traditional way of learning also; it emphasizes on teaching and learning using ICT. The current chapter is a review of literature about ICT and its benefits and the role that it plays in overcoming learning obstacles and challenges. The present chapter will tackle the following points: definition of ICT, the functions of ICT, the history of ICTs in education, the importance and the role of ICT in education, ICT in the EFL curriculum, Challenges and Barriers to Integration of ICT into Education, Benefits of using ICT, Education and the COVID-19 pandemic, Attitudes toward the use of ICT, and The integration of ICT in the Algerian universities (Moodle platforms) at last.

Definition of ICT

ICT an acronym that stands for: information and communication technology. It alludes to a technology that offers a variety of techniques for disseminating information via telecommunication. The internet, wireless networks, cell phones, and other forms of communication are all included, but the emphasis is mainly on communication. ICT can be understood as all hardware, software, networking elements, and systems put together by a person or an organization.

The delivery of materials by teachers and trainers utilizing IT and the relevant tools will enable students to become creative creators and users, changing traditional teaching and learning as well.

According to Gisbert (2000), one of the most difficult challenges to overcome on our way to the twenty-first century is to enable teachers and learners to achieve competency and mastery in the use of technology rather than allowing them to be enslaved by it.

The growing usage of ICT across many facets of life has altered how open access to all information is now possible. The use of modern IT has also transformed traditional teaching and learning into a new methodological learning process, and it has changed instructors' attitudes as well toward adapting to new management practices, pedagogical ideas, and methodological methods.

Additionally, by utilizing real materials and resources that are simple for teachers to use, ICT- based teaching and learning processes aims to promote communication.

The functions of ICT

ICT and IT (information technology) are sometimes used interchangeably. ICT however, is more all-encompassing. In every aspect other than IT, it is connected to computers and digital technologies, internet-enabled computers and mobile phones that are powered by wireless networks are both included in ICT.

Every ten years, ICT's individual components continue to expand. In the past, people used radio and television broadcasts, as well as landline telephones, as their main components. While certain devices, like computers and phones, have been around for many years, others, including smartphones, digital TVs, and robotics, have only recently come into being. The apps that support different components are also included in the list of ICT components.

The primary objective of ICT is to transport information through communication technologies. Computers, the internet, radio, television, and telephones are some of these

technologies. ICT has had a significant impact on how people communicate, learn, work, and live. In addition, ICT continues to transform every aspect of human life by replacing many of the activities that previously required human labor with robots. The presence of ICT improves learning quality by making learning more applicable to real-world situations, and it has been viewed as an ideal by educational institutions just as it has transformed people in society. It places an emphasis on fundamental educational goals and uses technology to foster students' imagination and creativity.

The purposes of ICT for teachers are to investigate technological possibilities for education, learn how to select appropriate hardware, software, and ICT interactions, and develop into critical ICT users. ICT also serves as a tool for creativity and problem-solving, an introduction to the world of information and technologies, and a chance to determine professional aspirations for learners.

The history of ICTs in education

The use of technology in education officially began in the 20th century with the introduction of instructional DVDs. By the turn of the 20th century, visual training was well established. At the University of Pennsylvania, the first electronic computer was employed in 1946. All around the world, in 1960, computer-based education was a source of inspiration. The University of Illinois has placed connected computer terminals in the classroom so that students can access resources during this period.

This was carried out while watching a recorded lecture on a connected screen or listening to audio equipment (Grace & Kenny, 2003).

In 1970, Engelhard created the mouse, groupware, hypertext, multiple-window displays, and an electronic mail system. During the 1970s and 1980s, microprocessors and electronic books were introduced. There were CDROMs, VCRs, and personal computers available (Grace & Kenny, 2003).

Following that, technology has improved to the point that multimedia tools and audiovisual aids are routinely used in schools. Later, digitalized communication in schools began.

Institutions originally employed computer networking to deliver distance learning courses. In 2005, textbooks on laptop computers and networks were produced. To connect to the internet, wireless and portable computers are employed. Many pieces of technical equipment were widely made available in schools and organizations (Grace & Kenny, 2003).

Since then, technological advancements have made multimedia tools and audiovisual aids commonplace in educational settings. Digitalized communication in schools started to emerge later. Computer networking was initially used by institutions to deliver the courses for distance learning. Networking and laptop computer textbooks were published in 2005. Portable and wireless computers are used to connect to the internet. Eventually, several pieces of technical equipment were made accessible at institutions of learning and businesses (Grace & Kenny, 2003).

The importance and the role of ICT in education

According to a number of studies, using new technology in the classroom is crucial for giving learners the chance to practice living in the information age. It is obvious, as Yelland (2001) observed that conventional educational settings do not seem to be appropriate or educating students to operate or be productive in today's businesses. According to her, organizations that do not use modern technologies in classrooms cannot honestly assert that they are preparing their kids for life in the twenty-first century. Gimus (2000) cited that "by teaching ICT skills in primary schools, the learners are prepared to face future developments based on proper understanding" (p.362). Similar to this, according to Bransford et al. (2000), "what is known about learning provides important guidelines for uses of technology that can help students and teachers develop the competencies needed for the twenty-first century" (p.206).

ICT can have a variety of effects on the teaching and learning processes. ICT has a considerable potential to improve

Student accomplishment and teacher learning, according to Bransford et al. (2000), who cite various studies that reviewed the literature on ICT and learning. Technology can support face-to-face teaching and learning in the classroom, according to Wong et al. (2006).

According to many researchers and theorists, using computers in the classroom can increase students' knowledge, cut down on the amount of direct instruction they receive, and give teachers the chance to assist those students who have special needs (Iding et.al (2002).

In addition to assisting teachers in improving their pedagogical practices, new technology can also benefit students' learning. Technologies can affect students' knowledge, motivation, and abilities, claim Grabe and Grabe (2007). They assert that ICT may be used to inform learners and assist them in completing educational duties. Becta (2003), asserts

that five elements influence the possibility of strong ICT learning opportunities developing in schools: ICT resourcing, ICT leadership, ICT teaching, school leadership, and general teaching. According to Becta's research from 2003, the success of integrating new technology into education varies from curriculum to curriculum, location to location, and class to class, depending on how it is used. ICT has been demonstrated to have a favorable effect on various areas of science education. This is covered in more detail in the following section.

ICT in the EFL curriculum

Traditionally, the focus of the curriculum has been on imparting knowledge rather than encouraging students to learn it; teachers have played this role rather than igniting students' interest in learning and fostering their capacity to analyze and make sense of data in order to meet academic requirements (Maria del Mar Camacho Marti 2007). Schools lack the freedom to choose their own educational materials and media, and they also lack the authority to choose what to teach because that is decided by the ministry of Education. This explains why the choices and elements of the curriculum are so closely tied to decisions about how to educate.

Instructors who want to try an instructive use of ICT to improve teaching and learning processes will have to pay attention to aspects such as the kind of curriculum used, the kind of learning it favors, the available media at schools to support this kind of learning, the kind of usage that instructors are able to make of the media they have at their disposal, and, most importantly, how the curriculum is conceived and practiced. Schools that desire an integrated curriculum must make an effort to develop alternative curricula projects that will aid learners and place an emphasis on connections between concepts rather than on their individual content. Learners will have to use investigation and research techniques to work through challenges that will be closely related to actual life scenarios.

According to the curriculum, the instructor serves as a referent while the learner is at the center of the learning process. The role of the instructor is described as a pedagogical intervention that will direct and support the process of students' independent learning construction. As a result, it will be important to support ideas and a variety of teaching methods while always adhering to the principles that encourage a significant form of learning, such as the opening, primary activity, and closing stages (Maria del Mar Camacho Marti, 2006). There is sufficient evidence to conclude that incorporating ICT into the curriculum in a variety of ways can improve students' learning (Leask & Pachler,

2001). Nevertheless, in order to build new, high-quality professional practices, Instructors will need to collaborate and learn as a team.

Challenges and Barriers to Integration of ICT into Education

According to Schepp (2005), it might be challenging to successfully integrate ICT into teaching and learning because it is a complicated process. The term “barriers” is used to describe these challenges. (WordNet, 1997, as referenced in Schoepp, 2005, p.2) a barrier is described as “any condition that makes it difficult to make progress or to achieve an objective”

Classification of the barriers

Researchers and educators have categorized hurdles for teachers using ICT in science classrooms using a variety of categories. Extrinsic and intrinsic barriers have each been given their own category in various research studies. But their definitions of extrinsic and intrinsic were different.

In Ertmer’s (1999) study, he classified extrinsic barriers as first-order and listed access, time, support, resources, and training while Hendren (2000), on the other hand, saw extrinsic barriers as pertaining to organizations rather than individuals and intrinsic barriers as pertaining to instructors, administrators, and individuals. The distinction between barriers at the instructor versus school level can also be found in the literature. Becta (2004) divided the barriers into two categories: those that effect an individual (teacher-level-barriers), such as a lack of time, lack of confidence, and resistance to change, and those that affect an organization (school-level barriers), such as a lack of resources and ineffective technical problem-solving training.

Similar to this, Balanskat et al. (2006) separated them into meso-level barriers, such as those connected to the institutional setting, and micro-level barriers, such as those related to instructors’ attitudes and approaches toward ICT. The latter introduced a third group of barriers known as macro-level or system-level, which included those connected to the larger educational framework.

Teacher-level barriers

Lack of teacher confidence using ICT

According to various researchers, lack of confidence is one obstacle preventing instructors from embracing ICT in their instruction. This is a contextual aspect that Dawes (2001) believes may serve as a barrier. Becta (2004) asserts that much of the research suggests that this is a significant obstacle to teachers’ adoption of ICT in the classroom. The topic of

lack of confidence was the one that drew the most answers from participants in Becta's survey of practitioners in 2004. Several studies have looked into the causes of teachers' lack of trust in ICT. Beggs (2000), for instance, said that teachers' "fear of failure" contributed to their lack of confidence. On the other side, Balanskat et al. (2006) discovered that a lack of ICT expertise among instructors causes them to feel uneasy about employing it in the classroom and lacks the confidence to do so. Similar to this, Becta (2004) stated in their study's conclusion that "many teachers who do not consider themselves to be well skilled in using ICT feel anxious about using it in front of a class of children who may know more than they do".

Many of the teachers who said their lack of confidence was a barrier in Becta's poll (2004) said they were most frightened about going into the classroom with little expertise in ICT and having their learners know it. It was stated that instructors' motivation to use ICT in the classroom is influenced by their level of technology comfort and experience Cox et al. (2006). On the other hand, educators who utilize technology in the classroom with confidence are aware of its value. According to Cox et al. (1999), teachers who are comfortable using ICT recognize the value of technology in both their professional and personal lives and recognize the need to expand their use in the future.

Lack of teacher competence in ICT

Teachers' skill in incorporating ICT into pedagogical practice is another barrier that is directly tied to instructor confidence (Becta, 2004). Newhouse (2002) discovered in Australian research that many instructors lacked the knowledge and skills to use computers and were uninterested in the modifications and integration of extra learning involved with incorporating computers into their instructing activities.

According to current studies, the level of this barrier varies by country. According to studies, teachers' lack of technological proficiency is a major barrier to their acceptance and implementation of ICT in underdeveloped countries (Pelgrum, 2001).

Teachers' lack of technological proficiency, for example, has been identified as the key impediment in Syria (Albirini, 2006). Similarly, in Saudi Arabia, a lack of ICT skills is a significant impediment to integrating technologies into science education (Al-Alwani, 2005). The usage of ICT in European schools was the subject of a report by Empereca (2006). Pelgrum (2001) discovered in a different international study of nationally representative samples of schools from 26 countries that teachers' lack of knowledge and expertise is a significant barrier to implementing ICT in primary and secondary schools.

Resistance to change & negative attitudes

Teachers' attitudes and a natural aversion to change were shown to be major obstacles in a large body of study on the issues preventing the integration of ICT into education (Cox et al., 1999). Gomez (2005) discovered through his or her study of the questionnaires that one barrier to ICT integration in science instructors' unwillingness to change regarding the implementation of new methodologies. Broadly speaking, Becta (2004) asserted that reluctance to change is a significant obstacle to teachers using new technologies in the classroom.

Australian researcher Watson (1999) claimed that various teachers will approach the integration of new technology into educational environments differently since it demands transformation. He asserts that it is critical to take into account varied teacher viewpoints since they have an impact on what they do in the classroom. Becta (2004) asserts that understanding how technology would enhance their teaching and students' learning is a crucial component of teachers' attitudes about its use. According to Schepp's survey from 2005, instructors did not feel that they were being supported, encouraged, or rewarded for integrating technology into their lessons, even though they thought there was more than enough technology accessible.

School-level barriers**Lack of time**

Recent surveys show that many instructors are competent and confident in using computers in the classroom, yet many still only utilize them sparingly due to time constraints. Time constraints and the challenge of scheduling enough computer time for classrooms were cited by a large number of researchers as obstacles to teachers using ICT in their instruction (AlAlwani et al. (2005). The lack of time teachers had to design technology classes, browse the numerous websites, or consider various facets of educational software was cited by all the teachers as their worst obstacle by Sicilia (2005). Becta's study from 2004 discovered that the issues of lack of time impacts teachers' capacity to perform tasks in various areas of their employment, with some of these duties including the participating teachers list the ICT features that need more time in detail. These include the time required to research online guidance, plan classes, experiment with and practice using technology, resolve technical issues, and obtain the necessary training. According to recent studies, a significant barrier to the use of new technology in science education is a shortage of time (Alalwani, 2005).

Due to hectic schedules, Alalwani (2005) claims that a hurdle to the application of ICT in Saudi Arabia is a lack of time, he explained that since science professors in Saudi Arabia typically teach 18 classes per week and work from roughly 7 a.m. to 2 p.m., a limited amount of time during the day for teachers and students to work on incorporating ICT into science teaching. Similar to this, Sicilia (2005) found that teachers spend significantly more time planning projects that involve the use of modern ICT than they do planning regular lessons in Canada.

Lack of effective training

Lack of effective training is the obstacle that is mentioned in the literature the most (Albirini, 2006). One conclusion of Pelgrum's (2001) research was that there were not enough possibilities for instructors to receive training in the use of ICTs in the classroom. Beggs (2000) discovered that inadequate training was one of the top three obstacles to teachers using ICT to teach students. The lack of in-service science teacher training programs, according to recent research in turkey (Zden, 2007), and Toprakci's (2006) finding that teacher preparation for ICT use in Turkish schools is lacking, are the main barriers to the implementation of new ICT in science. Becta (2004) asserts that the complexity of the training issue stems from the need to take into account a number of factors in order to guarantee the training's efficacy. These included time for pedagogical training, skill-building, and ICT use in beginning teacher preparation. Accordingly, recent research on science education by Gomez (2005) found that barriers to implementing new technologies in the classroom included a lack of training in digital literacy, a lack of pedagogic and didactic training on how to use ICT in the classroom, and a lack of training on the use of technologies in particular scientific fields.

It is crucial to give instructors pedagogical training as opposed to merely instructing them how to use ICT technologies (Becta, 2004). According to Cox et al. (1999), training should concentrate on pedagogical concerns if teachers are to be persuaded of the benefits of adopting ICT in their classrooms even after attending professional development courses in the subject. Instead, they only knew how to operate a computer and set up a printer.

According to Cox et al. (1999), Balanskat et al. (2006) found that inadequate teacher training is hindering teachers' use of ICT in their classrooms and in lesson planning.

They claim that this is because training programs do not focus on teachers' pedagogical development.

However, in addition to the requirement for pedagogical training, Becta (2004) asserts that it is still essential to provide instructors with specialized ICT training. According to Schoepp (2005), teachers must be taught the usage of these specific ICTs when new technologies need to be incorporated in the classroom. Teachers should receive training in both educational technology, which supports classroom instruction, and technology education, which focuses on the study of technologies themselves, according to Newhouse (2002). Similar to Sicilia (2005), who discovered that instructors want to learn how to implement new technologies in their classrooms but are hindered by a lack of professional development opportunities from doing so in topics like science or math, another issue with professional development in ICT is that training programs are not updated frequently and are not tailored to address the unique learning needs of instructors (Balanskat et al. 2006).

Lack of accessibility

According to several research studies, lack of access to resources, especially home access, is another complex obstacle that discourages instructors from integrating new technologies into education, as illustrated in the current discussion. The results of the many research investigations revealed a number of causes for the lack of technology access. Teachers grumbled about how challenging it was to always have access to computers in Sicilia's research from 2005. In order to work on many projects with the learners, the author stated that "computers had to be booked in advance, and the teachers would forget to do so, or they could not book them for several periods in a row". In other words, since most ICT resources were shared by instructors, a teacher would not have access to them.

Becta (2004) asserts that the lack of availability of hardware and software is not necessarily the cause of ICT resources being inaccessible. It could be caused by a variety of things, including inadequate resource management, subpar hardware, improper software, or a lack of direct access for teachers (Becta, 2004). The difficulties that teachers face in using new technologies are numerous and vary from nation to nation. According to research conducted across Europe by Empirica in 2006, teachers cited a variety of obstacles to using ICT in the classroom, including a shortage of computers and insufficient resources. A shortage of access was judged to be the biggest barrier. Similar to this, Korte and Husing (2007) discovered that certain infrastructure hurdle, such as a lack of broadband connection, exist in European schools. They came to the conclusion that a third of European schools still lack access to broadband internet. Pelgrum (2001) investigated

the perspectives of practitioners from 26 countries regarding the main challenges to the use of ICT in schools.

In general, there are a number of obstacles that prevent people from having access to ICT. Gomez (2005) discovered constraints in his research to include a lack of sufficient infrastructure and a lack of appropriate material resources. Overcoming these hardware obstacles does not, however, guarantee successful ICT use. According to Balanskat et al. (2006), access to ICT resources does not ensure their successful implementation in teaching. This is due to a number of factors, including a lack of high-quality hardware, appropriate educational software, and access to ICT resources, in addition to lack of ICT infrastructure.

Benefits of using ICT

ICT has a positive effect on students' perspectives on language learning. Students have a great chance to choose the components that will enable them to fulfill their learning strategies, which conventional approaches have not been able to do. The accessibility of material like graphics, animations, audio, and video clips is very realistic since it enables students to practice and convey a language in new ways. These technologies are used by teachers as well as students to quickly create, compile, preserve, and retrieve educational resources (Alkame, Chothaiwale, 2018). ICT adds authenticity and enables students to communicate with individuals from all over the world.

Korkut (2012) looked into how language learning is now possible without the challenges of travel. Now, students can benefit from education while still at home. Time restrictions used to be a major barrier to learning. Technology has positively affected the situation. Students can now attend any class at any time and from anywhere. Thus, due to advancements in online technology, students can now repeat any course until they understand it. The availability of ICT integrated education systems is round-the-clock, seven days a week, in contrast to traditional learning methods. ICT integration has improved teaching and learning methodologies by removing barriers related to time and place (MCluhan, 2012).

Koc (2005) further underlined that students can engage, exchange, and collaborate while utilizing ICT from anywhere at any time. For instance, a classroom using teleconferencing might invite students from all over the world to participate in a topic debate concurrently. They might be given the chance to analyze problems, investigate concepts, and develop ideas. They might carry out more assessments of ICT-based educational systems. In order

to express and think critically about their learning, students not only work together to learn but also share a variety of learning experiences.

According to Brush, Glazweski, and Hew (2008), ICT is a tool used by students to research the subjects they are learning, get past challenges, and solve problems that arise during the learning process. ICT improves knowledge acquisition and the understanding of concepts in learning domains while involving students in its application. Additionally, students are more likely than ever to use computers in productive ways (Castro, Sanches & Aleman 2011). They access, pick, arrange, and analyze it to obtain new data and knowledge. Students are better able to use knowledge and data from any sources and critically evaluate the value of learning resources as a result of ICT-based learning.

ICT also encourages new perspectives in the academic domains of students (Chai 2010). ICT enables more creative solutions to a variety of learning challenges. Ebooks, for instance, are frequently used in reading class reading aloud exercises. Students can quickly access a wide range of books, from simple to complex, using PCs, laptops, personal digital assistants (PDAs), or ipads. These e-books might also have reading programs with a reading-aloud interface, appropriate vocabulary-building exercises, games for reading comprehension and vocabulary improvement, and other things. ICT therefore includes specifically designed apps that offer original methods of achieving a variety of educational objectives.

Finally, the study sector has benefited from enhanced critical thinking and comprehension due to the internet use. Prior to the development of technology, it was extremely difficult to use reliable and authentic content (Shetzer & Warschauer, 2000). To submit their work in digital format, teachers and students can use the internet (Lee, 2000; Singhal, 1997). According to Fahad Salim Al-Adi, plagiarism detection software has improved originality and innovation in the development of new products.

It is now possible to document, reflect on, and edit one's work due to archival technology. Written and verbal communications are now more accurate and understandable (Greenfield, 2003). Race, gender disability, accent, and socioeconomic class are some of the more important difficulties that technology has helped to lessen (Shetzer & Warshauer, 2000).

Education and the COVID-19 pandemic

A novel corona virus outbreak known as COVID-19 started in china, in December of 2019 and quickly expanded to other parts of the world in the next few months. A novel corona

virus strain that targets the respiratory system is what causes COVID-19, an infectious disease (World Health Organization, 2020). In 191 nations and territories as of January 2021, COVID-19 had infected 94 million people and resulted in 2 million fatalities (John Hopkins University, 2021). Over 1.5 billion learners have been affected by the huge disruption of the educational systems brought on by this pandemic. It has compelled the government to postpone national exams, as well as forcing schools to temporarily close, stop teaching in person, and carefully adhere to physical distance.

These incidents have accelerated higher education's digital revolution and tested its capacity to react quickly and effectively.

Schools incorporated applicable technologies, set up infrastructure and systems, developed new teaching techniques, and revised their curricula. However, some schools found the transfer to be easy while others struggled, especially those from underdeveloped nations with poor infrastructure (Pham & Nguyen, 2020; Simbulan, 2020). As the global effort to stop the virus's virulent spread proceeds, schools and other learning environments are compelled to transition to fully online learning.

Online learning describes a setting where students are taught synchronously and asynchronously while managing their academic programs using the internet and other technology resources (Usher & Barak, 2020; Huang, 2019). Asynchronous online learning takes place without a set schedule for various students, while synchronous online learning comprises real-time interactions between the teacher and the learners (Singh & Thurman, 2019).

Online learning has assumed the role of temporary remote instruction in the COVID-19 pandemic scenario, acting as a response to an emergency. The transition to a new learning environment has, however, been hampered by a number of significant issues relating to policy, pedagogy, logistics socioeconomic considerations, technology, and psychosocial issues (Donista et al., 2020). Government education organizations and institutions raced to develop policies that would include governance, teacher management, and student management. Despite their lack of technological literacy, instructors who were accustomed to traditional teaching methods had to adopt technology. Online learning webinars and peer assistance systems were introduced to address this issue. Students' dropout rates rose as a result of socioeconomic, psychological, and intellectual factors.

Attitudes toward the use of ICT

Some researchers have discovered a connection between attitudes, behavior, and feelings, suggesting that people's attitudes dictate how they act toward the things and people whom they encounter and have an impact on the interactions that these things have with one another. These characteristics allow defining attitude as a sophisticated, largely acquired, lasting, but malleable system of cognition and affection that affects a person's favorable and unfavorable action or reaction to an object.

A person's attitude is probably a personal factor that will affect how they use ICT.

This is due to the possibility that a user's mindset may directly affect how they utilize ICT or a computer (Speier 2008). Experience levels and good views regarding computers or using ICT tools are positively correlated.

Several studies on attitudes toward ICT have recently been undertaken. In the UK, Saunders and Pincas (2004) conducted research on students' perceptions of information technology use in teaching and learning. According to the study's findings, students frequently utilize email and the internet to supplement their studies. As can be seen from the data, a significant portion of the students polled use email as a fundamental tool for networked learning.

Students also feel that ICT can occasionally be utilized in place of face-to-face activities and that ICT plays a vital role in supporting and enhancing their university learning experience. Some students, however, are opposed to the idea of having face-to-face lessons because they believe it would cause them to lose their routine and motivation. This opposition serves to underline the current perceived value of face-to-face classes for campus-based students.

Research was conducted on management students' attitudes about information and communication technology (ICT) by Glenda et al., (2006). Under the ICT schools pilot project in Thailand, Rumpagaporn (2007) looked at the students' critical thinking, abilities, attitudes toward ICT, and opinions of the learning environment in an ICT classroom. The results show that many students raise their critical thinking skills and adopt a favorable attitude toward ICT. Additionally, results indicate relationships between students' individual characteristics, their views of ICT classroom learning settings, and their outcomes in relation to their teachers' critical thinking abilities, and attitudes toward ICT.

Eventually, it can be inferred from these few studies that attitude changes depend on the precise purpose that the attitude serves. Wanger (1969), claims that in situations in

compliance, the influencing agents' positive response is essential for maintaining the attitude. It seems reasonable that the attitude would change if an advantageous reaction was changed or replaced by another agent.

The integration of ICT in the Algerian universities (Moodle platforms)

The acronym Moodle stands for Modular Object-Oriented Dynamic Environment. According to Brandi (2005), Moodle is a free learning system with no licensing fees. It is available for use in all Windows versions at universities. The system has been embraced as an educational platform by several countries. Moodle is open-access source software (OASS) that allows teachers to submit online courses, assess tasks, and provide online comments (Suppasetserree & Dennis, 2010). According to some studies, Algeria implemented the platform years ago and has trained teachers on how to utilize it. The platform was to be used by teachers until the pandemic outbreak (Ghouali & Cecilia, 2021). They typically teach professors how to use the site and upload lectures. Universities fail to provide teachers with training on how to prepare an online course (Ghounane, 2022).

Algeria, like many other nations, introduced e-learning to Algerian universities in 2007 through a program that encourage the use of platforms such as Moodle.(Salaa, Bibi & Nechad, 2020). Although the ministry of higher education has made efforts to provide internet access at the university, infrastructure, and human resource levels, teachers and learners are having difficulty implementing e-learning during the pandemic because both learners and instructors rely heavily on traditional techniques of learning. Many pedagogical challenges arose as a result of the abrupt shift (Ghounane, 2022). A number of scholarly studies have looked into how teachers and students in Algeria are dealing with the abrupt change to online learning. Guessar (2020), for example, attempted to provide light on the consequences of the pandemic on the delivery of teaching at Algerian universities.

Benadla and Hadji (2022) investigated learners' affective attitudes about online learning following the abrupt shift. Ghounane (2022) also did research on the nature of Moodle lessons and their effects on learners' learning practices. Despite the fact that most colleges educated instructors to utilize Moodle, they were unable to modify instructors' views or learners' enthusiasm to use the platform. According to H. Sarnou and D. Sarnou (2021), some instructors use Facebook and apps like Google Meet to teach MA students. The poor social background of certain learners who reside in rural areas, or what Benadla and Hadji

(2021) referred to as “people of the shadow” (p. 63), has had an impact on the learning process because most learners do not have computers, smart phones, or access to the internet. Their lack of understanding of how to use these educational platforms has increased their learning anxiety and influenced their learning behavior and attitudes.

Although scholars have released a flood of study papers on students’ attitudes toward educational platforms such as Moodle, few studies have looked into the reasons for these sentiments. Male et al. (2020) discovered that learners dislike online learning and want to return to traditional methods. However, no research has been conducted to evaluate how motivation and involvement affect learners’ attitudes.

Conclusion

This chapter is the theoretical part of the research study, it principally emphasizes on defining information and communication, in addition to providing the inevitable points such as: the importance and the benefits of using ICT in teaching and learning while integrating it in the Algerian educational system, since it creates the differences and facilitates the way of learning and teaching by minimizing the difficulties and the contemporary learning challenges. It talks also about the situation of teaching and learning during the COVID-19 pandemic, Teachers and students have to know the right way of using ICT, that is, they have to know how to benefit from the usage of information and communication technology since technology is playing a vital role in the new ways of teaching and learning (online teaching and learning).

Chapter II

Methodology

Introduction

The following chapter is devoted to introducing the methodology used in data collection. It entailed a Description of the selected techniques to complete the study investigation. In this chapter the researcher mentioned the main objectives of the study as well as the designed framework utilized and target population addressed to collect the needed data.

Research design

The researcher incorporated a mixed method approach to collect data about the use of ICT to overcome the learning challenges that learners face. As a result a combination of both quantitative and qualitative research methods were obtained to ensure the validity of the research

Qualitative approach

Obtaining and analyzing non-numerical data is a component of qualitative research methodology. The descriptive and conceptual information gathered through surveys, interviews, or observation is referred to as qualitative data. We can investigate concepts and further explain quantitative outcomes by analyzing qualitative data.

The researcher may hold focus groups or interviews as part of a qualitative study to gather information that isn't contained in records or documents already in existence. Interviews and focus groups may be unstructured or semi-structured to provide participants the ability to provide a variety of replies.

Open-ended questions can be asked in an unstructured or semi-structured fashion, and the researcher can then follow the responses. In-depth perspectives on each person's experiences are given by the responses, which are then contrasted with those of other study participants.

The underlying meanings, values, beliefs, and emotions that influence people's actions and decisions can be discovered through qualitative data. Additionally, qualitative data can be used to explore novel or developing subjects and can represent the complexity, diversity, and context of human occurrences. By giving you a deeper and more comprehensive understanding of your research challenge, producing new ideas or hypotheses, validating or questioning your assumptions, and discovering possibilities or gaps, qualitative data can improve your decision-making.

Quantitative approach

Quantitative research on the other hand needs different data collection techniques. These techniques include gathering numerical data to examine causal connections between various factors. Data gathering methods for this kind of investigation include: **Surveys,**

Questionnaires, and Experiments**Database information**

The data gathered using the methods listed above is suitable for numerical analysis. In this instance, questionnaires use a multiple-choice format to produce countable responses, such as yes or no, which can then be converted into quantifiable data.

The objectivity of quantitative data is one of its main advantages. Fewer variables and specific numbers are used. This can aid in removing biases from the study and improve the reliability of the results. Another advantage is that getting big sample sizes is frequently easier.

Mixed method research

A mixed method research is a procedure of collecting, analyzing and mixing both quantitative and qualitative methods in a study for a better understanding of the research problem

In a mixed method approach, the researcher combines both quality and quantity, in enables him/her to tap into the strength of each as well as minimize the weaknesses of both in a single study. It helps to have a more in-depth view of certain phenomena. It allows researchers to know how certain trends or results come to be

To address your research strengths methods research incorporates aspects of qualitative and quantitative research. Due to the integration of the advantages of both methods, mixed methods can help you obtain a more comprehensive picture than a solitary quantitative or qualitative investigation.

It is ought to mention that both characteristics of quantitative and qualitative methods are needed in the study of the research phenomena for example due to their ability to gather trustworthy empirical data, qualitative and quantitative research methods have been used successfully by researchers all over the world. When quantitative research is important for obtaining numerical data, qualitative research offers the chance to conclude language and content. Analytical statistics are the primary emphasis of the first. Comparatively, the latter is more interested in description than measurement.

Research tool

In any research study, research tools play a vital role in collecting and analyzing data. It is a key element of success concerning research investigations. In the current study, the researcher applied three research tools: a questionnaire for teachers and learners, a teacher interview and an observation

Questionnaire

A questionnaire is a set of organized questions the researcher circulate to a target audience in order to collect particular data .it is a methodical means of gathering information from a big group of individuals by asking them a series of questions regarding a particular subject or research goal. The responses might be quantitative or qualitative, and the questions can be open-ended or closed-ended. In order to gather information and insights from a specific group, questionnaires are frequently used in research, marketing, social sciences, healthcare, and many other sectors

In designing a questionnaire the researcher should:

- Determine the aim of the questionnaire and the target population you address
- Begins with a solid introduction to attract the respondent attention to the subject
- The questions should be relevant clear and well-structured to ensure that the responses serve the research aim

Student's questionnaire

The student's questionnaire was divided into two sections which contains ten different questions. The questionnaire started by asking the age and gender of each student, followed by series of questions related to the subject Matter. The first section was about ICT and its importance in shaping learners motivation and autonomy as well as creating a better atmosphere for learners inside the classroom. The second section contains three questions consist on, first, identifying whether learners still use ICT after the pandemic or not. In addition to their opinions concerning the use of ICT platforms alone or with the guidance of the teacher. The final question talked about the challenges that learners face while using ICT materials inside the classroom

The questionnaire used in this investigation entails a combination of closed ended questions, likert scale surveys and multiple choice questions. It was designed for the sake of gathering the needed data

Teacher's questionnaire

This questionnaire was an attempt to identify the effect of COVID-19 as a push factor in integrating ICT in The Algerian universities.

The first question includes the effectiveness of ICT tools in the teaching learning process whether it is a positive or a negative effect. The second, third and fourth questions were mixed between closed ended questions and a multiple choice question it discussed COVID- 19 and the adaptation of ICT in Algerian universities and whether Algerian

teachers are well equipped with the necessary tools to face an upcoming pandemic or not. The fifth question on another hand was about learner's interaction towards using ICT lectures or classical lectures. The final question was an open ended question which gave the opportunity for teachers to express their views about the importance of ICT as a push factor in developing learner's autonomy.

Target population

It refers to the entire population or group that the researcher is interested in studying; the target population must be chosen and agreed upon before research can start.

In this research investigation the participants were second year EFL students at Dr. Moulay Tahar Saïda University. A total of 25 participants were engaged in the research investigation . In addition to the participation of four teachers in which they were selected randomly to answer the research study.

Conclusion

This chapter was an entailed description of the research instruments used in this investigation. The researcher adopted a mixed method approach to guarantee the use of both numerical and non-numerical statistics in order to achieve the objectives of the study. In addition to the research tools used mainly questionnaire for teachers and learners, as well as mentioning the participants involved in gathering valid data for the research.

The second chapter was a methodological part of the thesis which presents the research methods and tools used in this investigation paving the way for the following chapter which includes the analysis and interpretations of the gathered information.

Chapter III

Data Analysis and Interpretations

Introduction

This third chapter is providing the consequences that were gathered from the research instrument that was used in the current study. It shows how much is ICT important for EFL learners and what is the role that it plays to overcome the contemporary learning challenges. The questions were varied from one to another depending on the differences of the sections, and it treated all the needed points about the research topic.

This research adopted the quantitative research method to achieve the principle goal of the dissertation. The current study requires a questionnaire for EFL students beside another questionnaire for EFL teachers at Dr Moulay Tahar Saida University. This chapter is dealing with analyzing and discussing the obtained results from the questionnaire, it will also demonstrate how many learners have answered the given questions and the remarked notes during the observation as well. It will also provide some recommendations that both learners and instructors have to follow for the sake of shedding the light on the role of ICT in overcoming the contemporary learning challenges.

Analysis of Students' Questionnaire

This students' analyzed questionnaire was directed to more than 25 second year EFL students, at Saida University exactly at English department. The population's answers were very significant to move forward in this study's investigation, by gathering more information through the collected data about ICT and its role in solving the contemporary learning challenges. The current sample is known to be the most suitable one to gain the most vivid reliable results and findings.

Section one: Personal data**Question One: The students' gender**

Table 01: the Students' Gender

Gender	Number	Percentage
males	10	40%
females	15	60%

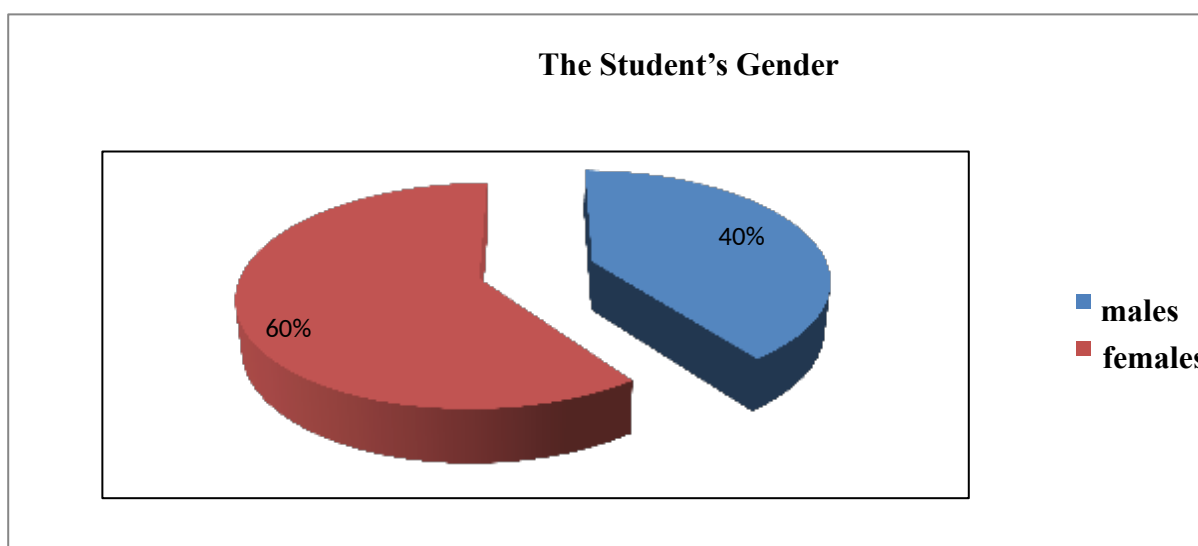
**Figure 01: the Student's Gender**

Table 01 and figure 01 are clarifying that females are more than males in a percentage of (60%) while males are less than them representing a percentage of (40%), this statistics can show that females are more interested in learning English language more than males do.

Question two: the learners' age

Table 02: the learners' age

Age	Number	percentage
19-20	5	20%
21-22	20	80%

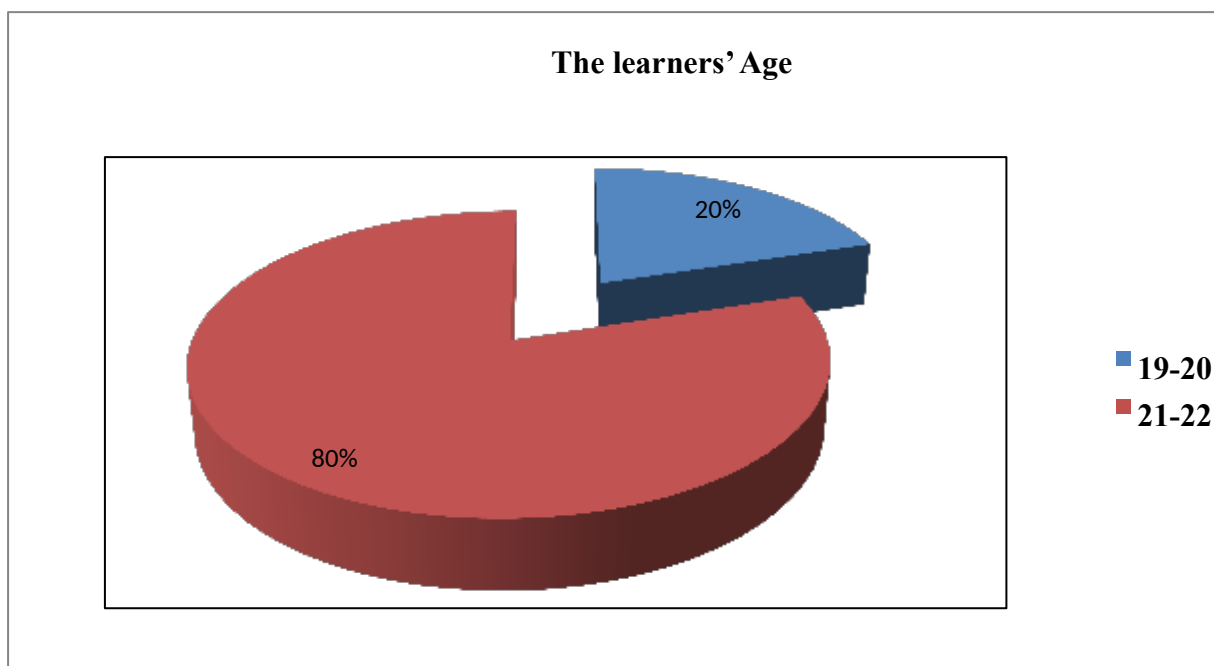
**Figure 02: the learners' age**

Table 02 and figure 02 are both showing that students are mature enough to choose the field of study that suits their information and suits their desire as well. The results explored that (80%) of the learners are 21 to 22 years old which is a good a number for a good decisions, while the rest of them (20%) are 19 to 20 years old.

Section two: learners' and the use of ICT

Question one: in your opinions what does the acronym ICT stands for?

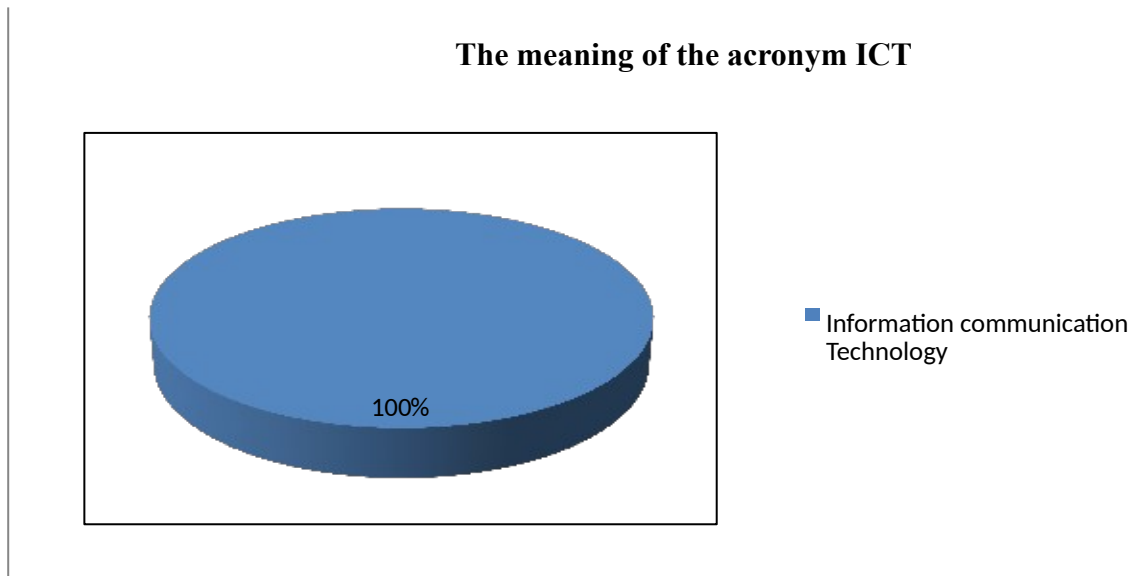


Figure 03: the meaning of the acronym ICT

The figure 03 demonstrates that all the participants are having the complete idea about what does the acronym ICT stands for, because (100%) of them answered by “ information and communication technology.

Question two: do you agree that using ICT tools and platforms motivate learners more than the classical techniques?

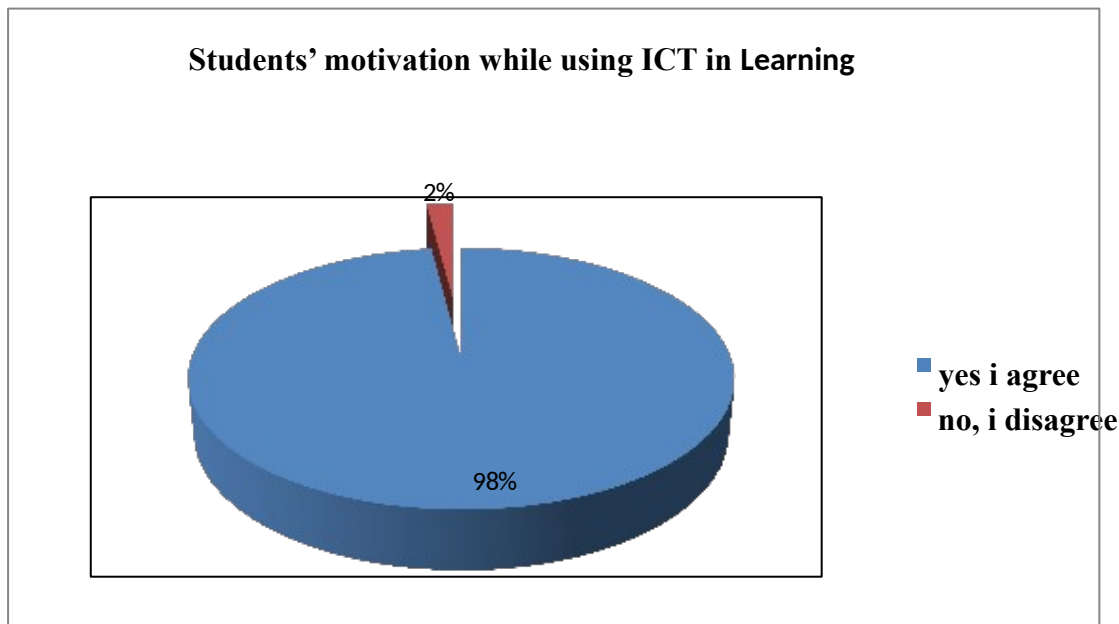


Figure 04: students' motivation while using ICT in learning

The pie chart above reveals that the great majority of students agree on the fact that that using ICT tools and platforms motivate learners more than the classical techniques, (98%) of the learners confirmed that they feel motivated while learning with ICT rather than learning with the classical methods of learning, (2%) of the participants on the other hand declared that they disagree on the fact that using ICT to learn motivate them, that can go back to the fact that they prefer the traditional way of learning rather than the new ICT one.

Question three: what is your attitude toward using ICT for learning?

Table 03: students' attitude toward learning with ICT

Students' attitude	Number	percentage
positive	23	92%
neutral	2	8%

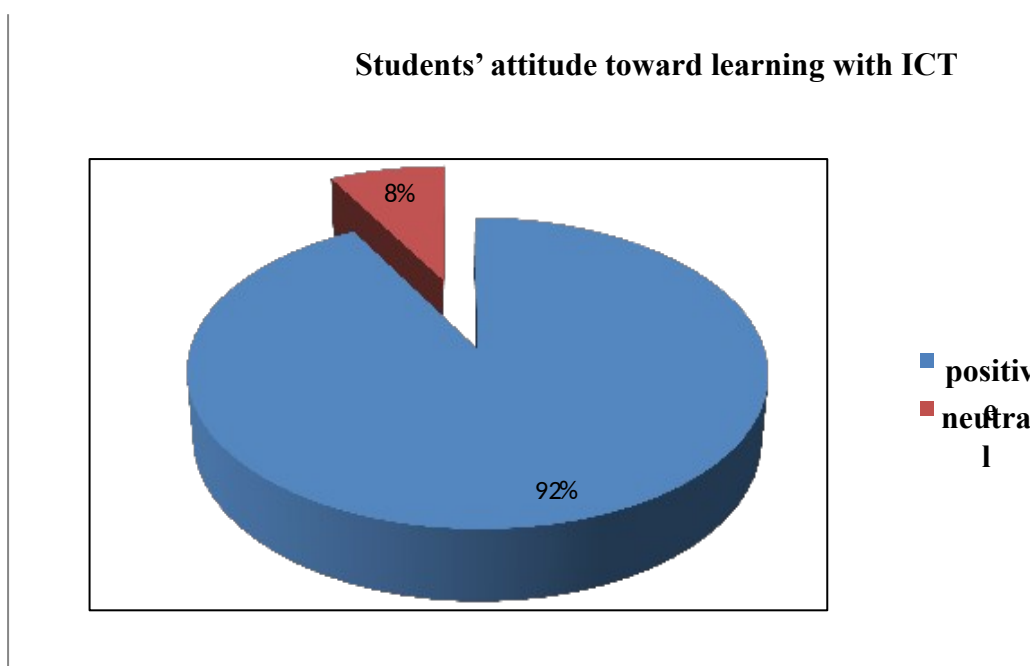


Figure 05: students' attitude toward learning with ICT

As it is shown on the table 03 and the figure 03 almost all of students are holding a positive attitudes toward the usage of ICT for learning, however, (92%) of the learners answered by "positive" which obviously show their positive attitude that reveals how much are they preferring ICT techniques and are having no problem with it; (8%) of the learners on the other hand declared that they do not exactly hold any attitude by answering with "Neutral".

Question four: how often do you use ICT platforms in general?

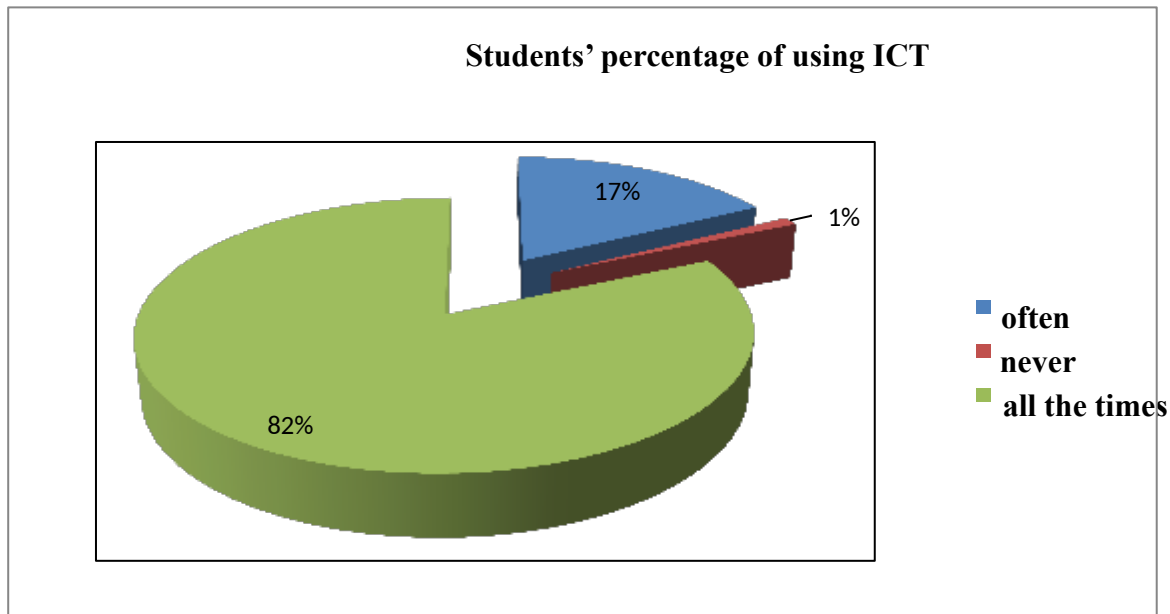


Figure 06: students' percentage of using ICT

The results obtained from the figure 03 show that students are using ICT in big extent, the information above revealed that (82%) of students are all the times using ICT which means that they prefer working with generally rather than other ways of learning. (17%) of the participants confirmed that they often use ICT as well, while only (1%) of the participants answered by “never” which reveals that they do not prefer using or working with ICT.

Question five: do you agree or disagree that getting information from ICT is better than using printed materials?

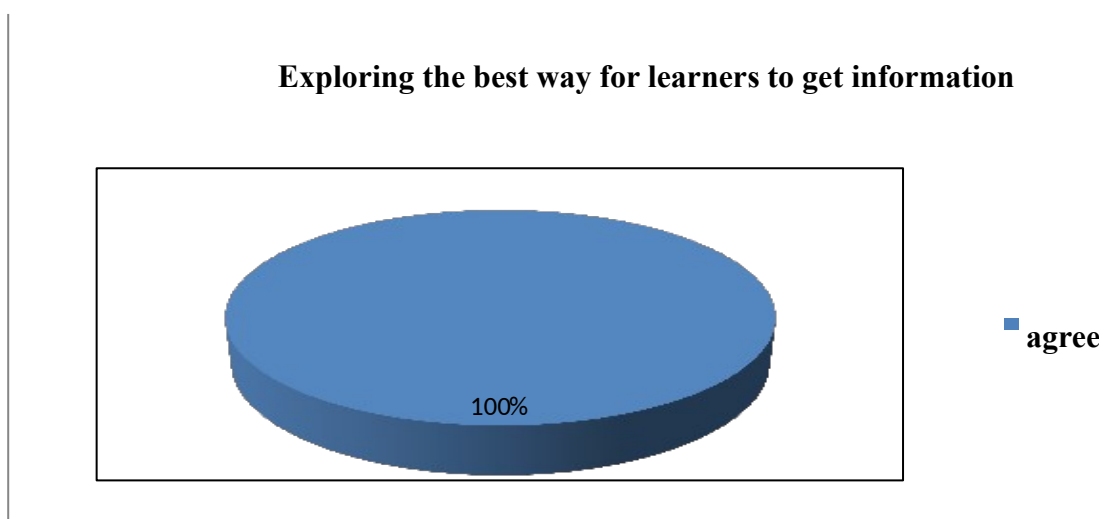


Figure 07: exploring the best way for learners to get information

The pie chart 05 demonstrates that the whole population is considering ICT as the best way to get information, since 100% (all of them) answered by “agree” on the question.

Question six: does the use of ICT create a better atmosphere?

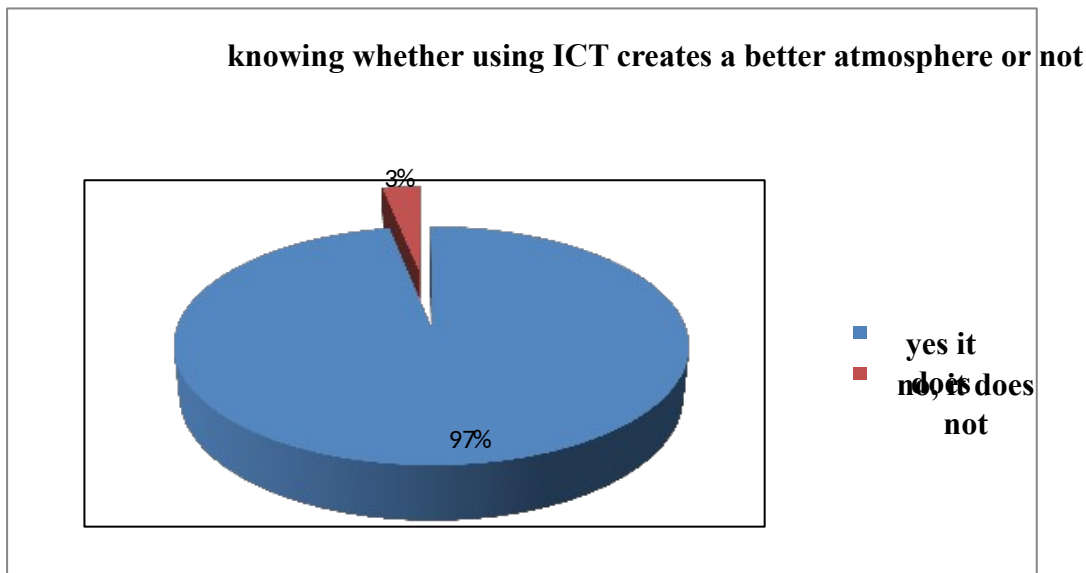


Figure 08: knowing weather using ICT creates a better atmosphere or not

It can be revealed according to the figure06 that using ICT makes the difference by creating a better atmosphere than any other way of learning since it was the answer of (97%) of the participants, while only (3%) of the participants declared that ICT does not create any better atmosphere for them (3% of the participants).

Question seven: what are the different components that differentiate ICT from other ways of learning?

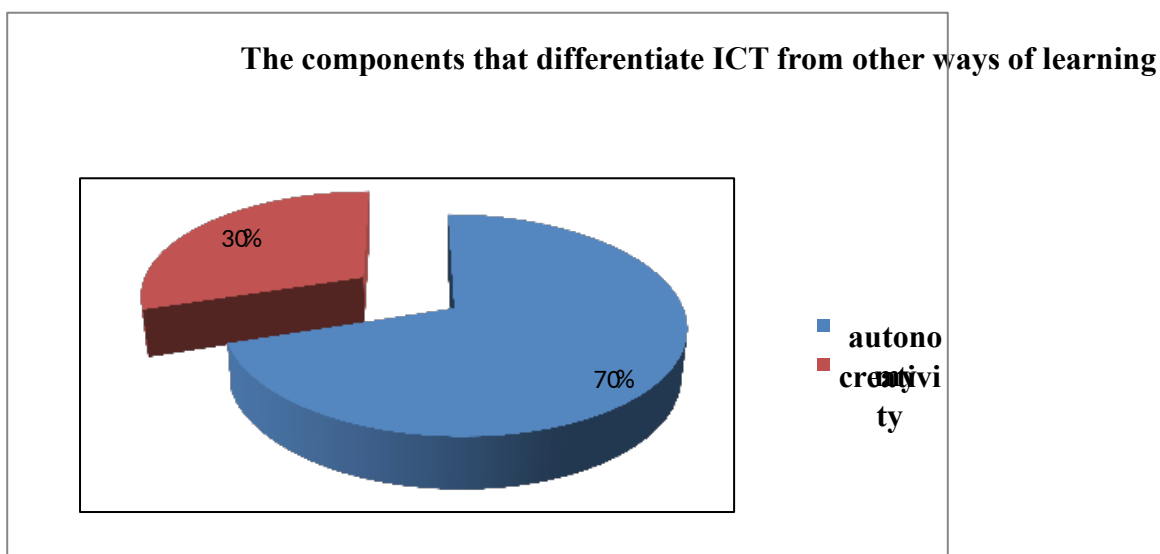


Figure 09: the components that differentiate ICT from other ways of learning

The pie chart 07 reveals that autonomy and creativity are the key components that characterized ICT from all other ways of learning. (70%) of students showed that autonomy is what they see as a good characteristic among ICT since it is known that students are always preferring and liking better to be autonomous learners, while (30%) of them prefer the creativity concerning ICT use since it is full of new techniques and plans which put them far of feeling bored.

Question eight: are learners still using ICT tools after the pandemic

Table 04: students' answers about using ICT after pandemic

Students' answers	Number	Percentage
positive	23	92%
neutral	2	8%

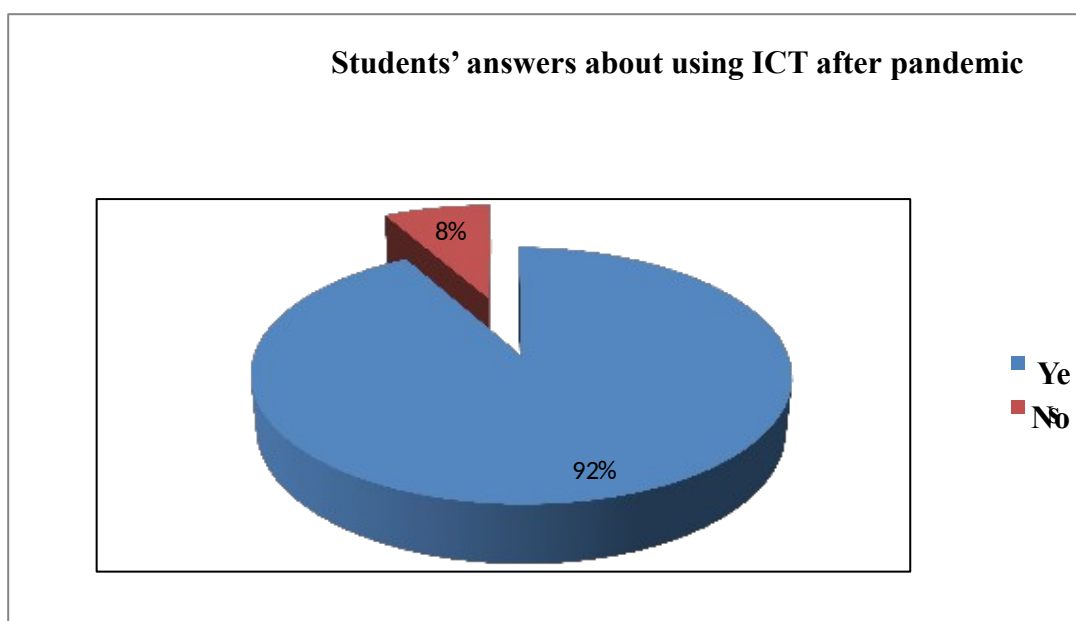


Figure 10: students' answers about using ICT after pandemic

The results on both table 08 and the pie chart 08 above reveal that the great majority of students are still using ICT tools because they represent (92%) of the whole population by answering by "Yes", while (8%) of the population answered by "No" which reveals that they are no more ICT tools after the pandemic.

Question nine: how can the use of ICT overcome the contemporary challenges of traditional learning?

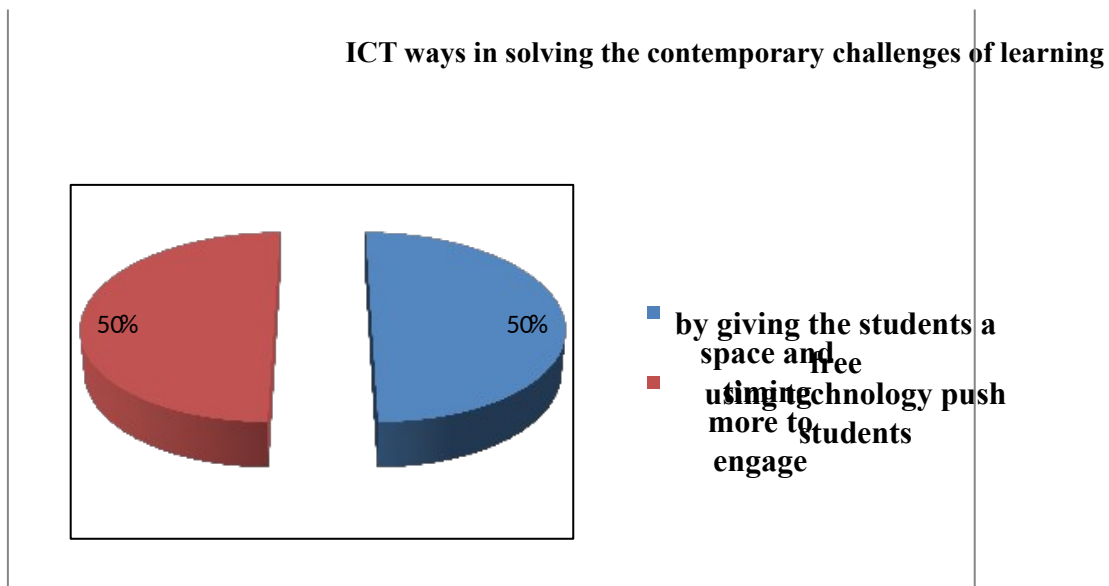


Figure 11: ICT ways in solving the contemporary challenges of learning

According to the figure 09 above, students' answers are divided into two equal parts: the first part representing (50%) of the participants who said that ICT can solve the contemporary learning challenges because it provides the free space and time that students need to feel at ease while learning, and the other part represent a percentage of (50%) of the participants that admit that ICT is solving the problem of challenges by pushing students more to engage since it contains different activities and techniques of learning.

Question ten: what are the challenges that you face while using ICT in the classroom

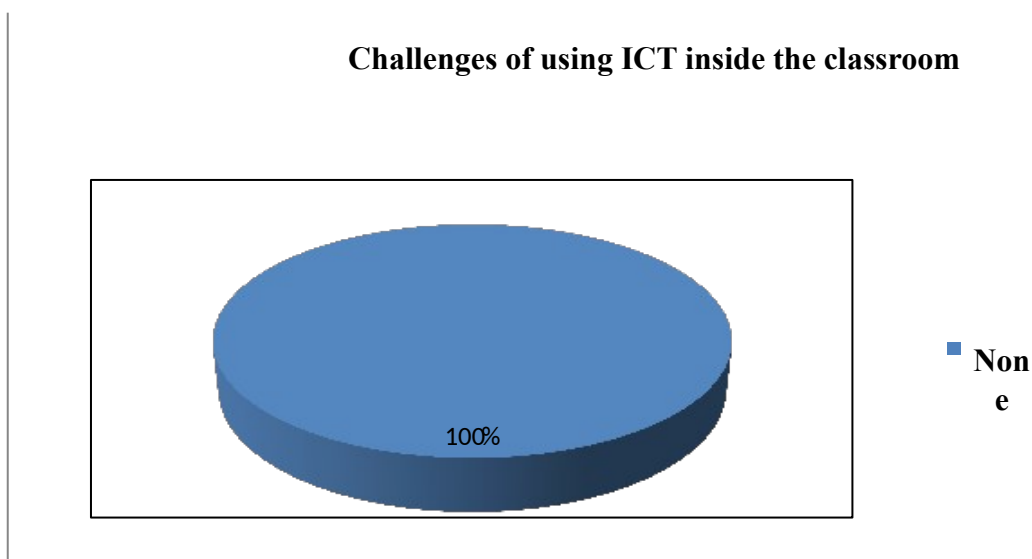


Figure 12: challenges of using ICT inside the classroom

By having a look at the results that figure 10 is providing, it can be obviously revealed that all (100%) students are not facing any challenges by using ICT inside the classroom.

Section three: further suggestions and comments

The current section formed the free space that students need to express themselves or their ideas in, because it does not contain any question that they have to answer, yet, it allows them to add anything they could not add in the questions sections. Students did not any extra remarks, except one collective idea which was concerning the research topic by expressing their impress about the topic and how much is crucial to be discussed especially nowadays where technology is playing such a vital role in humans life generally and learners life specifically.

Discussion and the interpretation of the main results (students' questionnaire):

As it is mentioned in this study, the main objective behind conducting this research study is to have an idea about the use of ICT to overcome the contemporary learning challenges.

Three research questions were asked to achieve the objectives of the study, these questions are as follow: what kind of challenges does traditional learning contains? , the second one: how can the use of ICT overcome the contemporary learning challenges? , and the third one: are learners still using ICT tools after pandemic?

The mentioned questions aided the investigator to find the suitable answers for the current research study, after analyzing the gathered answers from the questionnaire the researcher came up with various important information and points to discuss.

The first section entails two personal questions, section was about students' personal information which led the researcher to know that females are more than males, besides that, they also answered more than males did. Then, the researcher noticed that all students are mature and capable to make their own decisions concerning what they want to study and what they want to be in the future.

The second section entails ten (10) questions, it talks generally about EFL students and ICT, the questions of the second section led the investigator to sort out various significant items such as: exploring that all learners are aware of what does the acronym ICT stands for since all their answers were with "Yes", thus, students are having the complete idea about what they want to study and what they want to use for studying as well. The second question revealed that almost all of the students are motivated and excited to learn with ICT which means that ICT is wanted and accepted by them, unlike few of them who did not find using ICT in learning motivating for them. The third question clarify that all learners are holding a positive attitude toward using ICT, that is, ICT use and integration is welcomed and wanted by the great majority of students which means that they will know how to deal and cope with it without facing any difficulties. The fourth question shows that ICT is all time use by students since (82%) of them declared that they are using it daily, and (17%) of the participants said that they are often using it. The answers of the fifth question revealed that ICT is the most favorite way of getting information for students rather than any other way or tool. The use of ICT while learning create a better atmosphere according to students than the traditional way of learning, that what has been shown after collecting the results of the sixth question. The seventh and the eighth questions revealed both that autonomy and creativity are the items that characterized ICT from other ways of learning, then, it was demonstrated that students did not stop using

ICT after the pandemic; they kept working with it and using it even after the pandemic stopped. The last two questions showed that students are having no problems or challenges when using ICT in the classroom, since ICT is giving students a free space and time to learn comfortably and it is making them feeling at ease by using technology while learning. Briefly speaking, the questionnaire helped the researcher to prove all research hypotheses and to answer all the research questions concerning this study, because using ICT overcomes the contemporary learning challenges.

Teachers' questionnaire:

Analysis of Teachers' questionnaire

The following teachers' questionnaire was targeted to more than 10 second year EFL teachers, at Saida University exactly at English department. The participant's answers were very important to move forward in this study's investigation, by collecting more information through the collected data about ICT and its role in solving the contemporary learning challenges. The current sample is known to be the most suitable one to gain the most vivid reliable results and findings.

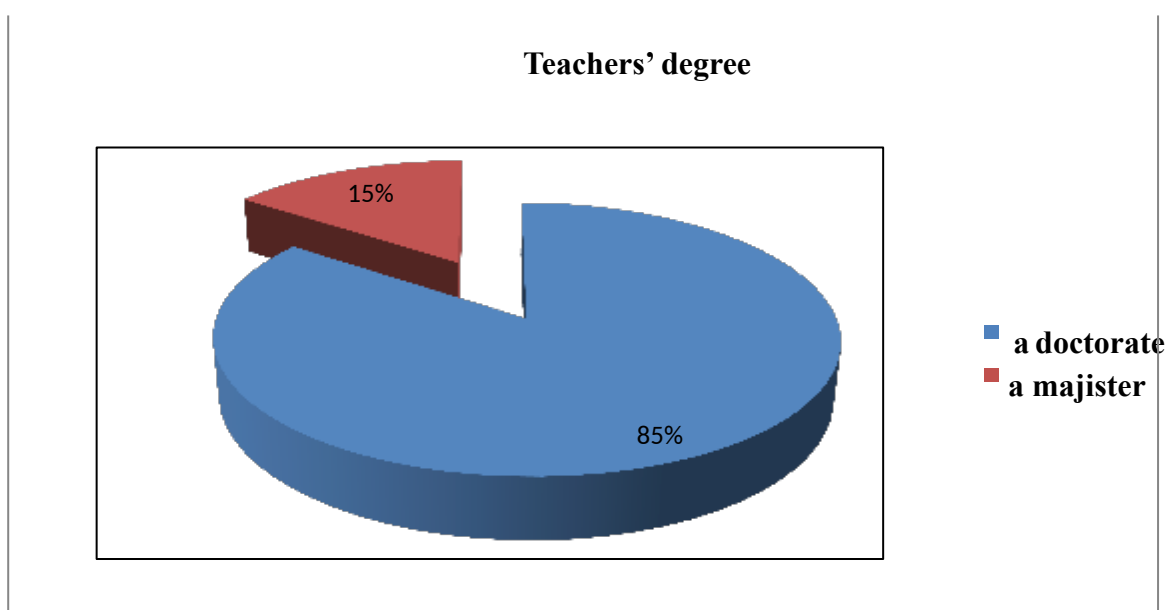
Section one: personal background:**Question one: which degree you held?**

Figure 13: teachers' degree

The figure above shows that the majority of teachers have reached a Doctorate degree (85%), while the other teachers represent a percentage of (15%) saying that they have reached a Master degree. The statistics are revealing that teachers are very competent and able to give the right answers of the questionnaire since they have a considerable knowledge.

Question two: how long have you been teaching?

Table 05: teachers' experience in teaching

Answers	Number of teachers	Percentage
15 to 20 years	5	71.4%
22 to 25 years	2	28.6%

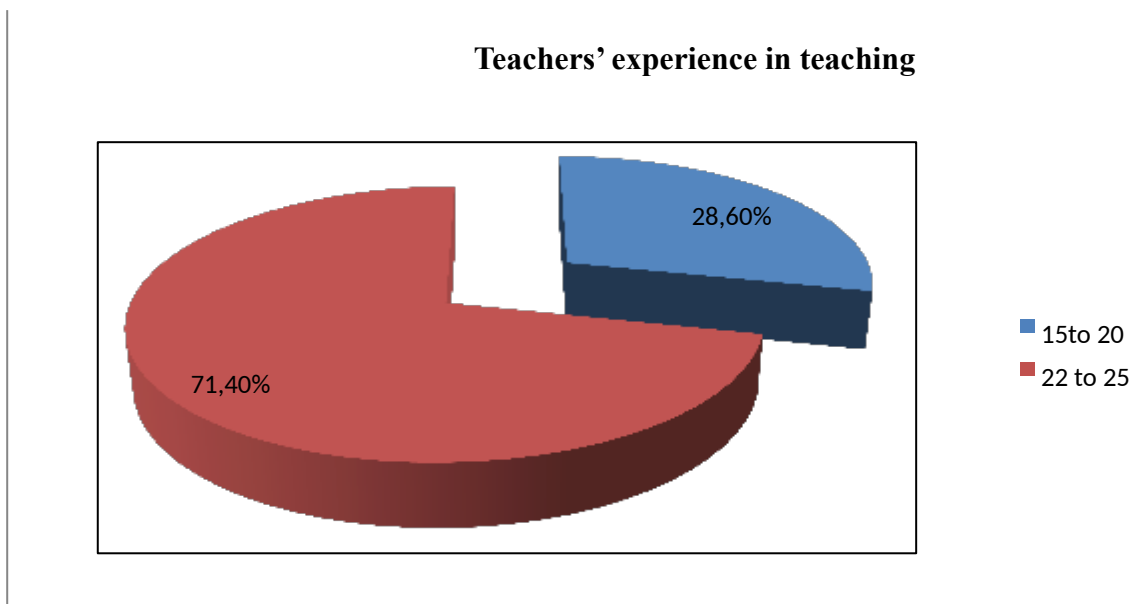


Figure 14: teachers' experience in teaching

Table 02, and figure 02 display the fact that second year EFL teachers are having a lot of experience since they have been teaching for a good period which is not less than 15 years among the field of teaching. (71.40%) of the teachers declared that they have been teaching for more than 22 years, yet, there are some of them who have been teaching for even 25 years. (28.6%) of the teachers answered by saying that they have been teaching for more than 15 years to 20 years. The mentioned statistics show how the teachers' answers will be an effective process that will help a lot in completing this research work.

Section two: EFL teachers' opinions and attitudes towards the use of ICT

Question one: as a practitioner, do you think that ICT is an effective method or just a complementary?

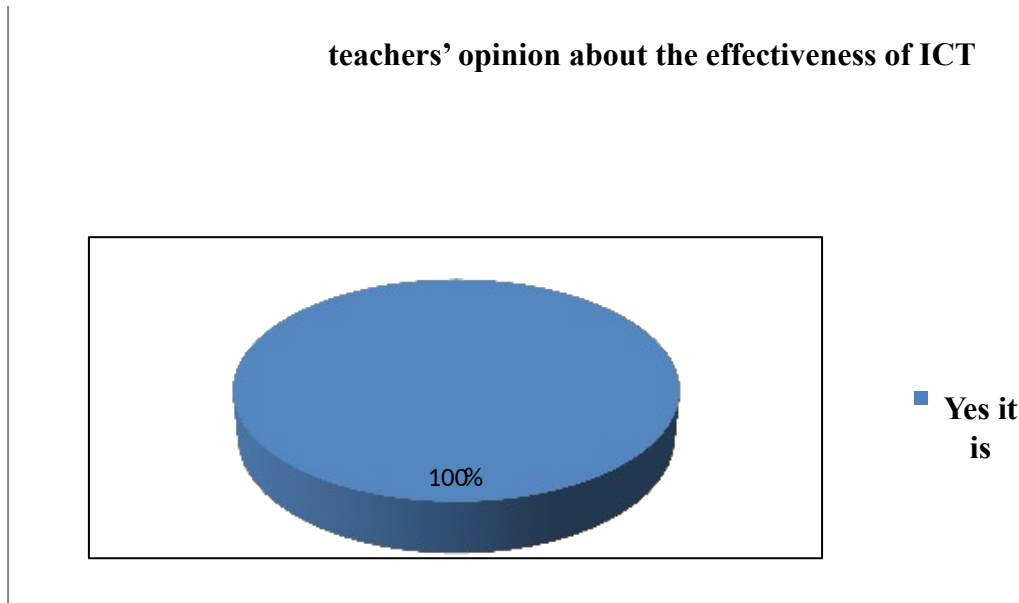


Figure 15: teachers' opinion about the effectiveness of ICT

All teachers (100%) answered by “Yes” on the question that was asked about the use of ICT, that is, all participants are seeing ICT as a helpful process that can bring a lot for them in teaching, and for students while learning.

Question two: is the integration of ICT in the Algerian universities a successful failed process?

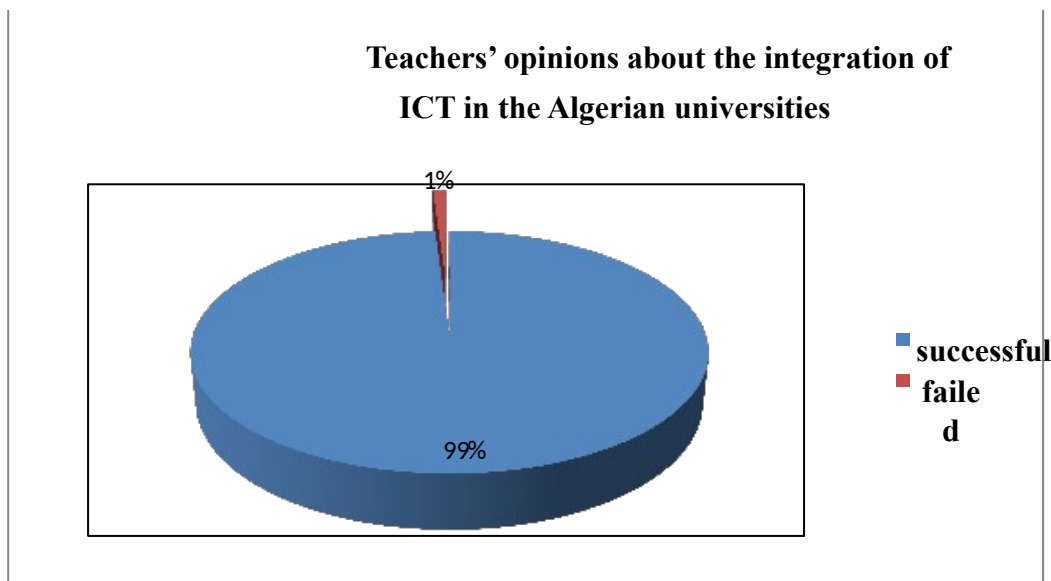
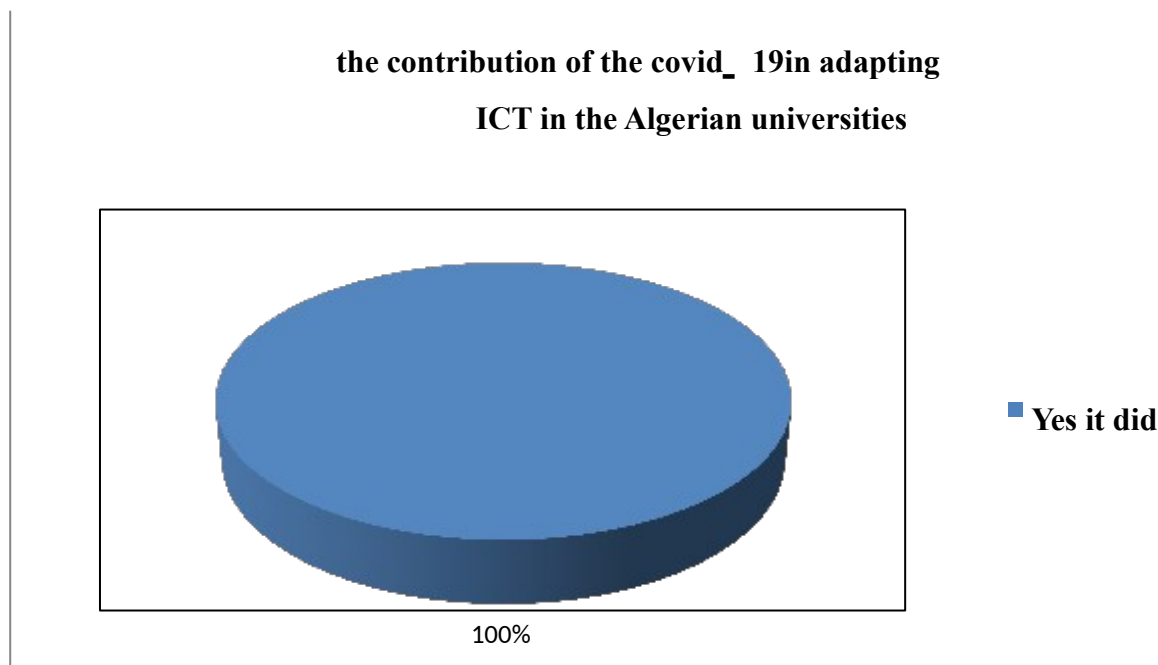


Figure 16: teachers' opinions about the integration of ICT in the Algerian universities

The statistics taken from the pie chart 02 clearly show that the integration of ICT in the Algerian universities is a successful process because (99%) of the participants answered that it will be a successful process except 1% of the participants answered that it will be a failed process.

Justification: the (99%) of the participants justified their answers by saying that the operation of integrating ICT will bring a lot of successful projects to the Algerian universities especially if students will know how to use it properly. The (1%) of the participants justify by saying that it is not that much necessary to be integrated.

Question three: did the corona virus contribute in the adaptation of ICT in the Algerian universities?



**Figure 17: the contribution of the covid-19 in adapting ICT
in the Algerian universities**

The figure above displays that the COVID-19 has contributed in a big extent in adapting ICT in the Algerian universities according to the teachers' answers, because all of them (100%) answered by "Yes".

Question four: do you think that Algerian teachers are equipped with the necessary tools to face an upcoming pandemic?

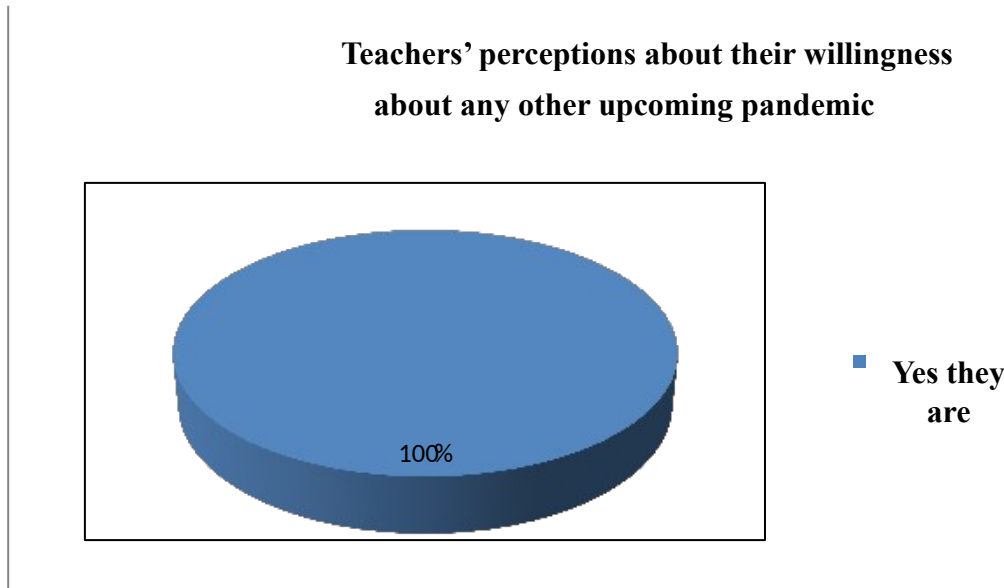


Figure 18: teachers' perceptions about their willingness about any other upcoming pandemic

Since (100%) of the participants confirmed that they are well-equipped about facing any other upcoming pandemic, it is revealed that they got used on using and working with ICT and they are having problem concerning working with it.

Question five: in your opinion do learners interact more with lectures using ICT or classical lectures?

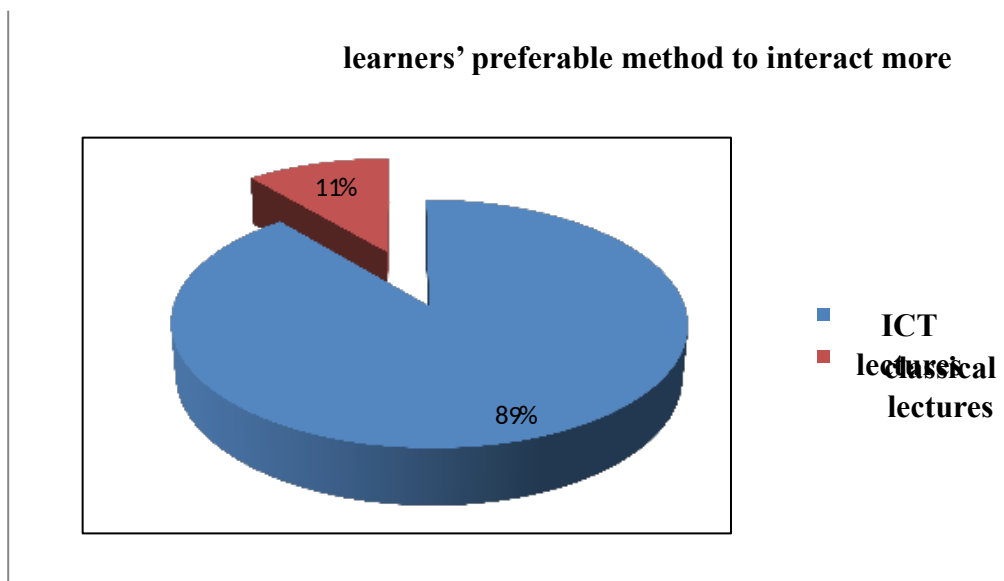


Figure 19: learners' preferable method to interact more

From the obtained answers in the pie chart 05 above, it can be revealed that the great majority of teachers declared that their students interact and engage more with ICT lectures, rather than classical lectures. (89%) of the participants answered that learners prefer the ICT sessions because they become more active and produce more while studying with ICT, (11%) from the participants on the other hand said that their learners prefer the classical lectures more than the ICT one.

Question six: are you still ICT tools while teaching or you stopped when the pandemic stopped?

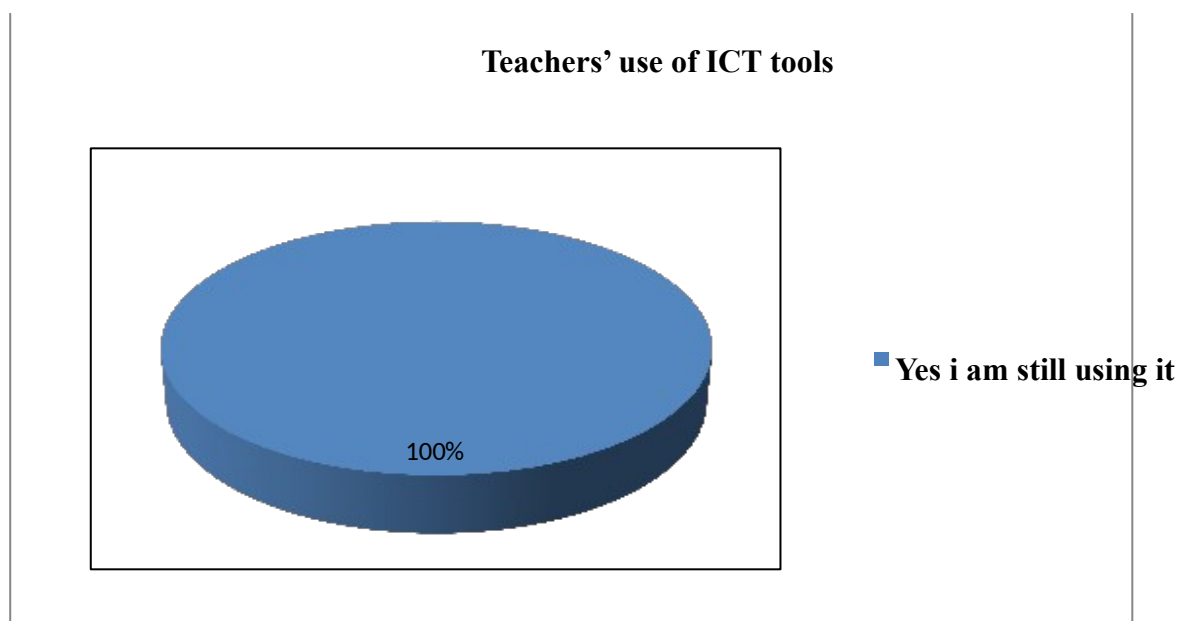


Figure 20: teachers' use of ICT tools

The results of the pie chart 06 reveal that using ICT by teachers did not stop when the pandemic stopped, yet, it is still continuing to be used nowadays, and was confirmed by all the teachers (100%).

Question seven: could you please talk in a few lines about the importance of ICT as a push factor in developing learners' autonomy?

Teachers were all having approximately the same answers, they said that ICT is of a great help in motivating learners to learn more and to feel responsible because learners will be the leaders of their own learning process when they are autonomous learners and that cannot be achieved if they are not using ICT since the traditional way of learning does not allow them to do so.

Discussion and the interpretation of the main results (teachers' questionnaire)

Teachers' questionnaire was compound of two sections: the first section was concerning the personal background of the teachers, the, the second one was concerning EFL teachers' opinions and attitudes towards the use of ICT.

The first section showed how much experience in teaching teachers are having, and the objective of the question was revealed by knowing that second year EFL teachers are all having a respectful experience because of their teaching career which was expanded to more than 25 years. Then, the investigator discover also that second year EFL students are competent because they are reaching the best degrees of certificate.

The second section contained seven questions that varied from one to another; the results of the seven questions were as follow: all teachers agreed on the fact that ICT is effective not just a complementary; teachers declared that integrating ICT in the Algerian universities will be a successful project, then teachers add that: the COVID-19 has contributed in a big extent in adapting ICT in the Algerian universities, teachers have also show that they are well equipped to face and receive any other pandemic. The answers show also that their learners prefer ICT lectures more than the classical ones, in addition to the teachers' abiding use of ICT even after the pandemic. Teachers eventually, mentioned some different points concerning the significance of ICT use.

Teachers' answers summed up that ICT is very important that is why it should be integrated in the Algerian universities for it offers students as benefits and for what it solve as challenges.

The research questions were completely and perfectly answered and the research hypotheses were also approved.

Conclusion

The third chapter is the last chapter in this research work, it entails the analysis and discussions of all the obtained data, that the researcher collected by using: a questionnaire for second year EFL students in addition to the questionnaire that was made for second year EFL teachers in the department of English language at Dr moulay tahar saida's university. The obtained findings of the questionnaires were compound of tables and pie charts in such a descriptive statistical form. The investigator approved the research hypothesis and also answered the research questions, while the results showed how much is ICT useful in overcoming the contemporary learning challenges, and how can it facilitates the way of learning for students, in addition to the enjoyable environment that it provides.

Pedagogical recommendations:

ICT usage is of a great significance for EFL learners, it helps them to develop learning skills and to solve various problems that could be created by the traditional way of learning. There are some suggested recommendations for EFL learners and their teachers that they should both follow to be aware of the different benefits of ICT use, and how it can create the difference when it used for both teaching and learning.

Recommendations for second year EFL students:

- Students should express their desire concerning using ICT to learn.
- Students should know how use the benefits of ICT and how to be far of its disadvantages.
- Students should be the leaders in their academic pursuits and self-directed.
- Students should actively sought knowledge rather than simply listening to their instructors.
- Students should devote the exact time of traditional way of studying for ICT learning.
- Students should reach more academic achievement after using ICT for learning.
- Students should classify the challenges that they face from traditional way of learning to find it easy later on to solve with using ICT.
- Students should navigate more from staying home to learn extra languages.
- Students should select the appropriate ways that help them learning quickly using ICT.
- Students should work on improving their cognitive and language skills using ICT.

Recommendations for second year EFL teachers:

- Teachers should encourage working with ICT in the classrooms.
- Teachers should bring new ways of teaching that suit learners' desire using ICT.
- Teachers should agree and support the idea of integrating ICT in the Algerian universities.
- Teachers should be aware of choosing the most appropriate tasks for their learners.
- Teachers should put their full attention on their students in order to make them staying on the context not out of it.
- Teachers should keep giving their students home works to solve, and give them the background they need as well.
- Teachers should always add their own touch and knowledge to their teaching techniques in order not to be relying only on ICT.

Conclusion

General Conclusion:

Technology advancement has led to new breakthroughs in the field of education. Several technological tools are available today that can be used to enhance learning and facilitate instructional process. Technology has the potential to significantly alter how people learn. It can help strengthen and develop relationships between teachers and students, ICT technologies are successfully being used in EFL classes, and their significance in education is growing, particularly at universities. Teaching and learning have improved as a result of the introduction of technologies in educational contexts, particularly in EFL.

The convergence of COVID-19 epidemic in 2019 brought several changes and disturbances in the field of education . resulted in the adaptation of ICT platforms and online learning as alternative way to continue the instructional process .

Dr Moulay Tahar Saïda university was no exception. Teachers and learners had to switch to the virtual environment , By integrating Moodle platforms in their educational system as well as other social media tools mainly Facebook to share their lessons online. The rapid advancement of information and communication technology modifies the strategies and techniques teachers depend on to teach, as well as the means. This study aims to highlight the importance of information communication Technology as a major element in overcoming learning challenges

This research paper is divided into three major chapters that contain a detailed view. of the study investigation

A related literature review is the starting point of this investigation, it contains the ICT definition, importance, and attitude towards its implementation, in addition to mentioning the Barrie's and hindrances of this implementation ending with a brief overview of the COVID-19 epidemic and it's effect on the Algerian educational system.

The second chapter explores the Methodologies followed to achieve the study purposes, a mixed method approach was suitable for the collection both numerical and non numerical data besides the main research tools used and the target population needed.

The third and final chapter represents an analysis and interpretation of the data collected by the researcher in addition to some recommendations and suggestions

Research Questions

1. What kind of challenges does traditional learning contains?
2. How does the implementation of ICT help in overcoming the learning challenges?
3. The research questions led to the finding of two main hypothesis:
 - ◀ It is hypothesized that traditional learning contains different challenges such: as the limited time, limited knowledge, anxiety during the learning sessions, and the lack of comfort
 - ◀ It is hypothesized that The use of ICT can solve various problems by facilitating the way of teaching and learning for EFL students, as well as developing their autonomy And creating a motivated atmosphere.
4. The data gathered by the teachers and learners questionnaire revealed the 2nd year EFL students are aware about the use of ICT as well as their positive attitude towards it. Besides it's effect on learners autonomy and motivation
5. On the other hand all teachers agreed on the effectiveness of information and communication Technology as a driven force of the learners development, they confirm that with the massive technological progress that the educational field has witnessed, ICT is a necessity in every aspect in education.
6. The findings of this study answered the research questions and confirmed the research hypothesis
7. The suggestions and recommendations represent a significant step towards the improvement of ICT integration in the field of education.

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Appendix

Questionnaire
Student's questionnaire

Dear respondents;

This questionnaire is an attempt to collect the needed data for an academic research. This questionnaire sheds light on the use of ICT to overcome the contemporary learning challenges. Your answers will be valuable in shaping the outcome of the reaserch, thank you in advance.

1- In your opinion, what does ICT stands for ?

- a- Information communication technology ☐
- b- Internet communication technology ☐
- c-Information communication techniques ☐

2- Using ICT tools and platforms motivate learners more than the classical learning techniques?

Agree ☐ Disagree ☐

3- What type of feedback you show while using ICT in class?

Positive ☐ Negative ☐ Neutral ☐

4- How often do you use ICT platforms In general?

Often ☐ Never ☐ Rarely ☐

Sometimes ☐ All the time ☐

5- Do you agree or disagree that getting information from ICT is better than using printed materials?

Agree ☐ Disagree ☐

6- Using ICT for learning creates a better atmosphere?

Yes ☐ No ☐

7- What are the different component you think are effected positively by ICT?

Creativity ☐ Autonomy ☐ Class interaction ☐ Behaviour ☐

8- Are learners still using ICT tools after the pandemic ?

Yes ☐ No ☐

9- As a student, do you think that using ICT platforms alone is enough or you need the presence and guidness of the teacher?

ICT with the guidness of teacher ☐

ICT without the guidness of teacher (online teaching) ☐

10- What are the challenges that you face while using ICT inside the classroom ?

Technical problems ☐ Interactional during presentations ☐ None ☐

Teacher's questionnaire

Dear Teachers;

This questionnaire is an attempt to gather the needed data for an academic research about the use of ICT to overcome the learning challenges. The researcher is grateful for your participation and assistance in answering this questionnaire, thank you in advance.

1- As a practitioner, do you think that ICT is an effective method to use or just a complementary?

Positive ☐ Negative. ☐ Neutral ☐

2- Is the integration of ICT in Algerian universities a success or a failure?

Yes (success) ☐ No(failure) ☐

Justify.....

3- Did Corona virus contributed in the adaptation of ICT Algerian university?

Agree ☐ Disagree ☐

4- Do you think that Algerian teachers are equipped with the necessary tools to face an up coming pandemic?

Agree ☐ Disagree. ☐ Neutral ☐

5- Do learners interact more with lectures using ICT or classical lectures?

Agree ☐ Disagree (classical lectures) ☐

6- Are learners more productive and autonomous when faced with PPT presentation or simple CM?

PPT presentation ☐ Classical CM. ☐ Both ☐

7- In few lines, mention the importance of ICT as a push factor in developing learners autonomy?

Justify.....