

PEOPLE'S DEMOCRATIC REPUBLIC OF ALGERIA
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Technology-driven Learning for Facilitating the Pupils' Positive Engagement

**Case Study: Second Year Pupils at
Aissaoui Lakhdar Middle School in Ain
Kermes - Tiaret**

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for the Degree of Master in Didactics

Presented by

Miss. Nesrine OUANNANE

Miss. Naima NOURI

Supervised by

Dr. Djilali MOURI

Board of Examiners

Dr. LAKHDAR Asmaa TOUMI

Chairwoman

Ibn Khaldoun University of Tiaret

Dr. MOURI Djilali

Supervisor

Ibn Khaldoun University of Tiaret

Dr. BOUGUESSA Amina

Examiner

Ibn Khaldoun University of Tiaret

Ibn Khaldoun University of Tiaret

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Dedication

My aim to finish the master's degree was one of my dreams and greatest challenges.

I dedicate this modest work to:

First, and foremost I thank Allah for giving me the strength throughout this journey.

My beloved mother may God have mercy on her soul and grant her paradise, without her favours and guidance; I will not be standing here in front of you: My idol, source of my happiness and success in life who had given me a lot of love and support, she is the one who had brightened my career with her prayers, honestly, I will not forget any of her motivational and instructional words, sincerely, her efforts will not go in vein.

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It was a great and stressing experience, but it would not have been finished without the support of all of them.

Miss. Nesrine OUANNANE

Dedication

In the Name of Allah, the Merciful, the Compassionate, All the Praise is due to Him alone.

I would like to dedicate this work to my family, first to my mother, to my uncle, to my brother, and to my friends Nessrin and Shayma. Without forgetting to thank my dead father Khaled, may God have mercy on him. His joy would have been greater with my success if he had been present among us.

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ABSTRACT

The present study seeks to investigate the impact of Information and Communication Technology on middle school students, it basically focuses on the importance of ICT to enhance teaching and learning process, the main purpose of this research study is to examine the relationship between the pedagogical challenges and the development of ICT learning tools, in view of this work divided into three parts. A theoretical part, namely the first and the second chapters include the main ideas of ICT in education. We have also collected the benefits and the role of teachers in the classroom also; we discussed the term ICT and its importance in education. The third chapter deals with the methodology adopted to conduct the research study with the analysis of the findings, the data were gathered through a series of questionnaires administered to a sample of (69) students (second year middle school of Aissaoui Lakhdar in Ain Kermes). The findings of this research reveal that the majority of students and teachers show positive attitudes towards the integration of ICT in education. Consequently, students and teachers need to be provided by effective ICTs, and take advantage of appropriate tools in order to improve their teaching process. This research ends up with recommendations and implications for further research.

Key words: ICT, Education, Middle School Students, Pedagogical Challenges, Positive Attitudes.

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List of Acronyms

AI: Artificial Intelligence

AL-Powered: Adaptive-Learning

BBC: British Broadcasting Corporation

BCE: Before Common Era

CE: Common Era

Chat GPT: Chat Generative Pertained Transformer

EFL: English as Foreign Language

ELT: English Language Teaching

E-skills: Electronic skills

FL: Foreign Language

ICT: Information and Communication Technology

IT: Information Technology

LMD: Licence Master Doctorate

MIDI: Musical Instrument Digital Interface

NASA: National Aeronautics and Space Administration

OECD: Organisation of Economic Co-operation and Development

TED: Technology Entertainment and Design

TEFL: Teaching English as Foreign Language

TV: Tele-Vision

UNESCO: United Nations Educational Scientific and Cultural Organisation

W.W.W: World Wide Web

WMA: Windows Media Audio

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General Introduction

General Introduction

Education is changing now and will keep changing in the future due to technology. Digital media are used in education to improve instruction both in traditional classroom settings and in online learning environments.

Education technology is the body of information and equipment that makes it possible to use technological tools in the teaching and learning process, it's about using "ICTs" to solve educational challenges and give details about Technology of Communication. Teachers can use this time to organize the learning process and make the teaching task as effective as possible. Technology, including televisions and computers, has made this possible. While some instructors feel "Traditional Methods" are effective, others advocate for the use of educational technology. The latter considers the application of using technology in education, such as computers, the Internet, mobile phones, tablets, and digital whiteboards, offers several benefits, including modernization and relevance to the technological era.

Teachers can use a wide range of materials and strategies to explain the subject effectively. Visual and interactive teaching methods enhance student comprehension of class material. For all of these advantages and many more, Algerian institutions prioritize integrating technology into education and encourage experimentation with new kinds of learning. Educational technology has been widely used in schools and educational facilities for decades. Teachers benefit from employing educational equipment like projectors to illustrate lectures for students.

Nowadays, teaching and learning English via traditional techniques is a challenging undertaking. In our classes, we virtually always employ books, blackboards, and chalk. New teaching tools are becoming more prevalent with the advancement of technology. As a result, we must investigate how to include it into the evolution of English teaching and learning. This study has the following objectives:

General Introduction

- To find out if these educational aids are available in our middle schools.
- To investigate whether these educational tools are being integrated into EFL classrooms.
- To investigate whether these new technologies are helping the teaching and learning process.
- To investigate whether the educational technology could help the student to enjoy English learning.

Educators are increasingly interested in employing technology in the classroom due to its significant influence on English learning. Overuse of traditional approaches reduces student-teacher engagement and motivation. Thus, ICTs have to be incorporated into the academic curriculum. This study emphasizes the relevance of teacher and learner activities in improving the learning process. At middle school level, ICTS help students become more engaged with the educational system by introducing them to technology.

To investigate the use of technology in EFL classrooms and its impact on teaching and learning, the study offered the following research questions:

Why do educators employ educational technology while teaching and studying English as a foreign language?

- Can teaching aids increase EFL learning for teachers and students?
- How do educational tools impact EFL instruction and learning?

To investigate the aforementioned research topics, we presented the following hypotheses:

- Implementing educational technology in EFL classroom can dramatically increase learning results.
- Teaching tools enhance EFL classes while increasing learner engagement and motivation.
- Educational technology has a positive impact on EFL teaching and learning.

ChapterOne

Literature Review about
Information and Communication
Technology

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Introduction

A recent development in foreign language education is the use of technology for teaching and learning English as a second language. With computer-assisted education and interactive media technologies complementing the conventional usage of chalk and the blackboard, technology is becoming more prevalent in both classroom and home study settings. In light of earlier research, Zhang (2003) declared that increasing connection between English and technology creates new demands for College English education.

This theoretical chapter is about ICT and EFL teaching starting by general study about the history of ICT and their definition and what also the types and the use of ICT in education .Then we move to the importance of Information and Communication Technology (ICT) .Additionally, the advantages and disadvantages of ICT). In the other hand, the best applications for both learners and teachers like (Duolingo, Memrise and Babbel) .also Teachers' Role in the Classroom.

1.1. History of Information and Communication Technology

1.1.1. Pre-mechanical Period

The pre-mechanical period can be traced back thousands of years ago, around 3000 BCE to 1450 CE. During this time, humans started communicating with one another using words and pictograms carved in rocks.

Then they started to write symbols as substitutes for pictures to depict ideas, objects, and animals. These gave rise to our modern-day alphabet. Time passed and early humans soon realized that stone tablets are too heavy and bulky. The information to be stored was growing and was becoming enormous, and writing these pieces of information in stone tablets was impractical. When paper was finally produced from the papyrus plant, storing of information was revolutionized.

Humans continued to write information that can be organized in some manner kept as a permanent record. They eventually compiled these records written on pieces of paper and bound them together, eventually giving birth to books. As these books grew in number, they needed to be compiled and stored in areas; hence, libraries were created. Libraries were considered the first data centers in history.

In the late stages of this period, humans started using the numerical system. This numerical system spread around the world gradually, enabling a simpler, faster, and more organized way to count. A skilled abacus operator can work on addition and subtraction problems at the speed of a person equipped with a hand calculator (multiplication and division are slower). The abacus is still in use today, principally in the Far East.

1.1.2. Mechanical Period

This period served as the bridge between our current period and the pre-mechanical period. This period started around 1450-1840. During this time, the interest in automating and

speeding up numerical calculations grew. The machines driven by mechanical means such as steam and gears dominated information processing and calculation. This period also concentrated primarily on development of machines that will enhance calculation speed.

Napier's invention led directly to the slide rule, first built in England in 1632 and still in use in the 1960's by the NASA engineers of the Mercury, Gemini, and Apollo programs which landed men on the moon.

The highlight of this period is the advent of the mechanical calculator called the Pascaline, which was invented by the famous mathematician inventor, Blaise Pascal along with Wilhelm Schickard. This device inspired other inventors to automate counting and calculations.

In 1642 Blaise Pascal, at age 19, invented that as an aid for his father who was a tax collector. Pascal built 50 of this gear-driven one-function calculator (it could only add) but couldn't sell many because of their exorbitant cost and because they really weren't that accurate (at that time it was not possible to fabricate gears with the required precision). Up until the present age when car dashboards went digital, the odometer portion of a car's speedometer used the very same mechanism as the Pascaline to increment the next wheel after each full revolution of the prior wheel. Pascal was a child prodigy. At the age of 12, he was discovered doing his version of Euclid's thirty-second proposition on the kitchen floor. Pascal went on to invent probability theory, the hydraulic press, and the syringe.

1.1.3. Electromechanical Period

The electromechanical period ushered in a new age in communication and information. This period started around 1840-1940. In this period, the use of electricity for information handling and transfer bloomed. The need and the urgency to share information with one another in a faster yet reliable manner over long distances aroused.

One early success was the Harvard Mark I computer which was built as a partnership between Harvard and IBM in 1944. This was the first programmable digital computer made in

the U.S. But it was not a purely electronic computer. Instead the Mark I was constructed out of switches, relays, rotating shafts, and clutches. The machine weighed 5 tons, incorporated 500 miles of wire, was 8 feet tall and 51 feet long, and had a 50 ft. rotating shaft running its length, turned by a 5 horsepower electric motor. The Mark I ran non-stop for 15 years, sounding like a roomful of ladies knitting. On a humorous note, the principal designer of the Mark I, Howard Aiken of Harvard, estimated in 1947 that six electronic digital computers would be sufficient to satisfy the computing needs of the entire United States.



Information and Communication Technology

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1.2. Definition of ICT

UNESCO (2002:123) defines ICT as “forms of technology that are used to transmit, process, store, create, display, share or exchange information by electronic means.” Indeed, it is required for information transmission through using several electronic devices on which information are processed to store knowledge that creates new environments out of displaying applications, sharing and exchanging data.

Christenson (2010) defines ICT as access to information through telecommunications. It is similar to information technology (IT) which includes the Internet, wireless networks, cell

phones, and other communication mediums. This can be a general definition of ICT with the focus on communicational aspects which is an integral base for learning and teaching.

ICT means the use of computer-based technology and the Internet to make information and communication services available in a wide range of users. Which mean that ICT refers to the application of computer-based technology and the Internet to provide communication and information services to a broad user base.

Information technology (IT) is the application of computers and telecommunications equipment to store, retrieve, transmit and manipulate data, often in the context of a business or other enterprise. In other words the use of computers and communications technology for data storage, retrieval, transmission, and manipulation—often within the framework of a corporation or other enterprise—is known as information technology, or IT.

Livingstone (2012, p. 13) states that ICT includes technologies specific to the school environment (e.g. interactive whiteboards) or applications used across formal or informal boundaries (e.g. Education games) and networked technologies. Which meant by this is that information and communication technology (ICT) include both networked and specially designed for use in educational settings (like interactive whiteboards) as well as applications used informally or legally (like educational games).

According to Hennessy, Ruthven and Brindley (2005, p. 2), the term ICT encompasses the range of hardware (desktop and portable computers, projection technology, calculators, data logging and digital recording equipment), software applications (generic software, multimedia resources), means of telecommunication and information systems (Intranet, Internet). That is to say that Software applications (generic software, multimedia resources), hardware (desktop and portable computers, projection technology, calculators, data logging and digital recording

equipment), communication methods, and information systems (Intranet, Internet) are all included in the term ICT.

Information and communications technology (ICT) is an extensional term for information technology (IT) that stresses the role of unified communications[1] and the integration of telecommunications (telephone lines and wireless signals) and computers, as well as necessary enterprise software, middleware, storage and audiovisual, that enable users to access, store, transmit, understand and manipulate information.(which means a term used to refer to information technology (IT) extensions, information and communications technology (ICT) emphasizes the importance of unified communications[1] and the integration of computers, telecommunications (such as phone lines and wireless signals), enterprise software, middleware, storage, and audiovisual components that are required to allow users to access, store, transmit, comprehend, and manipulate information.)

1.5.Types of ICT



Types of ICT
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Most people can't imagine a world of communication without technology. The amount of time and energy put into sending the simplest messages before communication technology is more than can be described in 140 characters or less.

Things are a bit different now. The incorporation of technology into different types of communication has made it easier than ever to share information. Even though there are an overwhelming amount of gadgets, software, and tools associated with communication technology, it is not uncommon for the modern day communicator to be an expert at them all. Technology has reinvented the way people communicate. Originally simple devices have evolved into communication channels that create connections worldwide. There are four main types of communication technology that have contributed to the ease of sending messages: telephone, radio, television, and internet.

1.4.1. Telephone

The telephone revolutionized verbal communication. People can talk to each other from any place in the world, strengthening relationships and eliminating the worries of long distance communication. Speaking with someone across the country can be done just as easily as speaking with someone down the street. As technology advanced, the device upgraded from "telephone" to "mobile phone." What used to be a heavy piece of equipment can now easily fit in your pocket. Not only is the modern telephone portable, but the features and capabilities are also advanced. As the telephone progressed, it adopted new types of visual and written communication. Today, text messages and electronic versions of photos are regularly sent using mobile phones, increasing the possible amount of information being shared using phones. The telephone introduced a brand new approach to verbal, written, and visual communication, and exciting new features continue to change the communication technology game.

In another meaning, the telephone revolutionized verbal communication, enabling global communication and strengthening relationships. As technology advanced, the device evolved from a bulky device to a portable device, offering increased functions and capabilities. The telephone also introduced new forms of textual and visual communication, increasing the amount of information exchanged through text messaging and electronic picture copies. These innovative features continue to shape communication technology.

1.4.2 Radio

Another innovation in the realm of verbal communication, radio is used to reach sizable audiences, as opposed to just one person on the other end of a phone. The radio's ability to reach a large audience at a low cost continues to motivate a lot of communicators to take full advantage of the tool. Information providers, such as advertisers and newscasters, spend substantial amounts of time communicating with their massive audiences using radio technology. Radio technology transformed the way information is delivered to large audiences and continues to strengthen mass communication.

In another words, Radio, introduced twenty years after the telephone, revolutionized verbal communication by reaching large audiences. Its low cost and wide audience reach inspire communicators, including newscasters and marketers, who use it for extended periods, improving mass communication.

1.4.3 Television

Television is another way to reach extensive audiences, but it brought a new perk to the table: communication. Some information is hard to describe using just words. Television provides audiences with the best of both worlds: information and visuals to accompany it. This advantage caused the television to replace the radio as the leading tool for mass communication. Today, there are thousands of television channels that communicate information on almost any topic: history, sports, news, science, fiction, and so on. Whether it

is for entertainment or cold hard facts, people are constantly turning to television for information. That is to say Television is a popular medium for public communication, offering visual communication and knowledge. With numerous channels covering various subjects, including science, fiction, sports, and history, it has surpassed radio as the most popular medium for information.

1.4.4 Internet

The internet removes the need for communicators to have a separate device for each different type of communication technology. With the Internet, you can do it all in one place.

As the queen bee of interaction, the internet successfully combines all types of communication technology and houses them in one place. It provides the largest array of information and communication sources known to man. The tools available on the internet make any type of communication effortless.

Verbal and nonverbal communication can be accomplished with video conferencing software. Written messages can be sent through email. Electronic versions of pictures can be sent to and from any internet device. Also, customer communication software is another example of one of these tools. While other gadgets help make communication between a business and their consumers easy, certain tools can often be considered hybrid – bringing together different types of communication.

Live chat is a rare hybrid tool that combines all types of communication – verbal, nonverbal, written, and rich media – through audio and video conferencing software, instant messaging, and file sharing capabilities. Customers can place orders, ask questions, or troubleshoot issues through live chat, all on a single customer communication platform. This gives them access to a business and allows them to connect with an agent whenever they have a query. With live chat software, it's never been easier to connect. For instance, WhatsApp is a great example of

a live chat communication technology. This multi-purpose application not only allows you to share instant text messages, images, and videos but also makes video and voice calls. Also, using the WhatsApp Business version, you can automate messages and promptly respond and interact with your customers. Communication technology has made connections among people stronger than ever. But in order for those networks to run smoothly, the collection of interactive devices being used also need to be connected. This is known as information and communication technology.

To put in another way, the Internet has revolutionized communication by integrating various technologies and information sources, making communication more efficient. Video conferencing software allows for both vocal and nonverbal communication, while email allows for written communication and image transmission. Customer communication software, such as live chat, is a unique hybrid tool that merges various forms of communication. It allows customers to place orders, ask questions, and handle difficulties on a single platform. WhatsApp, an example of a live chat tool, allows for recording, making audio and video conversations, sharing instant messages, photos, and videos, and automating messages. Information and communication technology is essential for the proper functioning of these networks.

1.5 Use of ICT in Education

The education sector is facing many challenges nowadays. We live in a world where frequent changes occur in all sectors. The biggest instance is the corona pandemic. Who knew that this could also happen? Covid-19 has changed the whole world. Due to lockdown, everyone is working from home online. Students, educators, and all are working hard so that learning continues. This pandemic has brought a new model of learning, which is online for people. Today, from the time we get up in the morning to the time we sleep, we are surrounded by media like newspapers, radio, TV, and computers. So, getting tech-savvy and

using information and communication tools is very important in the changing society. If we use and adopt ICT in schools, our education system can prosper, and the country would become a knowledge superpower.

1.5.1. Introducing ICT in Schools

Tools of technology like TV, Radio, Computers, the Internet, Mobile phones all play an important part in our lives. People use ICT to stay connected and become adaptable to it. ICT is an important part of our lives and has transformed it completely; which means that ICT, including television, radio, computers, internet, and mobile phones, is crucial for daily life, enabling people to stay connected and adapt to changing technology.

According to *Cross and Adam*, the four basic factors that are responsible for introducing ICT in education are as follows:

Social: Technology plays an important role in society. Students need to be made aware of technology and strive to become tech-savvy.

Vocational: Many jobs nowadays are technology-oriented.

Catalytic: Using technology tools as a great way to enhance the teaching-learning process.

Pedagogical: Technology and ICT tools as a great way to enhance learning, flexibility, and efficiency in the process of disseminating knowledge; which mean, technology plays a crucial role in society, education, vocational employment, catalytic teaching, and pedagogical improvement, enhancing flexibility and efficiency in information-sharing processes.

1.5.2 ICT as a Current Thinker and Adapter

There are three ways by which ICT can be considered as an important tool in education. These are as follows:

ICT Education: ICT education means using trained personnel who can meet the needs and deliver information effectively to society. The vision is to train people and to equip students with ICT skills and knowledge.

ICT-supported Education: It is also known as multimedia education. Around the world, many institutes and universities use ICT tools for printed study materials. It includes broadcast media, like radio, TV, audio-visual aids, etc.

ICT-enabled Education: ICT-enabled education means the content is disseminated through ICT tools. Here, ICT is considered as a medium required for the teaching-learning process.

We understand from that ICT instruction involves qualified workers to communicate with society and meet demands. It aims to provide knowledge and skills to students and individuals. ICT-aided education uses multimedia tools like television, radio, and audio-visual aids. ICT-supported learning distributes content.

1.5.3 Objectives of using ICT in Education

The objectives of ICT in education include:

- Providing accessibility through online medium of education.
- Improving the quality of teaching, especially in remote areas.
- To increase transparency in the education system.
- To strengthen the policies, rules, and laws in the education system.
- To analyse the learning and participation of the students and measure its effectiveness.
- Measuring and evaluating students' behaviour, involvement, and retention in the learning process.
- To analyse students' performance, placement, and application of knowledge.

That is to say ICT in education aims to provide accessibility, improve instruction standards, enhance transparency, strengthen laws, and evaluate student involvement and learning efficacy. It also monitors student behaviour, participation, and information usage.

1.5.4 Importance of Students Engaging with ICT



Students Engaging with ICT
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Students should engage with ICT in order to:

- To develop 21st-century skills like ICT Literacy and capability.
- To improve retention levels
- Make them prepared for an integrated society that is taking advantage of the ICT developments.
- Adapt ICT tools as a lifelong partner.

In another words Students should utilize ICT for 21st-century skills development, retention, preparing them for an interconnected society, and using ICT technologies as lifelong companions.

1.6 Importance of ICT

Today we do not need to go any further than our own home or even room, to see some form of ICT in our lives. Whether it is a computer, plasma TV, or mobile phone, we all have them in some part of our lives. In today's society, people as consumers of ICT, all strive for the

one

dream – the dream of a connected life. This makes ICT a lifestyle choice for much of the population. In addition, this lifestyle choice is changing the way we communicate, increasing the rate of consumerism, and changing how we interact and gather information (Sherringham, Dec 2008/Jan 2009). We understand from Jan and Sherringham that these days, we don't even need to leave our rooms or homes to find some sort of ICT in our daily life. We've all used a computer, plasma TV, or cell phone at some point in our life. People who use ICT in today's society all aspire to live linked lives. This is the common desire. Because of this, a large portion of the population chooses to live with ICT. Furthermore, this lifestyle choice is altering how we connect, communicate, and get information. It is also accelerating the rate of consumerism.

ICT has invaded and transformed many aspects of our lives to the extent that we live in an environment that is dominated by technology which itself is consumer driven (Semenov, 2005). In another meaning our environment is now controlled by technology, which is driven by consumers, since ICT has permeated and changed many facets of our life. Students are also given many opportunities to learn many things that are not being taught in the schools by themselves. ICT can also help students for multi-tasking learning. This means that students can do and learn more than one task when they are learning one task. (Rintaningrum, 2019). That is to say that there are several possibilities for students to learn subjects outside of the classroom. ICT may assist pupils in learning while multitasking as well. It follows that when learning a single task, kids are able to do and learn many tasks at the same time.

1.6.1 Advantages of ICT

Steve Ballmer said that "The number one benefit of information technology is that it empowers people to do what they want to do. It lets people be creative. It lets people be productive. It lets people learn things they didn't think they could learn before, and so in a sense it is all about potential.", which mean that Information technology offers individuals the

ability to accomplish anything they desire, allowing them to express their creativity, work productively, and learn things they never thought possible.

Evgeny Morozov illustrated that "Information technology has been one of the leading drivers of globalization, and it may also become one of its major victims." To put in another way Information technology may end up becoming one of the main victims of globalization, as well as one of its main drivers.

According to Bill Gates "Information technology and business are becoming inextricably interwoven. I don't think anybody can talk meaningfully about one without the talking about the other." That is to say that the relationship between business and information technology is becoming increasingly intertwined and meaningful conversations about one cannot be conducted without discussing the other.

As mentioned by Narendra Modi "Technology transforms people's lives. From mitigating poverty to simplifying processes, ending corruption to providing better services, Technology is omnipresent. It has become the single-most important instrument of human progress." We understand from Narendra Modi that Technology transforms people's lives by reducing poverty, streamlining procedures, eradicating corruption, and enhancing services, making it the most significant tool for human advancement.

As stated by Peter Drucker "*The new information technology... Internet and e-mail... have practically eliminated the physical costs of communications.*" In another words with the advent of modern information technologies, such as email and the Internet, the physical expenses of communication have all but disappeared.

1.6.2 Disadvantages of ICT

According to Hara (2004), within the early years education attitudes towards ICT can vary considerably. Some see it as a potential tool to aid learning whereas others seem to disagree with the use of technology in early year settings .which mean the use of ICT in early

childhood education varies significantly, with some recognizing its potential for learning support, while others argue against its use.

Blatchford and Whitebread (2003:16), suggests that the use of ICT in the foundation stage is “unhealthy and hinders learning». That is to say, the use of ICT in foundation pupils is deemed unhealthful and hinders their learning.

Blatchford and Whitebread, 2003 .interpreted " Other early years educators who are opposed to offering ICT experiences within the educational settings take a less extreme view than this and suggest that ICT is fine, but there are other more vital experiences that young children will benefit from " in another words Some early childhood educators argue against ICT in classrooms, stating that while it is beneficial, it is not the only essential experience young children need.

According to the IT learning exchange (2001), in most schools ICT will be the single largest curriculum budget cost. This may be seen as a good thing but on the other hand there will be little money left over. To put in another way ICT typically dominates the majority of school curricular spending, despite its potential positive impact on education.

1.7 Best Applications for Teachers and Learners /digital Trends

1. Duolingo

Duolingo is one of the most popular language-learning apps around. It uses game-like elements such as fun quizzes and awards to make learning fun and engaging. It has a wide range of topics, from grammar to pronunciation, so you can build your confidence in any area of English that you need help with. This app offers a fun and interactive way to learn English in a variety of ways. It includes lessons in reading, writing, listening, and speaking skills – all tailored to different levels of proficiency and difficulty. The app also tests your knowledge with quizzes and games to help keep you engaged in the learning process. That is to say Duolingo is a popular language learning application that offers engaging and dynamic

learning methods for speaking, writing, listening, and reading skills. It includes game-like features like quizzes and prizes, catering to different abilities and complexity levels. The app also uses games and quizzes to assess knowledge.

2. Memrise

Memrise is another great app designed for language learning. It focuses on vocabulary building and covers grammar, spelling, and other topics. What sets memrise apart from other language-learning apps is its use of multimedia—you can watch videos, listen to audio clips, and even take part in conversations with native speakers all within the app!

Memrise focuses on building your vocabulary by teaching you new words through videos, audio clips, and images. You can also challenge yourself with activities such as memory games and speed tests. The best part is that the app caters to all skill levels, so you can start at whatever comfortable level.

In another words memrise is a powerful language learning tool that focuses on vocabulary acquisition through multimedia features like films, audio samples, and native speaker conversations. It offers exercises like speed tests and memory games, and supports various ability levels, allowing users to start at a comfortable level.

3. BBC Learning English

This app offers comprehensive lessons based on topics ranging from grammar to pronunciation and speaking skills. BBC Learning English also includes videos where native speakers demonstrate how words should be pronounced correctly as well as activities that let you practice what you have learnt. Moreover, there are even “listen-and-repeat” exercises to help sharpen your ear for spoken English. That is to say BBC Learning English offers comprehensive instruction on speaking, pronunciation, and grammar, with exercises, videos, and "listen-and-repeat" activities to practice and enhance ear for spoken English.

4. Bussuu

Busuu is one of the best English language apps available today and highly recommended for learning English at a beginner level. This app is designed by the linguists and it combines human interaction and AI-powered teaching to help you learn a language faster. The app provides courses in 12 languages on its mobile app to more than 90 million learners worldwide. Busuu provides an interactive platform where users can engage in conversations with native speakers from around the world who can provide feedback on their pronunciation and writing skills. It also has comprehensive grammar, vocabulary, and pronunciation lessons that will help improve your overall understanding of English. With its basic level being free of charge, this app is perfect for beginners looking to start learning English from scratch. We understand from that Busuu is an AI-powered English language study app that connects over

90 million learners globally to native speakers. It offers lessons in 12 languages, pronunciation, grammar, and vocabulary, and is ideal for beginners. The basic version is free, making it an excellent choice for those starting from scratch.

5. Babbel

It is a comprehensive language-learning app that covers all aspects of English, from basic conversation skills to more advanced grammar knowledge. It offers lessons tailored to each user's needs, so you can learn at your own pace without feeling overwhelmed by too much information too quickly. In addition, Babbel allows users to track their progress over time to see how far they've come since starting the course! That is to say this comprehensive language-learning program covers all aspects of English learning, from conversation to complex grammatical concepts, offering customized lessons to suit individual needs and allowing users to track their progress over time.

6. Kahoot

Kahoot is an educational platform that is based on games and questions. Through this tool, teachers can create questionnaires, discussions, or surveys that complement academic lessons. The material is projected in the classroom and questions are answered by students while playing and learning at the same time. Kahoot promotes game-based learning, which increases student engagement and creates a dynamic, social, and fun educational environment. In another meaning Kahoot is a game-based educational platform that combines game-based learning with academic content, fostering student engagement and a lively, sociable learning environment.

7. Google Classroom

If your school already uses the G Suite for Education (formerly known as Google Apps for Education), chances are already known about Google Classroom. Not only can you distribute and grade assignments through the app, as well as organize all class materials on Google Drive, you can also reach your students more easily — either to make announcements or to engage them in discussions. Teachers can now boost engagement with the Student Selector, which randomly selects students from the roster, so you can motivate full classroom participation. We understand from that Google Classroom, part of G Suite for Education, allows teachers to manage assignments, resources, and communication with students. It also features the Student Selector, allowing teachers to increase engagement and classroom involvement.

8. TED

You can't go wrong with TED. The organization's official app houses hundreds of inspiring and intriguing TED Talks, featuring fascinating lectures from industry and subject experts spanning a wide swath of topics such as neuroscience, traditional folk music, human evolution, and many more. TED Talks make a perfect conversation-starter for classroom

discussion or debate or help teachers brainstorm topics for future lessons. Which mean that TED offers a vast collection of inspiring TED Talks on various subjects, promoting classroom debate and assisting educators in developing new lesson plans through their app.

9. Edmodo

Edmodo is an educational tool that connects teachers and students, and is assimilated into a social network. In this one, teachers can create online collaborative groups, administer and provide educational materials, measure student performance, and communicate with parents, among other functions. Edmodo has more than 34 million users who connect to create a learning process that is more enriching, personalized, and aligned with the opportunities brought by technology and the digital environment. That is to say Edmodo is a social network-integrated educational application that connects educators and students, enabling personalized, engaging, and technology-driven learning experiences with over 34 million members.

10. Thinglink

Thinglink allows educators to create interactive images with music, sounds, texts, and photographs. These can be shared on other websites or on social networks, such as Twitter and Facebook. Thinglink offers the possibility for teachers to create learning methodologies that awaken the curiosity of students through interactive content that can expand their knowledge.in another meaning Thinglink, an interactive platform, allow educators to design innovative teaching strategies that engage students through interactive material posted on social media platforms like Facebook and Twitter.

1.8 Role of the Teacher under the Use of ICT

The role of the teacher has changed to suit more the freedom given to the students' autonomy under the LMD (Licence, Master Doctorate) system. Thus, the teacher has to

accept now his/her role as a mediator, a facilitator of knowledge and learning processes. The teacher, therefore, is no more the only, exclusive omnipotent holder of knowledge. S/he is called to master not only the subject s/he teaches but also the methodological competencies that allow him/her to clearly define the objectives of the learning process as well as the referential of the competence on which the control of the learning process is based .In this respect, the present study focuses on what teachers have to do in their classrooms when teaching under a learner-centred approach or orientation. This paper attempts to work on the modern relationship between the teacher and the learner in the classroom under observational experiences using ICT (Information and Communications Technology) as a motivating tool.

The traditional method is teacher-centred, i.e., the teacher is the provider of knowledge thinking that s/he is the only source of knowledge. S/he was the centre of the teaching-learning practices (teacher-centred approach). In other words, in the traditional classroom, the teacher is the only actor who can direct with authority his or her classes; s/he imposes himself/herself on the learners' FL acquisition by making them reliant and dependent without making much effort to develop their skills in the classroom. They learn passively, focusing upon the teachers' instructions and their performance (presentation).

We understand from that The LMD system has transformed the teacher's role to accommodate student autonomy, requiring them to be experts in subject matter and methodological skills. This study focuses on implementing a learner-centred strategy in the classroom, using ICT as a motivational tool, and aims to examine the contemporary connection between the instructor and student through observational experiences. Moreover, the conventional approach to teaching is teacher-centred, with the instructor as the sole source of information. This approach makes learners dependent on the teacher, focusing on passive learning and performance, rather than actively enhancing their abilities.

Conclusion

At the end of this theoretical chapter the instructors and students should be aware of how to utilize technology effectively since it plays a significant role in the learning and teaching of the English language. Because of this, the effectiveness of technology depends on teachers' ability to integrate it properly; technology will never take the role of teachers in the classroom. Students should use technology responsibly in the meantime to avoid having detrimental consequences on their academic performance.

Chapter Two

ICT in Education

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Introduction

Technology has made many things easier for individuals and allowed them to stay up to speed with global updates and developments. As a result, the world is currently experiencing significant advancements in a variety of disciplines. This advancement also improved the realm of education. This field could transition from the dark ages to the modern era with the successful integration of various digital tools. The theoretical foundation that guides this research is represented in this chapter. It is broken up into two sections. The first section discusses how ICT and education relate to each other generally. We talk about how technology is used in education, how ICT affects student achievement, how TEFL and ELT need to include ICT, and how technology affects the teaching and learning process. We go into the challenges Algeria faces in using ICT in the second section of this chapter.

2.1. Use of Multimedia in Education

These days, effective teaching and learning are difficult without the application of a variety of strategies based on cutting-edge ICTs and breakthroughs in "digital" pedagogy. Multimedia is one of the key components of a high-tech information-educational environment. Strong instruments support educators in developing their professional skills and aid learners in meeting their learning objectives.

2.1.1. Definition of Multimedia

Multimedia is a combination of more than one media type such as text (alphabetic or numeric), symbols, images, pictures, audio, video, and animations usually with the aid of technology for the purpose of enhancing understanding or memorization (Guan et al., 2018).which mean Multimedia enhances comprehension and recollection by combining various media types like text, symbols, images, photos, audio, video, and animations, often using technology.

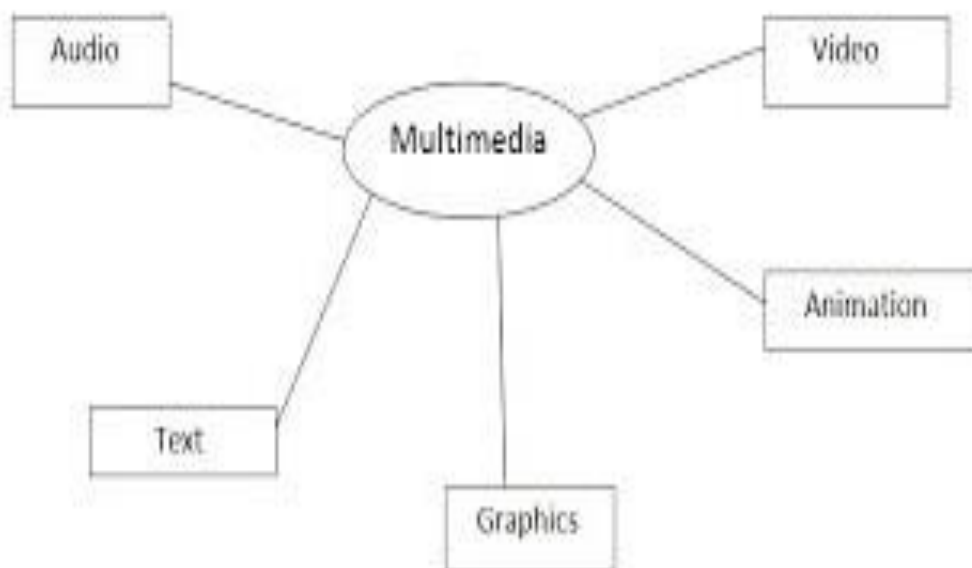
The word 'Multimedia' is a reasonably new one in its field. It is used to describe several different mediums when they are merged together. We can define multimedia according to its common characteristics: texts, graphics, animations, video, and sound. In another words Multimedia, a relatively recent term, refers to the combination of various media, including text, images, music, video, and animations, based on shared traits.

The word multi and media are combined to form the word multimedia. The word "multi" signifies "many." Multimedia is a type of medium that allows information to be easily transferred from one location to another. Multimedia is the presentation of text, pictures, audio, and video with links and tools that allow the user to navigate, engage, create, and communicate using a computer. To put in another way Multimedia, a term combining "multi" and "media," facilitates information transfer through the display of

text, images, music, and video, enabling users to interact, explore, and communicate with computers.

According to (Sethi, 2005); (Mayer, 2001) Multimedia refers to the integration of two or more different information media within a computer system. These media can include text, images, audio, video, and animation. This is mean that Multimedia refers to the integration of various information mediums into a computer system, including animation, video, audio, text, and picture formats.

Vaughan (2011) defined multimedia as a combination of digitally manipulated text, photographs, graphic art, sound, animation, and video elements. What is meant by this Multimedia refers to the digital transformation of text, images, graphics, music, animation, and video components.



Elements of Multimedia
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2.1.2. Components of Multimedia

Multimedia consists of the following 5 components

Text

Characters are used to form words, phrases, and paragraphs in the text. Text appears in all multimedia creations of some kind. The text can be in a variety of fonts and sizes to match the multimedia software's professional presentation. Text in multimedia systems can communicate specific information or serve as a supplement to the information provided by the other media. This implies that texts are composed of characters, forms words, sentences, and paragraphs in multimedia creations. It can be presented in various types and sizes, enhancing or conveying specific information.

Graphics

Non-text information, such as a sketch, chart, or photograph, is represented digitally. Graphics add to the appeal of the multimedia application. In many circumstances, people dislike reading big amounts of material on computers. As a result, pictures are more frequently used than words to clarify concepts, offer background information, and so on. Graphics are at the heart of any multimedia presentation. The use of visuals in multimedia enhances the effectiveness and presentation of the concept. Windows Picture, Internet Explorer, and other similar programs are often used to see visuals. Adobe Photoshop is a popular graphics editing program that allows you to effortlessly change graphics and make them more effective and appealing. That is to say Multimedia applications often use graphics to enhance presentation and efficacy, often enhancing the visual appeal of non-textual data through tools like Adobe Photoshop.

Animations

A sequence of still photographs is being flipped through. It's a set of visuals that give the impression of movement. Animation is the process of making a still image that appears to

move. A presentation can also be made lighter and more appealing by using animation. In multimedia applications, the animation is quite popular. The following are some of the most regularly used animation viewing programs: Fax Viewer, Internet Explorer, etc. In another meaning Animation is a technique that makes stationary images move, adding fun and appeal to presentations. Popular apps for watching animation include Viewer for Fax and Internet Explorer.

Video

Photographic images appear to be in full motion and are played back at speeds of 15 to 30 frames per second. The term video refers to a moving image that is accompanied by sound, such as a television picture. Of course, text can be included in videos, either as captioning for spoken words or as text embedded in an image, as in a slide presentation. The following programs are widely used to view videos: Real Player, Window Media Player, etc. we understand from that Video is a motionless image with sound, often accompanied by text or captions, and is typically viewed using applications like Window Media Player and Real Player.

Audio

Any sound, whether it's music, conversation, or something else. Sound is the most serious aspect of multimedia, delivering the joy of music, special effects, and other forms of entertainment. Decibels are a unit of measurement for volume and sound pressure level. Audio files are used as part of the application context as well as to enhance interaction. Audio files must occasionally be distributed using plug-in media players when they appear within online applications and webpages. MP3, WMA, Wave, MIDI, and RealAudio are examples of audio formats. The following programs are widely used to view videos: Real Player, Window Media Player, etc. To put in another way Sound is a crucial component of

multimedia, delivering music, special effects, and entertainment. Audio files, in various formats, are used in plug-in media players for enhanced interaction.

2.1.3. Role and Importance of ICT in Teaching and Learning

Technology is evolving and scholars in the areas of Information Technology (IT) and education technology are continuing to study how multimedia technologies can be harnessed for the enhancement of interesting as it provides a useful source of information in the case of children. This is because gathering information using the traditional techniques is more difficult especially when it involves children's interests and preferences (Molina et al.,2018).It indicates Sound is a crucial component of multimedia, delivering music, special effects, and entertainment. Audio files, in various formats, are used in plug-in media players for enhanced interaction.

Earlier attempts at analysing student behaviour while engaging with online material included analysing student access computer logs and the frequency of participation and duration of participation (Morris et al., 2005).Which mean previous studies have examined students' online behaviour by analysing their access to computer records and their frequency and duration of participation.

Using multimedia as cognitive tools engaging learners in a tool-like environment, has demonstrated an improvement in learning, collaboration, communication and problem solving (Jacobson and Spiro, 1995). This implies that the use of multimedia as cognitive tools enhances learning, teamwork, communication, and problem-solving by creating a tool-like environment for students.

2.2. ICT and Students' Achievement

A number of studies estimate the causal effect of ICT on students' performance by exploiting the exogeneity of national or local programs aimed at increasing ICT infrastructure in schools and find either little or no effect (Barrera-Osorio and Linden, 2009, Checchi et al.,

2015, Cristia et al., 2012, Goolsbee and Guryan, 2006, Leuven et al., 2007). In another words Studies examining the causal effect of ICT infrastructure on student performance using exogeneity of national or local initiatives show negligible or no effect.

A partial exception is Machin, Sandra, and Olmo (2007), who investigate the effects of a change in the rules governing ICT funding across different school districts of England and find a positive impact on primary school students' performance in English and science, but not in mathematics. However, the above papers do not specify how ICT is used. Which mean that The study examines the effects of changing ICT spending laws in English school districts on primary school students' performance in science and English, but not arithmetic.

The actual practice that teachers make of ICT and their ability to integrate it into the teaching process is then a key issue (UNESCO, 2000). This implies that the integration of ICT in teachers' daily work and their ability to integrate it into the curriculum are crucial issues.

The importance of what teachers do in the classroom has been emphasized in the recent literature on the effects of teaching practices on students' academic performance, which has focused on the effect of traditional versus modern teaching style. The results generally show that teaching style matters (Aslam & Kingdon, 2011; Schwerdt & Wuppermann, 2011; Zakharov, Carnoy, & Loyalka, 2014). It indicates recent writing explores the influence of conventional and modern teaching styles on students' academic achievement, emphasizing the importance of classroom teaching and the significance of instructional style.

2.2.1. Meaning of Academic Achievement

Academic achievement has been operationally defined as the sum total of achievement made in all subjects. This is obtained by adding the achievement scores obtained by the students in all subjects in the final examination. To put in another way Academic accomplishment is defined as the total progress made across all topics, calculated by aggregating the final test scores of each student across all disciplines.

Academic achievement or academic performance is the extent to which a student, teacher or institution has attained their short or long-term educational goals. Completion of educational benchmarks such as secondary school diplomas and bachelor's degrees represent academic achievement. That is to say Academic accomplishment is defined as the total progress made across all topics, calculated by aggregating the final test scores of each student across all disciplines.

2.2.2. Importance of Student's Motivation for their Academic Achievement

Achievement motivation energizes and directs behaviour toward achievement and therefore is known to be an important determinant of academic success (e.g., Robbins et al., 2004; Hattie, 2009; Plante et al., 2013; Wigfield et al., 2016). To put in another way Achievement motivation significantly impacts academic performance by directing behaviour towards achieving goals.

There is still a limited number of studies, that investigated diverse motivational constructs in relation to students' academic achievement in one sample and additionally considered students' cognitive abilities and their prior achievement (Steinmayr and Spinath, 2009; Kriegbaum et al., 2015). We understand from that few studies have examined various motivational factors influencing students' academic performance in a single sample, considering cognitive capacities and past achievements.

Motivation plays a significant role in individual's educational life and their achievement. Motivation reflects in learners' choices of academic tasks, the time and effort they allocate to each task, their perseverance in academic tasks. Motivation also enables them correctly handle obstacles they come across in the learning process, which mean motivation significantly impacts academic success and motivation, influencing assignment selection, time and energy commitment, persistence, and overcoming challenges during the learning process.

The concept of motivation is closely related to other constructs in education and psychology. They include attention, needs, goals and interests which all focus on stimulating individual learners and rising their interest and attention towards engaging in an action or behaviours and the accomplishment of such actions or goals. This implies that motivation is closely linked to psychological and educational concepts like attention, needs, goals, and interests, which aim to energize learners and increase their interest in specific behaviours or objectives.

2.2.3. Impact of ICT on students' achievement

Tools for information and communication technology are widely employed in classrooms all around the world. Depending on how teachers utilize this technology in the classroom, it might have a favourable or bad influence on students' academic performance.

2.2.3.1. Positive Impacts

ICTs facilitate information access and easily available and they can improve managerial and professional skills in using technology. Besides, teachers and students are exploring the new possibilities given by these technologies and constructing capabilities concerning learning through ICT. Building capabilities concerning ICT usage in education becomes an essential element among different universities in the world. Furthermore, the use of information and communication technology inside the class will be beneficial for students to acquire e-skills and new competencies in terms of utilizing technology (Tah Babila, 2010). In another meaning ICTs enhance information accessibility, professional and management skills, and learning skills, making classroom use crucial for colleges worldwide and fostering new technological competences and e-skills.

2.2.3.2. Negative Impacts

The use of technology in the classroom can have a negative impact on the student's achievement. Students may not have enough time to discuss the topic or to ask questions about it; because time has been wasted on technical problems. In addition, the overuse of ICT has a bad effect on students since they can learn using face-to-face interaction with their teachers. Another impact of using technology is that students reduced unwillingly their abilities to take notes effectively. To illustrate, they are likely to listen, to follow, and to grasp the message then students have to take notes using the appropriate information (Mbah, 2010,p. 109). What is meant by this is technology use in classrooms can hinder student achievement by reducing time for discussion, in-person interactions, and productive note-taking, despite the importance of active listening and understanding.

2.3. Need for ICT Integration

ICT is a valuable and an innovative teaching tool enhancing EFL learning. The rapid growth of ICT has naturally influenced the every aspects of language teaching process. For example, in Computer, internet, smart boards, cell phones, video games, music players etc. are used in the target language learning process to raise students' motivation and language awareness (Altun, 2015).

ICT makes English language environment interactive, flexible and innovative. (Qin and Shuo, 2011) The students feel highly motivated to learn a language as they displayed positive attitudes towards language learning as they use computer and learn in stress-free learning environment.

The situation is constituting or problematic for research for both TEFL and technology integration in education. The main reason for this is because of the development of digital technology for more advanced society, millennials who dominated the educational participation in the 21st century education (OECD, 2015). Teacher educators of TEFL,

therefore, play an important role in modelling technology integration in their instructional activities (Collins & Jung, 2003) because the way teachers are educated directly and indirectly impact future teachers' technology integration (Habibi et al., 2018).

Integration of Information, Communication, and Technology (ICT) in education refers to the use of computer-based communication that is incorporated into the daily classroom instructional process. Thus, the need for ICT integration in education is crucial, because with the help of technology, teaching and learning is not only happening in the school environment, but also can happen even if teachers and students are physically distant.

A technology based teaching and learning offers various interesting ways which includes educational videos, stimulation, storage of data, the usage of databases, mind-mapping, guided discovery, brainstorming, music, World Wide Web (www) that will make the learning process more fulfilling and meaningful (Finger & Trinidad, 2002).

Hermans, Tondeur, Van-Braak, and Valcke (2008) have identified three main stages for ICT to be highly valued and regarded by the teachers; integration, enhancement and complementary.

To put in another way, ICT enhances EFL instruction by creating a dynamic environment with computers, internet, and games. Teacher educators play a crucial role in integrating technology into instructional activities, especially for millennials. Additionally, ICT-based teaching offers engaging methods like educational videos, stimulation, and the World Wide Web, enhancing learning experiences across geographical boundaries.

2.4. ELT and Educational Technology

There are many definitions of educational technology, each referring to its various aspects. Before the application of technology in its new sense, planners helped improve the teaching and learning outcomes of audio-visual cases and devices. Thus, it can be concluded that the contributions of this branch are summarized from education to the use of purely educational

items. The most recent definition agreed by educational technology experts, The American Association of Educational Communication & Technology (AECT) stated that educational technology is the theory and practice of designing, producing, using, and evaluating learning processes and resources. (Spector & Yuen, 2016)

With the spread and development of the English language around the world, English is used as an official language. English learners are increasing day by day, different teaching methodology has been implemented. In this modern world, the idea of English learning and teaching has changed to a great extent and it has also changed the teacher-student relationship.

The old tradition of English teaching has been drastically changed with the remarkable entry of information technology. Graddol was a British linguist state that” Technology lies at the heart of the globalization process; affecting education work and culture. At present, the role and status of English is the language of social context, political, sociocultural, business, education, industries, media, library, communication across borders, and key subject in curriculum and language of imparting education”. Additionally, the early systems for text based communication were unfriendly to accented characters and almost impossible for languages using non-roman writing systems, while computer operators interacted with programs using instructions in English.

For decades English and computers have seemed to hand in hand. Computers technology and the programs for learning English which make them easy to English-speaking countries. The hardware and software reflected the needs of the English language. This adaptability of recent software is a significant characteristic. It has allowed new technical vocabulary to develop in languages other than English, while desktop publishing systems have made possible short-run printing in minority writing systems.

That is to say, Educational technology involves creating, utilizing, assessing, and repurposing learning materials and processes. English has become a widely used

official

language due to global expansion, and information technology has significantly altered teaching practices. Besides, computers and English have become intertwined, with modern software enabling new technical terminology and desktop publishing tools for minorities.

2.4.1. Application of Educational Technology in English Language Teaching

The application of educational technology in English language teaching includes possible means and information that can be used in language teaching. It deals with teaching instruments such as television, language labs, and a variety of designed media. The public domain of its audio visual equipment consists of two distinct parts: the hardware and the software. The hardware part deals with physical and real equipment, such as projectors, sound recorders, TV sets, microcomputers, etc., and the software part includes many items used in connection with such equipment and devices like slides, audiotapes, videotapes of computer programs, written languages, and more. (Ahdian, 2007); (Xu, Banerjee, Ramirez, Zhu, & Wijekumar, 2019)

The introduction of technology in school is considered a necessity premised on pedagogical rationales. Researchers have suggested that a crucial factor for successful technology integration into the classroom is the teacher (Rhema & Miliszewska, 2010). When the teachers revolutionize their classrooms with mobiles, computers and internet-connected devices, ordinary and low-level students would make massive gains (Kumar, Rose, & D'Silva, 2008). The advancement in ICT is undoubtedly rapidly transforming the culture of work. Teachers need to be prepared to use and adopt technology as technology enhances student's learning, teachers should understand the fact that 21st -century classroom must provide technology-supported teaching materials. (Padmavathi, 2016)

In another meaning, Educational technology applications in teaching English include tools like television, language labs, and customized media. As well as teachers play a critical role in

integrating technology into classrooms, as it improves student learning and supports the development of technology-supported instructional materials.

2.4.1.1. Chat GPT

Even though AI tools have evolved over many years, Chat GPT has disrupted a wide range of disciplines, perhaps because it developed rapidly and is now readily accessible to the public (Holmes & Tuomi, 2023). Though the term AI implies that “intelligence” is involved, the truth is that Chat GPT is currently a stochastic parrot, a term first coined by Bender et al.

Holmes and Tuomi (2023) remind us that AI is “a specific field of inquiry and development, rather than a type of intelligence that is artificial” (p. 546). Since Chat GPT processes language and functions as a personal conversational interface, it is worth examining how it may support instruction and strengthen students’ AI literacy skills (UNESCO, 2023).

In recent months, advances in generative AI have taken the world by storm, and the field of English Language Teaching (ELT) has also been affected. While empirical research on the affordances of Chat GPT for fostering second language acquisition is scarce in terms of developing speaking skills and grammatical knowledge, a small body of literature has proposed ways of leveraging Chat GPT to develop second language (L2) writing skills (e.g., dos Santos et al., 2023; Kim et al., 2023; Yan, 2023), vocabulary (Kohnke et al., 2023), and assessments (Sims, 2023).

Kohnke et al. (2023) describe the affordance of Chat GPT as a vocabulary learning tool, as Chat GPT can define unknown words, generate dialogues that can be adjusted to varying proficiency levels, and explain vocabulary terms in students’ first languages.

We understand from that, Chat GPT, a stochastic parrot, has revolutionized various disciplines due to its rapid development and accessibility. It can enhance education by interpreting language and serving as a personal conversational interface, particularly in English Language Teaching, and enhancing second language writing skills.

2.5. The Impact of technology on teaching and learning process

Today technology serves as a useful tool in enhancing the teaching skills and learning ability. Audio visual education can be easily provided with the help of technology. Computer is a useful tool in all areas of teaching-learning. Multi-media technologies are used in schools, colleges to communicate ideas between students and teachers. Today technology base education is attainable at the universities of developed countries. Smart schools have made a leap in virtual learning. On-line learning and remote training are among new education forms in the new century. By evolving the learning environments at the beginning of 21st century, individuals and societies put heavy responsibility on the shoulder of educational institutions and their traditional structures by their increasing need of education.

2.5.1. Positive Impact of Technology on Teaching and Learning

Technology has a positive impact on student learning. Technology causes students to be more engaged; thus, students often retain more information. Because of the arrival of new technologies rapidly occurring globally, technology is relevant to the students.

2.5.1.1. Improved Education and Teaching

Various research studies have explored the impact of ICT on teachers' instructional practices and student assessment. Bado ([2022](#)) found that teachers who implemented instructional activities in three stages (pre-game, game, and post-game) maximized students' learning outcomes and engagement. Furthermore, ICT can increase efficiency in lesson planning and preparation by offering possibilities for a more collaborative approach among teachers. The sharing of curriculum plans and the analysis of students' data led to clearer target settings and improvements in reporting to parents. (Balanskat et al., [2006](#))

Balanskat et al. ([2006](#)) documented studies that revealed that the use of digital technologies in education had a positive effect on teachers' basic ICT skills.

Punie et al. (2006) reported that the provision of fully equipped multimedia portable computers and the development of online teacher communities had positive impacts on teachers' confidence and competence in the use of ICTs.

Condie and Munro (2007) reported impacts from the use of ICTs in schools in the following areas: attendance monitoring, assessment records, reporting to parents, financial management, creation of repositories for learning resources, and sharing of information amongst staff.

This implies that, Research shows that ICT enhances instructional strategies and student evaluation, with three-stage activities maximizing learning results and student engagement. What's more digital technologies improve class preparation and planning efficiency, enhance teachers' ICT abilities, and improve target sets and reporting to parents. Also, the availability of multimedia portable PCs and online teacher communities boosts confidence and proficiency in ICT use.

2.6.1.2 Internationalization

In computing, internationalization and localization (American) or internationalisation and localisation (British), often abbreviated i18n and l10n respectively, are means of adapting computer software to different languages, regional peculiarities and technical requirements of a target locale. Internationalization is the process of designing a software application so that it can be adapted to various languages and regions without engineering changes. Localization is the process of adapting internationalized software for a specific region or language by translating text and adding locale-specific components.

Localization (which is potentially performed multiple times, for different locales) uses the infrastructure or flexibility provided by internationalization (which is ideally performed only once before localization, or as an integral part of ongoing development).

Internationalization and localization are two processes used to customize computer software for different languages, regional variations, and technological specifications.

Internationalization involves creating software that can be translated without technical modifications, while localization involves translating text and adding locale-specific elements. Both processes are essential for continuous development.

Microsoft defines internationalization as a combination of world-readiness and localization. World-readiness is a developer task, which enables a product to be used with multiple scripts and cultures (globalization) and separates user interface resources in a localizable format (localizability, abbreviated to *L12y*).

When kids attend school in various regions of the state, they can virtually "meet" their peers without exiting the learning space. Certain websites, like www.udemy.com, assist students in learning foreign languages online by matching them with a tutor from another nation.

It indicates that Microsoft defines internationalization as the combination of localization and world-readiness, involving developers in creating products for diverse scripts and cultures. Online learning platforms like Udemy allow students to connect with foreign language instructors remotely.

2.5.2. Negative

Information and communication technologies (ICT) are causing great changes in the Knowledge Society and, therefore, in the teaching-learning process which, they also present certain disadvantages that cannot be ignored, and knowing and analysing them allows us to advance toward a more sustainable and adequate use of technology in our lives and, particularly, in the field of education.

2.5.2.1. Deteriorating Writing Ability

As a result of extensive use of internet chatting

As a result of extensive use of internet chatting and shortcuts, the writing abilities of today's youth have deteriorated significantly. Nowadays, youngsters rely so much on digital communication that they have completely forgotten how to improve their writing abilities.

Nowadays, youngsters rely so much on digital

Occasionally, it is also time intensive from

the

Occasionally, it is also time intensive from the teacher's perspective. The installation of such technology is too expensive. When taken in excess, there may be health consequences. Some pupils lack the financial means to purchase new computer technology. That is to say, Today's kids do longer possess the same writing skills due to heavy usage of shortcuts and online chatting. Young people nowadays have become so dependent on digital communication that they have lost all memory of how to write better. These days, children depend so heavily on digital media that it may occasionally be time-consuming from the teacher's standpoint as well. Installing this kind of equipment is just too costly. Overconsumption may have negative effects on health. Some students don't have the money to buy the newest computers.

However, recent studies have shown that technology has a negative impact on the process of education (Fried, 2008; Wentworth & Middleton, 2014), particularly on the four areas stated below:

- Deterioration of students' competencies in reading, writing, and arithmetic, which are the

Deterioration of students' competencies in reading, writing, and arithmetic, which are the

basic three skills any student is expected to master;

- Dehumanization of education in many environments and distortion of the relations between teachers and students;

Dehumanization of education in many environments and distortion of the relationship between teachers and students;

Isolation of students in a digital and virtual world that distances them from any form of social interaction.

Deepening of social inequalities between the haves and the have-nots, that is students who can possess technology and those who cannot.

Which mean, new research shows that technology negatively impacts the educational process, causing a decline in students' proficiency in reading, writing, and math, dehumanizing relationships between educators and learners, distortion of interaction between instructors and pupils, and a growing socioeconomic divide between those who can afford technology.

Spitzer (2014) gives a full account of the risks of adopting technology in the classroom and warns against its potential negative effects on students' achievements. He cites literature affirming that handwriting and reading are impaired by typing and that Information Technology (IT) brings about shallow processing of information.

Carr (2011) accuses technology of causing our minds to be “shallow” and asserts that students who read linear texts have better understanding and a stronger memory than those who read via the Internet , He argues (2011, p. 90) that “The shift from paper to screen doesn't just change the way we navigate a piece of writing. It also influences the degree of attention we devote to it and the depth of our immersion in it.

In another words, the author warns against implementing technology in the classroom, citing research showing typing deteriorates handwriting and reading skills, and IT leading to superficial processing. They argue that linear text comprehension and stronger memories are more beneficial for children reading online.

2.5.2.2. An Increase in Cheating Incidents

Technological advancements such as

Technological advancements such as graphical calculators, high-tech watches, small cameras, and similar equipment have become excellent tools for test cheating. It is less risky for children to write calculations and notes on graphing calculators.

- It is less risky for children to write calculations

While the growing popularity of smartphones is often seen as “progress”, it is also having monumentally negative impact on the tertiary education sector. The increased use of technology has contributed to the simplification and ease of copying homework assignments and cheating in general – across schools and tertiary institutions around the world.

Contract cheating” is perhaps the most serious form of academic dishonesty, involving students putting out a tender for others to complete their homework, coursework and assessments. But most students are cheating in a far simpler way: by switching on mobile devices and snapping a photo of a classmate’s work, enabling them to copy homework almost word for word in order to avoid doing it themselves. Students are also using mobile phones or earpieces during exams, by activating their device’s Bluetooth, or texting applications to share exam information with other test takers.

This means that, Modern technology, such as graphical calculators and smart watches, is becoming a common tool for test-taking fraud. This trend is causing significant harm to the tertiary education industry, as it allows for easy copying of homework assignments and cheating. Contract cheating is a common form of academic dishonesty, but most students cheat by taking pictures of classmates' assignments and sharing exam information using infrared, Bluetooth, or texting features.

2.6. Obstacles Facing the Use of ICT in Algeria

In Algeria, the lack of consultation in decision - making, the responsibilities and decision-making centres in the school system, and negative influence of the various current problems in the education system, probably the most main obstacles to the integration of educational technologies.

2.7.1 Lack of Financial Resources

The number of computers for each facility remains insufficient and very few teachers use them, they are not convinced of the educational value of these technological tools and use them only for management purposes, and the preparation of examinations. In addition, there is a reduced internet speed if students work at home as well as computers with performance access to high school materials only during the opening hours of the establishment. (Dalila Berass & Rachid Brahim, (2007), *Pour une université sans craie et sans tableau*, Le quotidien d'Oran). In another meaning, the facilities lack sufficient computers, with few teachers using them for educational purposes. They are mainly used for administrative tasks and exam preparation. The internet speed is slower for remote students, and access to high school materials is limited.

2.7.2. Unavailability of Digital Resources

Relative insufficiency in quantity, quality and the relevance of educational digital content and resources is one of the points to stress about. Other issues of ICT integration are related to their appropriation by teachers, funding, development, standardized indexing and the identification, evaluation and certification of content digital rights, respect for copyright and safety for young students in the field of Web surfing. Teachers always criticize the quality and validity of the digital content that is available on the web. What is mean by this is The lack of instructional digital content and resources, concerns about ICT integration, instructors' use, finance, development, standard indexing, digital rights, copyright respect, and online safety of young students are among the issues. Critics often criticize the legitimacy and quality of online digital material.

2.7.3. Lack of Teacher Training

In Algeria, initial teacher training does not focus on the use and pedagogical integration of educational technologies. Perrenoud identified ten new teaching skills, including:
Using

technology new "ICTs". Lebrun (2004), for his part, states that: "The importance of information, technical support and pedagogical support to teachers is a priority for technologies to really catalyse a pedagogical renewal. Without this, the new technologies will at best reproduce the old pedagogies." (Lebrun, 2004: p257) In other words, Algerian teacher training focuses on integrating educational technology, but not on integrating new ICTs into classrooms. Perrenoud highlights the importance of access to knowledge, technical assistance, and pedagogical guidance for technology to truly revolutionize teaching, as out-dated pedagogies may be largely replicated by new technologies. Added to this is the traditional practice that providesthem poorly to a pedagogy that integrates educational technologies. Indeed, the majority of teachers associate educational technologies with a heavier task and a host of technical problems and see it as a threat to the power of the teacher in his class, which mean, customs that don't lend themselves well to a curriculum that incorporates instructional technology. In fact, most educators view educational technology as a challenge to their authority as instructors and link them to more laborious tasks and a variety of technical issues.

Conclusion

Since technology is so important to the teaching and learning of the English language, both teachers and students should know how to use it effectively by the end of this theoretical chapter. As a result, instructors' ability to effectively incorporate technology into the classroom determines its efficacy; technology will never replace teachers in the classroom. In the interim, students should utilize technology sensibly to prevent negative effects on their academic performance.

This chapter aimed to provide light on the application of educational technology in educational contexts. It emphasized the use of multimedia in education, as well as the significance of information and communication technology in teaching and learning, in addition to the importance of ICT, integration in TEFL and its influence on student accomplishment. The current chapter also attempted to illustrate the influence of technology on the teaching and learning process, as well as the primary barriers to the use of ICT, notably in Algerian middle schools.

Chapter Three

Data Collection and Analysis

Chapter Three
Data Collection and Analysis

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3.1. Introduction

The present study is about Information and Communication Technology and its effects on learners' motivation. This chapter is designed to analyse the results obtained through investigating the learners' motivation and the effects of ICT on it either positively or negatively. We have presented a brief review of literature related to ICT, specifically, in education and learner's motivation. The following step is to move to something more practical based on procedures to collect data in the task such as: questionnaires.

This chapter is composed of the analysis of data collected from the questionnaire, which contains questions given to students in order to gather information about the impact of different tools of Information and Communication Technology on their motivation.

It also deals with the data analysis and interpretation and discussion of the findings of each instrument.

It ends by providing some suggestions and pedagogical recommendations on the light of the main results obtained. In brief, this chapter attempts to identify how ICT effects on education and learners.

3.2. Research Aim

Since language is by its very nature a tool for communication, language acquisition needs to occur in a supportive and encouraging setting. The effectiveness of the teaching and learning process depends on several elements in order to achieve various objectives.

Therefore, the aim of this research is to investigate the role of ICT to increase student's positive engagement, besides to ICT usage in daily life and for EFL learning.

3.3. Research Methodology

The descriptive approach is used in this study to collect and interpret data both qualitatively and quantitatively. The nature of the topic to be conducted, the research's goal, and the data collected all impact the approach used. The descriptive approach was used in this research because it seemed appropriate for the study and the context in which it was conducted, since the research aims to determine the effect of Information and communication technology on student's positive engagement in Ain kermes educational context.

This research was conducted in the form of case study. This research style usually used by researchers in order to collect, analyse and interpret data collected by instrument from a variety of resources such as individuals , groups and communities

Therefore, this study was conducted by the use of a questionnaire. The first one was designed to 69 learners while the second is conducted to 7 middle school teachers.

The questionnaire is used for the students since they represent the main variable in our study and their opinions help us to confirm or disconfirm the hypotheses. The students' questionnaire aims to reveal how ICT could decrease or increase their motivation in learning English as a foreign language. We have chosen to work with second year Middle school students at Aissaoui Lakhdar. The interview aims to expose whether EFL teachers of Middle School use the different tools to improve learners' motivation or not and how they use it to provide better EFL instruction.

3.3.1. Participants

The participants differed from each instrument to the other. For the questionnaire, the population is composed of students at Aissaoui Lakhdar Middle School including 2nd year level, however it consists of 152 learners in the second semester of the academic year 2023/2024. Hence, our sample included 69 students (45% of the total population) randomly selected from the 2nd year levels. Therefore, we randomly selected few students from each class to make a kind of equality between classes. For teacher's questionnaire, the participants were 10 middle school EFL teachers from Aissaoui Lakhdar and Laaradj Mohamed, also Khaïter el Boudali, they have been selected to represent the population participating, they consist of ten female and a male teachers.

3.3.2. Research Instruments

A combination of research methods in one instrument has been used. In fact, many researchers have proved the effectiveness of the mixed method approach as it is one of the most common methods in collecting data in foreign language.

In this study, one research tool has been used: teachers' questionnaire and learners' questionnaire with both methods qualitative and quantitative close ended and open-ended questions.

The questionnaire is a research instrument that contains a set of questions for the aim of gathering data from participants; however, they are often created for statistical analyses of the responses (Nunan, 1992). A questionnaire is very helpful so that the researcher can collect data from different participants with preserving money and time. Wray, Trott, and Bloomer (2006:158) view: (the questionnaire is useful for surveying a lot of people in many different locations). In other words, the survey is helpful for gathering information from a large number of respondents in various places.

Undoubtedly, the questionnaire gives the participants liberty and privacy in answering and also time to think about the questions to provide their perspectives. As it allows the researcher to design questions according to the research questions and hypothesis and is very applicable in analysing and discussions the results.

3.3.2.1. Teacher's Questionnaire

The teacher questionnaires were used to gather the quantitative data consisted open ended and multiple-choice questions. The questionnaire were done by a random (10) English teachers of Middle School.

3.3.2.2. Student's Questionnaire

This questionnaire were given to random (69) Middle School students in order to give their personal opinions towards the use of educational technologies at middle school Aissaoui Lakhdar).In a form of open ended and multiple choices questions.

3.4. Analysis of Student's Questionnaire

This questionnaire is designed primarily to diagnose students and to invite them to contribute general information about their actual situation. Its main objective is to demonstrate their attitudes towards the impact of ICT in enhancing its English Language Skills. This section is intended to analyse data collected from the second year Middle School student's survey. From different groups of the second year answered the questionnaire in order to prevent any misunderstanding, the questions were explained to students who could ask for clarification. The questionnaire consisted of fourteen questions and each one would be treated separately as follows.

Section One: Background Information

Question One: Gender

Gender	Number	Percent
Male	38	55%
Female	31	51%
Total	69	100%

Table3.1 : Students' Gender

The information derived from the table above, indicates that students who participated in the study are males and females. This means that the study are of different gender and different attitudes gender and different attitudes, this table will reveal that male students are more than male. In fact the examiner has recorded thirty eight males' subjects out of total sixty nine (55%), whereas the rest is of a female sex, that is thirty one (51%) are females subjects, which means that boys are more interested in using ICT tools especially in the fields of communication, entertainment education and learning.

Question Two: Age

Years	Number	Percent
12	20	29%
13	49	71%
Total	69	100%

Table3.2: Students' Age

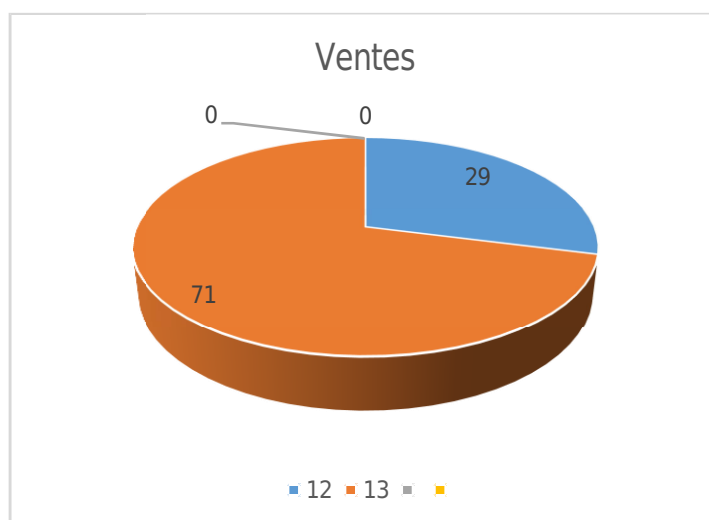


Figure 3.1: Students' age

The table and the pie-chart above indicate that most students are 13 years old. They present the majority of the second year students which means they are not repeaters and this is due to their interest in their studies, and learners who have 12 years old are the minority because who are in their ages are study 1st year Middle school.

Question Three: How do you evaluate your level of English?

Level of English	Number	Percent
Average	26	38%
Good	24	35%
Excellent	19	27%
Total	69	100%

Table 3.3 : Students' Level

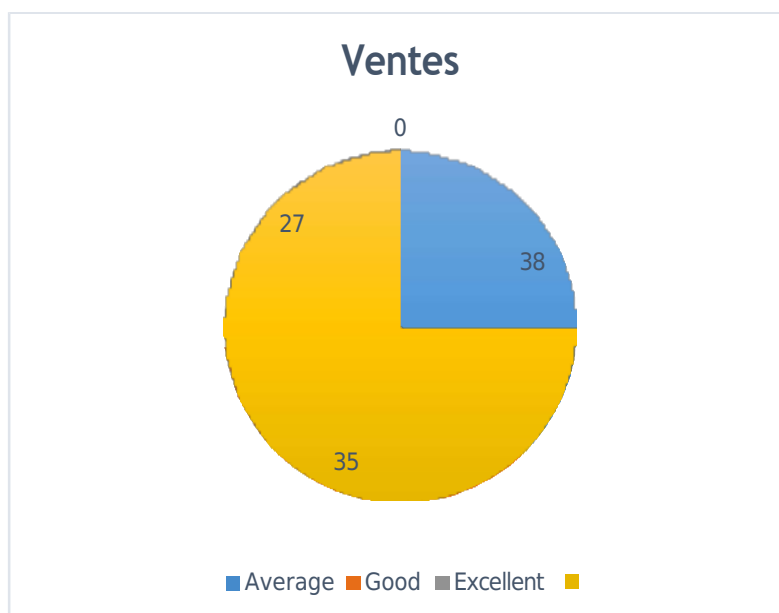


Figure 3.2: Students' level

The majority of participants are twenty six making up 38 that they said are average in English, they do not motivate well and fear from doing mistakes, as well as lack of focus and they do not give enough time to learn English while twenty four students making up 35 and present the good, and this is due to asking more questions, love English, practice outside classroom and take the lead by speaking first, however ninety students are excellent and represent 27 they have passion to read everything, speak with native speakers by using ICT.

Question 4: In which area of language do you have difficulties?

Area of Language Difficulties	Number	Percent
Reading	18	26
Listening	14	20
Oral expression	7	10
Writing	7	10

Grammar	23	34
Total	69	100

Table 3.4: Student’s Language Difficulties

The table and the pie-chart above show that grammar is the main language difficulties (34%) the majority of students suffer from it because they forget the rules or they do not know it. Whereas 18 participants who have problems with reading representing (26%). Also 14 students found listening hardness (20%). However, seven participants have obstacles with oral expression and the same thing with writing (10%).

Section Two: ICT Usage in Daily Life

Question Five: Does technology make life easier in all domains?

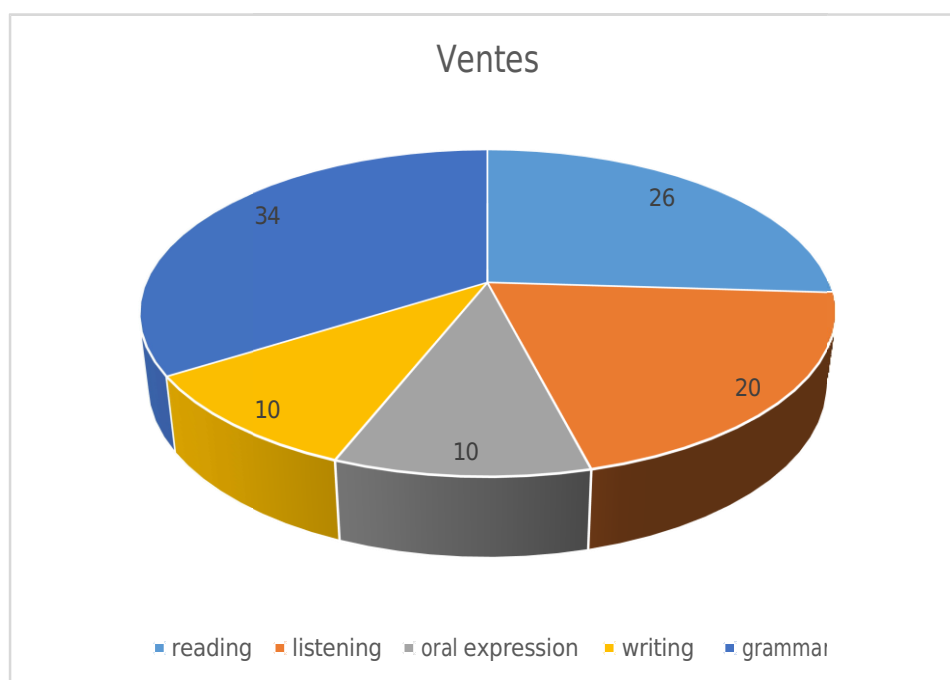


Figure 3.3: Student’s Life and Technology

Answers	Number	Percent
Yes	59	85%
No	10	15%
Total	69	100%

From the pie-chart above, demonstrate that the majority of students which are sixty seven represent (97%) see that technology facilitate life in all domains and make it easier. However three participants (3%) think that life does not change with or without technology and they do not need it, made they hate technology or they do not know how to use it.

Question Four: Do you use technology in your daily life?

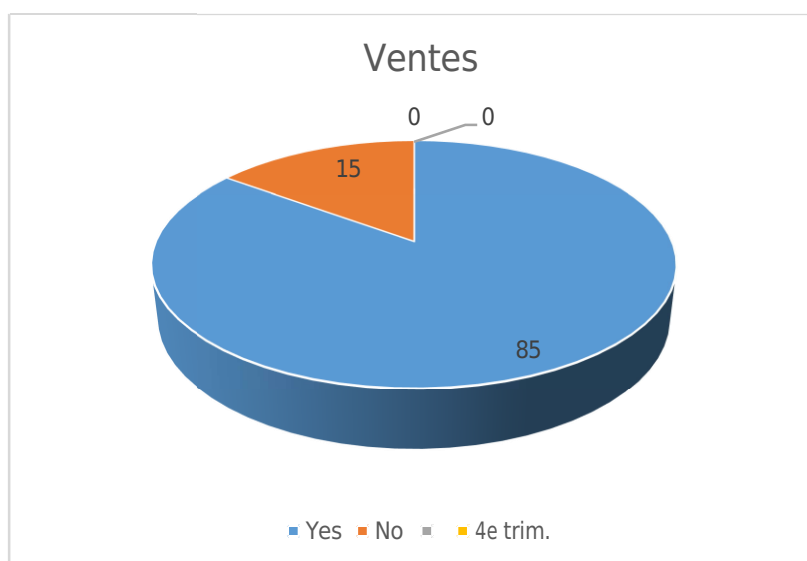


Figure 3.4: Students' Technology Use

Middle School students are asked to answer this question by ticking up 'yes' or 'no'. Therefore, fifty-nine participants which present 85 state that they utilize Technology in their daily life and the rest ten which represents 15 answers by no.

Question Five: According to you, which technology among the following ones is the most interesting nowadays?

Electronic devices	Number	Percentage
Internet and associated applications	22	31%
Smartphones and associated applications	20	28%
Tablets	11	15%
Computers	16	23%
Total	69	100%

Table 3.6: Student's ICT Preferences

From the table above, demonstrates that twenty two students are interested which are twenty two are interested in using internet represent 31%, followed respectively by participants who utilize their smartphones and associated applications(28%), learners who prefer computers only sixteen(23%), and the minority are using tablets represent(15%).

Question Six: Daily Usage of Electronic Devices

Answers	Number	Percentage
Less than one hour	12	17%
1-2 hours	16	23%
2-4 hours	7	11%
More than 4 hours	34	49%
Total	69	100%

Table3.7: Daily Usage of Electronic Devices

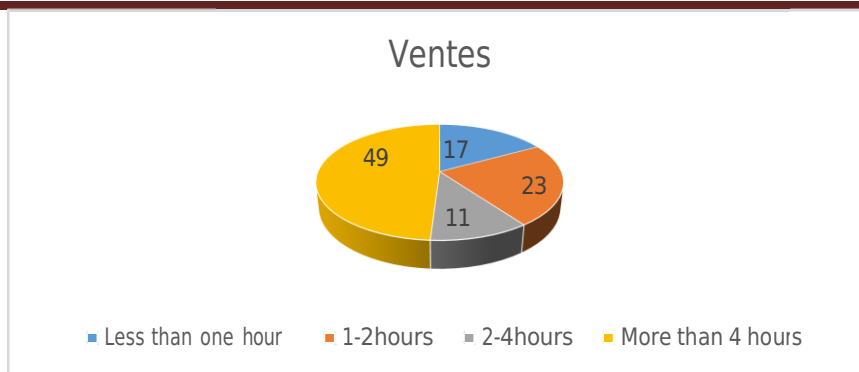


Figure 3.5: Students daily devices usage

The table and pie-chart above show that 34 students (49%) of the population of study use electronic devices for more than 4 hours per day, whereas 16 students representing (23%) of the respondents use those devices for 1 to 2 hours a day. Also 12 students (17%) use electronic devices for less than one hour. however the rest 7 students which represent (11%) using those devices 2 to 4 hours. These data demonstrate that the majority of students of the population of study depending on electronic devices which we consider as something good to do a lot of things on computer or on net and to support the process of learning.

Section Three: ICT Usage for EFL Learning

Question Seven: Do your teachers use ICT?

As mentioned in the graph, (89%) declared that the majority of teachers use ICT in their lectures while seven were showing (10%) said that there is no use of ICT.

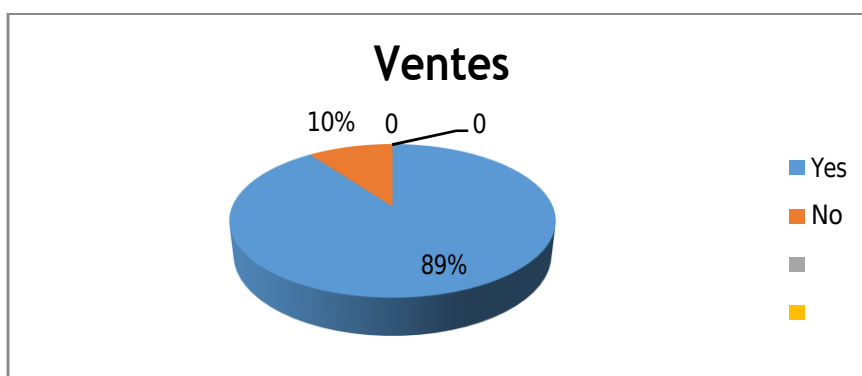


Figure 3.6: Teacher's Using ICT in Classroom

Question Eight: Do you prefer using technology rather than the traditional ways?

The data shows that sixty three participants were making up 91% support the use of ICT to gain information in their studies. While only six of them were presenting 9%, they are against the technological devices in the learning process as shown in the pie-chart:

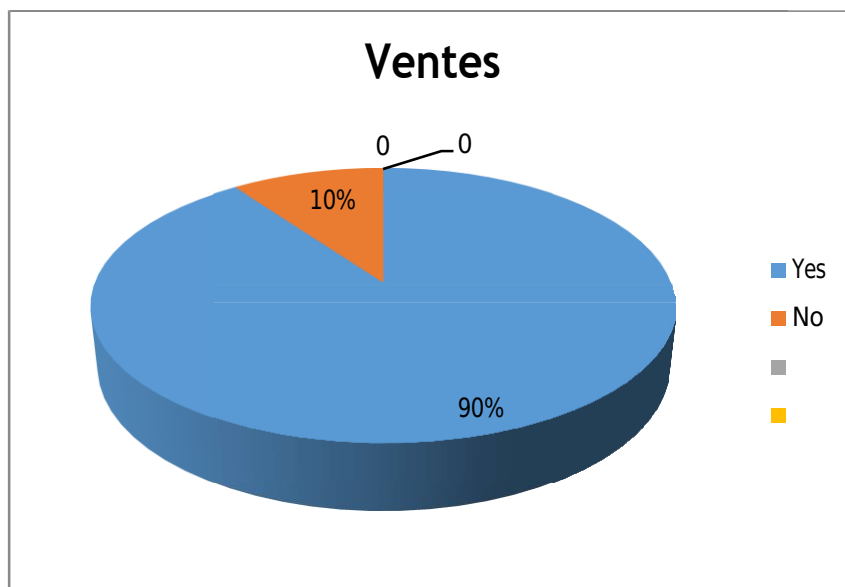


Figure 3.7: Students Learning Preferences

Question Nine: Do you think that the use of technology in classroom improves the learning process?

Answers	Numbers	Percentage
Always	31	45%
Sometimes	34	49%
Rarely	4	6%
Never	0	0%
Total	69	100%

Table 3.8: Improving Learning Process Using ICT

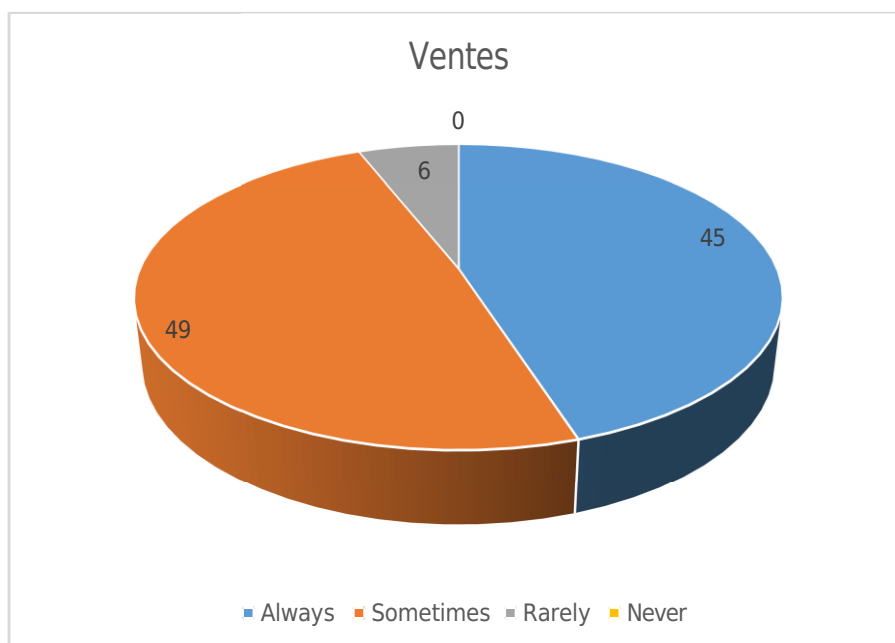


Figure 3.8: Improving Learning Process Using ICT

As it is mentioned in the pie-chart and the table (47%) declared that the majority of students think that the use of technology improves the learning process. While thirty five were showing (47%) said that sometimes ICT can improve the learning process. Whereas, just 3 participants (4%) who answered by rarely.

Question Ten: Does technology motivate students to learn?

Answers	Numbers	Percentage
Always	43	63%
Sometimes	23	33%
Rarely	4	4%
Never	0	0
Total	69	100%

Table 3.9: Students' Motivation Using Technology

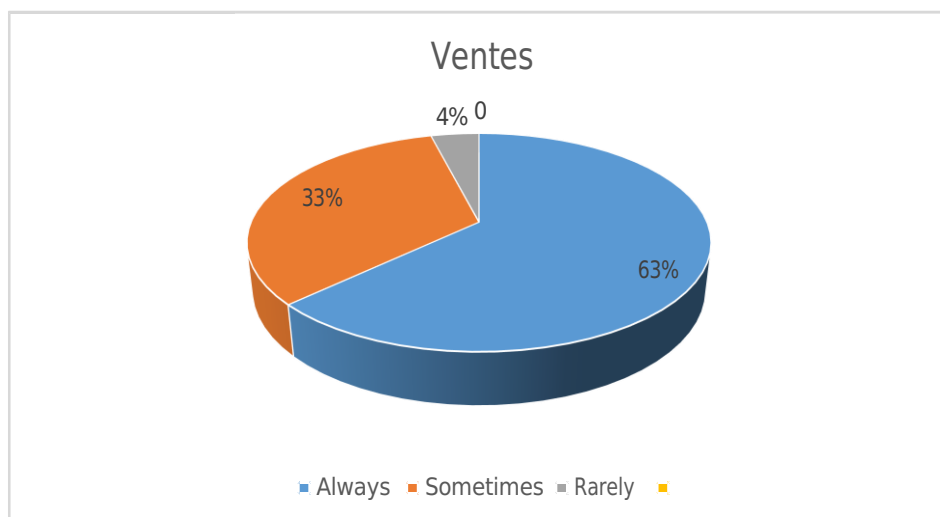


Figure 3.9: Students' Motivation Using Technology

In reply to the above question, just four of the respondents (4%) have shown that ICT does not motivate them to learn. In comparison, thirty four students have decided on the inverse situation. This converts into (63%). While twenty three students declared that technology can sometimes motivate them to learn.

Question Eleven: Do you think that the use of educational technologies improves your English language skills?

Answers	Number	Percentage
Yes	67	97%
No	2	3%
Total	69	100%

Table 3.10: Improving Students' Skills Using Educational Technologies

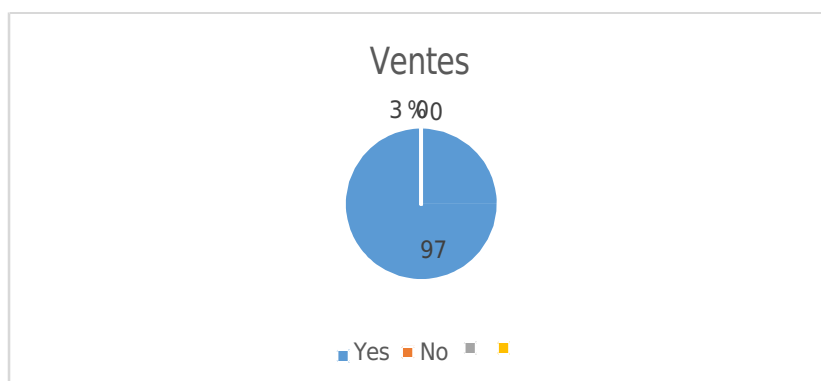


Figure 3.10: Improving Students' Skills Using Educational Technologies

To answer the above question, numerical minority of two students (3%) has indicated that ICT does not help them to promote their English language skills. In comparison, sixty seven students have selected the opposite answer (97%).

3.5. Analysis of Teachers' Questionnaires

Section One: Background Information

Question One: Teachers' Age

The respondents were asked to mention their age; four of them are aged between 23 to 28 years, representing (40%). Other three of them are aged between 40 to 49 years, representing (30%). Only two teachers are aged between 29 to 39 years. And only one is aged more than 50 years. The following figures explain the findings:

Age	23 to 28 Years	29 to 39 Years	40 to 49 Years	Over than 50 years
Number	4	2	3	1
Percent	40%	20%	30%	10%

Table 3.1: Teachers' Age

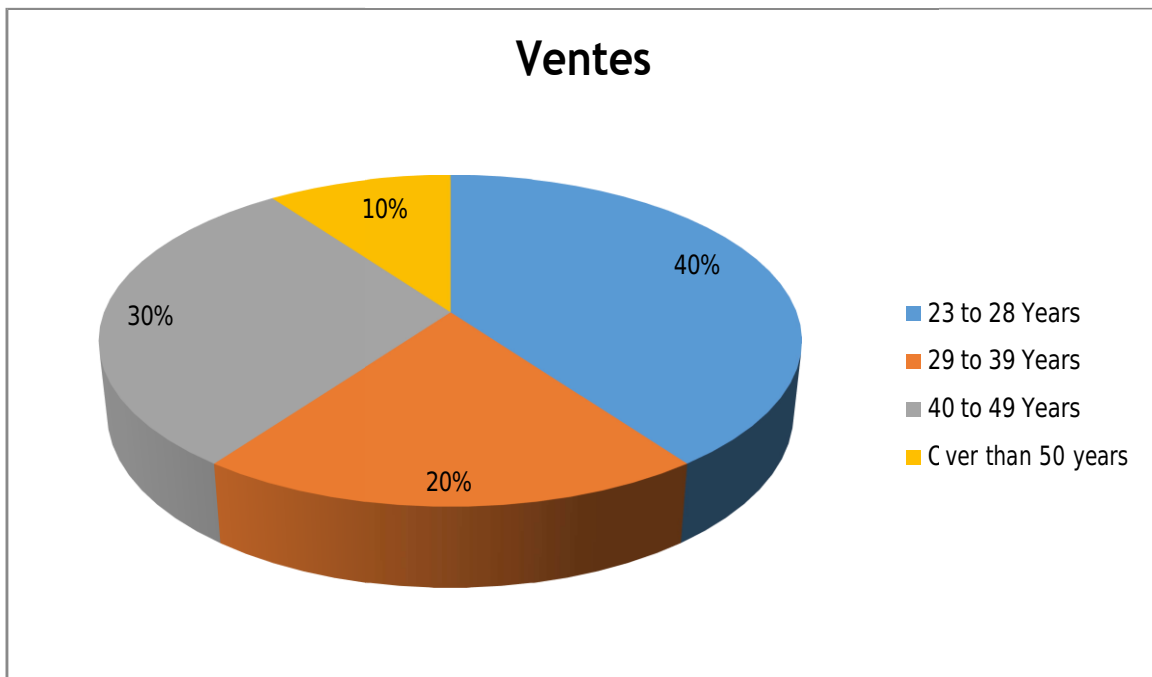


Figure 3.1 Teachers' Age

Question Two: Teachers' Gender

Gender	Male	Female	Total
Number	1	9	10
Percent	10%	90%	100%

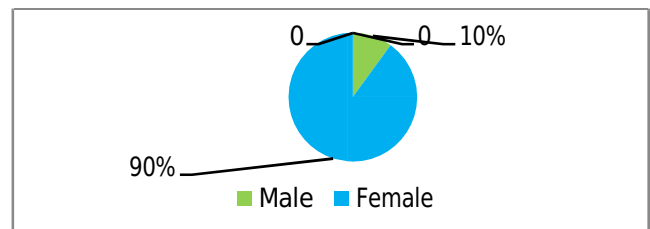


Figure 3.2 Teachers' Gender

Table 3.2 Teachers' Gender

The second question is about the teachers’ gender. The table above indicates that all of teachers are females except one male. It illustrates that, they are much more in English languages Department than males.

Question Three: Teaching Experience

Experience in teaching has a great importance. In this question our purpose is to find out the teachers' experience in English (short, average, long, very long). As it is very important so that it can differentiate between less experienced and experienced teachers.

Years	Number	Percent
1 to 5 Years	5	50%
6 to 15	1	10%
16 to 25	3	30%
More than 25	1	10%
Total	10	100%

Table 3.3 Teachers’ Experience

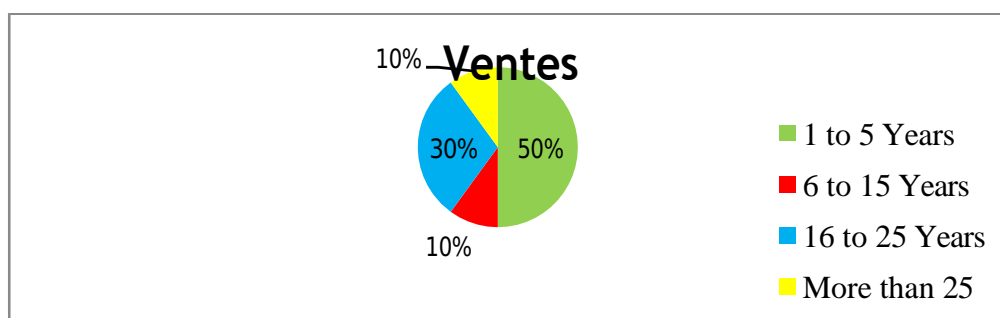


Figure 3.3 Teachers’ Experience

Among the ten teachers questioned, 05 teachers have been teaching English between 01 to 05 years, whereas, 03 teachers state that they have been teaching English between 16 to 25 years.

Only 01 teacher has been teaching English between 06 to 15 years. Another teacher has been experienced more than 25 years.

Question Four: Teaching Level

Level	1st year	2nd year	3rd year	4th year
Number	04	08	01	07
Percent	40%	80%	10%	70%

Table 3.4 Teaching Level

The table above is about teacher s teaching levels .As it is mentioned the teaching level starts from (1st year to the 4th year Middle school).in the number of (10 teacher we find that there are some teachers are teaching in different levels thus we find that the number on the table not equal with their number.

(4/10) Teacher teaches in the level of 1st year have the percentage of (40%).

(8/10) Teacher teaches in the level of 2nd year have the percentage of (80%).

(1/10) Teacher teaches in the level of 3rd year have the percentage of (10%).

(7/10) Teacher teaches in the level of 4th year Master have the percentage of (70%).

Section Two: Usually Utilization of ICT

Question One: Do you have your own electronic device (computer, tablet, or smartphone)?

Answers	Number	Percent
Yes	10	100%
No	00	00%
Total	10	100%

Table 3.1 Teachers' Own Devices



Figure 3.1 Teachers’ Own Devices

Based on the table and the figure above, it is clear that the all of teachers, 10 representing (100%) have their own electronic devices, this can help ICT's integration in EFL Classrooms.

Question two: Do you have a network at home?

Answers	Number	Percent
Yes	10	100%
No	00	00%
Total	10	100%

Table 3.2 Teachers’ Home Network

Figure 6.2 Teachers’ Home Network

As it is indicated in the table and figure above, it is shown that all of the teachers of the target population, 10 representing (100%) have internet connection at home.

Question three: Can you get connected to the network at the middle school?

Answers	Number	Percent
Yes	8	80%
No	2	20%
Total	10	100%

Table 3.3 Teachers' Network at Middle School

Figure 3.3 Teachers' Network at Middle School

From the above table and the pie-chart, the results seem satisfied in that the majority of teachers of the target population, 8 representing (80%) can get connected to network at their department, which means that Algerian universities are totally occupied with Internet connection which teachers need at any time for supporting their courses.

Question Four: Daily Usage of Electronic Devices

	Number	Percent
1 to 2 hours	7	70%
2 to 4 hours	1	10%
More than 4 hours	2	20%
Total	10	100%

Table 3.4 Teachers' Daily Devices Usage

The table and the pie-chart above show that 7 teachers (70%) of the population of study use electronic devices for 1 to 2 hours per day. Whereas 2 teachers representing (20%) of the respondents use those devices for more than 4 hours a day. The remaining is only 1 teacher (10%) use electronic devices from 2 to 4 hours. This data demonstrates that the majority of teachers of the population of study depending on electronic devices which we consider as something good to do a lot of things on computer or on net and to support the process of teaching and learning.

Question five: Among the following activities, which activity do you spend time on using electronic devices?

Activities	N
Preparing courses and classroom activities	7
Browsing the internet for information to support your lessons	7
Explore, reading, exchange ideas, instant messages	1
Browsing the NET for pleasure	4

Table 3.5 Using Electronic Devices in Classroom Activities

The table above displays that 7 teachers of the population of study are spending their time using electronic device in doing activities and preparing coursework. Another 7 teachers of the population of study are spending their time using electronic device in browsing the internet for information to support their lessons, whereas 4 teachers of the respondents, browsing the NET for pleasure. Only one teacher spend their time using electronic device exploring, reading, exchange ideas, and instant messages. This data demonstrates that the majority of teachers of the population of study are trying to support their coursework with electronic devices (ICT) which we consider as a positive point that needs to be supported by administrators.

Question Six: Among the following activities, which activity do you practise using electronic devices?

Activities	N
Creating spreadsheets or charts (Excel, word etc.)	06
Creating presentations (Power Point, etc.)	01
Creating graphics (Photoshop, Flash, etc.)	07
Creating and editing video/audio (Premier, Movie Maker, etc.)	04
Creating Web pages (Dreamweaver FrontPage etc)	02

Table 3.6 Teachers' Activities Using ICT Devices

This table shows that 7 teachers of the population of study which is the majority are using electronic device in creating graphics (Photoshop, Flash, etc.). Another 6 teachers of the population of study is using electronic device in Creating spreadsheets or charts (Excel, etc.). However,04 teachers of the population of the respondents are using electronic device creating

and editing video/audio (Premiere, Movie Maker, etc.), whereas 2 teachers are using ICT in creating Web pages (Dreamweaver, FrontPage, etc.) Only one teacher is using electronic device creating presentations (Power Points, etc. This data implies that all teachers of the population of study are knowledgeable of the computer technologies and applications and the majority of them are good in creating spreadsheets, charts and presentation which is helpful technique to present courses in the classroom.

Section Three: ICT Usage in Teaching Learning English Language

Question One: Does the educational technology help you to offer as much information as possible in a short period of time?

	Always	Sometimes	Rarely	Never
Number	8	2	0	0
Percent	80%	20%	0%	0%

Table 3.1:Offering Information in Short Time through Ed-Tech

Most teachers (80%) believed that educational technology is useful and very important in offering information in short period of time, while two teachers represented (20%) think that ICT does not help them in teaching process.

Question two:When using the educational technologies while presenting the lesson, do you feel that most of students are more efficient and interested?

	Always	Sometimes	Rarely	Never
Number	9	1	0	0
Percent	90%	10%	0%	0%

Table 3.2 Learners Interest in Ed-Tech

Teachers who answered by (Always 90%) explained that online tools and videos can facilitate distance learning and allow students to work, especially that students like listening and watching rather than writing. Only one (10%) who claimed (Sometimes) explained that student interest refers to the way that teacher present either in using Ed-tech or without it.

Question three: Do you think that social media like Facebook, Tweeter and You tube help your students to learn?

**Figure 3.1:Teacher Responses and percentages
aboutstudents' knowledge enhancement toward social media**

The teacher who responded by (Yes) they social media help students to enrich the learner's knowledge because it support, enhance and optimise the delivery of information. Additionally, when they form groups on face book and posts questions, lessons to obtain feedback from peers, they can share links such as videos.

Question four: Can these modern aids replace the role of teachers?

Figure 3.2Modern Aids Replaces Role of Teacher

All teachers claimed that teacher role remains very important, especially when it concerns adaptation of the input accordance with learners' preferences styles, levels ...

Question Five: What techniques are used in motivating students in learning English?

Some teachers are claiming some techniques using in motivating students in learning English:

- Using flash cards and visual aids activities and presenting the lesson with different ways in order to not get bored.
- Offer non-judgmental feedback on students' work, stress opportunities to improve, look for ways to stimulate advancement.
- Whatever is visual, kinaesthetic and auditory, motivates, attracts and drive the attention of kids and students in learning English.
- Use of ICT (videos, power point...etc), classroom managements (classroom seating arrangement), timemanagement (how to divide your time according to the lesson).
- State clear rules and expectations, give plenty of talking time and know students' goals and needs.

Question Six: In which teaching units can ICT work better?

Figure 3.3: Works of ICT in Teaching Units

Most teachers clarify that ICT works better in both listening and oral expression representing 80%. Whereas, 50% see that ICT works better in reading and phonetics. Few participants (20%) found that ICT is helpful in teaching unit including grammar and writing.

At the end of this analysis some teachers are suggested and recommended some ideas about the use of technology in EFL teaching

- ICTs provide interaction between teachers and learners, it develops the critical thinking and promotes learners' autonomy which make them feel more confident and increase love motivation.
- Online dictionaries and translation tools, videos and podcasts, online English games, tests and quizzes.
- Technology has made lives easy, comfortable and enjoyable. It has brought the world closer and better counted. So, in order to introduce it we use: presentations, simulations, real life objects to make this lessons engaging and effective.
- The use of technology is very useful in teaching. It facilitates learner's study and understanding. Moreover, it helps the teacher in introducing the lesson. The learners can understand quickly through pictures or videos.

3.6. Limitations of the Study

There is no such thing as a full study in the world, and this study has encountered various difficulties and challenges that have caused it to overlook some important facts, such as the fact that the study's approval in the administration was difficult. We looked for more than one school in our study but were unable to find any; we had some difficulties organizing the questionnaire with teachers because they have a charged program and time must be respected, especially due to exams; and, finally, there were only a few dissertations and thesis on critical thinking in the Algerian context.

3.7. Discussion and Interpretation of the Main Findings

In this part, the collected results for our study instruments will be discussed in relation to the previously stated hypotheses. The teacher and student surveys enable the researcher to collect a wealth of information regarding the usage of ICTs in EFL courses and how to encourage students. Its goals are to enhance learning and improve language by using ICTs as a tool for language development. We have noted and highlighted the three created theories, which will be confirmed or disproven.

The findings of the questionnaire distributed to EFL students and instructors demonstrate that they are typically more concerned with the usefulness of ICT in increasing motivation and boosting accomplishment. Most teachers agree that using ICTS in conjunction with traditional methods of teaching English is far superior, as students believe that their learning process will be developed over time by using ICT devices, including participation in some online devices and learning distance. This suggests that both instructors and students believe that utilizing ICT to study and teach English is beneficial. While there are certain limits, such as the fact that not all instructors have access to the department's resources. Although the results show that participants strongly prefer using ICT, their patience and willingness to try something new, adapt their teaching-learning style, and express a positive point of view were critical during the research and confirmed the first hypothesis, which states that ICT can be used to improve EFL students' performance.

The second hypothesis was that presenting courses using ICT technologies makes English lessons more appealing. The discussion and interpretation of the findings emphasizes the importance of ICT in language transmission. These findings demonstrated how beneficial the technology was to both the instructor and the students' development in learning English and making topics more enjoyable. As a result, including ICT into course presentation and job completion is critical to confirming this notion.

Finally, the third and final hypothesis states that ICT will have a significant influence on student motivation and EFL learning. The findings of both the teacher and student questionnaires show a close association between ICTs and participation. EFL teachers believe that ICT is the most effective technique of encouraging and developing students' learning ability. They believe that if ICTs are available and suitably selected based on learners' requirements, students' learning may become more driven. This verifies the first component of the hypothesis, which states that learners' learning would enhance and grow after using ICTs as a pedagogical resource for studying different subjects and engaging in diverse activities. Furthermore, virtually all teachers believe that electronic devices are a superior teaching tool, and that their usage is acceptable for a wide range of language learning activities and units. Furthermore, the use of tables permitted us to reach the same findings and demonstrate the importance of ICTs in enhancing students' learning performances.

3.8. Suggestions and Recommendations

A predictable alteration in teaching and learning pattern occurs if combining ICT in education as Harris et al (2002) said "... It is not necessarily the technology that has to be innovative, but the approach to teaching and learning must be"

Based on the results obtained from this research, we can provide the following recommendations and suggestions:

1. The government should encourage the use of ICT in middle schools by employing computers and tablets to help enhance the process of teaching English language.
2. Technological advancement should be offered in all middle schools.
3. Providing training courses for instructors who are unable to utilize ICT and engaging them in order to take full benefit of its characteristics.

4. ICT resources and specialists should organize workshops, seminars, and conferences on the use of technology and its devices in education.
5. Establishing infrastructure for electronic remote learning networks in our colleges.
6. Preludes to an electronic computer system that teachers might utilize in the classroom to train users to fix their own gadgets.
7. Technology workouts for learners using innovative ICT applications.
8. Investigate and choose the finest pursue global models.
9. To accomplish ICT integration in learning and teaching, case studies and best practices should be shared.
10. ICT innovation and modernization contribute to effective middle schools.
11. Algeria's Ministry of Higher Education should promote technical innovation and ensure the effectiveness of instructional programs in institutions.
12. Regulate pupils by restricting their studies to computer science and programming for advanced students.
13. Create a data climate between laboratories and libraries that extends beyond their bounds.

Conclusion

This chapter discusses the study's fieldwork, which is separated into two sections: research technique and findings or outcomes. The study was performed to explore the perspectives of students and teachers. About the Integration of Educational Technology in learning and teaching EFL at Middle school of Aissaoui Lakhdar at Ain kermes, this project aims to develop innovative approaches to teaching and learning English, resulting in more entertaining and successful lessons.

The teacher and learner inquiry aims to find out the cause behind the inadequate use of technology in our classrooms through the assessed questionnaire. Moreover, this research work has been mentioned the discussion about the results, the recommendations and suggestions for the future studies.

General Conclusion

The previous study was conducted about using Educational Technology in Teaching and Learning EFL at middle schools. The study aimed to assess the effectiveness of educational technology tools in improving EFL teaching and learning. The abuse of conventional methods has become a severe issue that prevents In order for students to make enough learning progress, it is necessary to incorporate helping materials within the academic curriculum.

For the purpose of exploring the use of technology in EFL classrooms and its influence on teaching and learning, the research posed the following research questions:

- Why do educators use educational technology to teach and study English as a foreign language?
- Do teaching aids improve EFL learning for both teachers and students?
- How do educational tools affect EFL teaching and learning?

To study the research problems mentioned above, we proposed the following hypotheses:

- Using educational technology in EFL instruction can significantly improve learning outcomes.
- Teaching tools improve EFL lessons and increase learner engagement and motivation.
- Educational technologies have a favorable influence on EFL teaching and learning.

The first theoretical chapter was around the use of educational technology in English language teaching. The previous study was about the use and the impacts of technology and what it supports in teaching and learning, also the benefits for both teachers and students. The next point was the definition of Information and Communication Technology (ICT) in education, and its importance. Moreover, it has been included the best applications for teachers and educators/ digital trends in English Teaching and learning (ELT) in addition to the advantages and disadvantages of ICT. The study has also discussed the role of the teacher inside the classroom doors.

General Conclusion

The second theoretical chapter discussed ICT in education. The chapter has focused on the use of educational technology in educational contexts, with the goal of capturing ICTs' potential contribution to EFL teaching and learning. It stressed the importance of multimedia in education, as well as the role of information and communication technology in teaching and learning. In addition to highlighting the significance of ICT integration in TEFL and its impact on student achievement, the chapter aimed to demonstrate the impact of technology on the teaching and learning process, as well as the key impediments to ICT usage, particularly in Algerian middle schools, whereas the third chapter was about discussing the results obtained from the questionnaire of teachers and students.

By discussing the results, we can learn how ICTs can help improve the teacher development. Finally, a set of suggestions, recommendations, and limitations to the current research are also presented in this part of the research.

Lastly, it might include that the actual study has endeavored to show a new thought in the field of Education in technological basis through exploring a numerous perspectives of the connection between learning and technology, and how it can be positive and what are its negative use. The research work attempted to provide the outcomes of the study process. All things considered, is to be aware and make the attention about the future studies toward teaching and learning English through Educational technology.

General Conclusion

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Appendices

Appendix 01**Teacher's Questionnaire****Dear teachers**

As a part of the preparation of English Master's Certificate, we are required to prepare a questionnaire. The latter is meant to collect and gather data in and can only be done through mutual cooperation. The provided information will be used for the purpose of scientific research.

Thank you.

SECTION ONE: Background information.

1-Age:

a-23 to 28 years b-29 to 39 years c-40 to 49 years d- over than 50years

2-Gender: a-Male b-Female

3-Teaching experience:

a-1 to 5 years b-6 to 15 c-16 to 25 d-more than 25 4-

Level (s) you teach:

a-1st year MS b-2nd year MS c-3rd year MS d-4th year MS

SECTION TWO: usually utilization of ICT (patterns usage of ICT in daily life)

1-Do you have your own electronic device (computer, tablet, or smartphone) ?

A-Yes b-No

2-Do you have a network at home?

A-Yes b-No

3-Can you get connected to network at middle school?

A-Yes

b-No

4-Daily usage of electric devices

A-1 to 2 hours

b-2 to 4 hours

c- more than 4 hours

6- Among the following activities, which activity you spend time on using electronic devices?

A-Preparing courses and classroom activities

B-Browsing the internet for information to support your lessons

c-Explore, reading, exchange ideas, instant messages

D-Browsing the NET for pleasure

7-Among the following activities, which activity you practice using electronic devices?

A-Creating spread sheets or charts (Excel, word, etc.)

B-Creating presentations (Power Point, etc.)

C-Creating graphics (Photoshop,Flash,etc.)

d-Creating and editing video/audio (Premier, Movie Maker,etc.)

e-Creating Web pages (Dreamweaver, FrontPage, etc.)

SECTION THREE: ICT usage in teaching learning English language

1- Do the educational technology help you to offer as much information as possible in a short period of time?

A-Always

b-sometimes

c-rarely

d-never

2-When you use the educational technologies while presenting the lesson; do you feel that most of students are more efficient and interested?

A-Always b-sometimes c-rarely d-never

Why?

.....

.....

3-Do you think that social media like Facebook, Tweeter and YouTubeHelp your students to learn?

A-Yes b-No

Please

specify ?.....

.....

4-Can these modern aids replace the role of teachers?

A-Yes b-No

If yes, how?.....

5-What techniques are used in motivating students in learning English?

.....

.....

.....

.....

6-In which teaching units can ICT work better?

A-Listening

B-Grammar

C-Reading

d-Oral

E-Writing

F-Phonetics

7- What are your suggestions and recommendations to introduce the use of Technology in EFL teaching?

.....

.....

.....

.....

We highly appreciate your contribution.

Appendix 02**Student's Questionnaire****Dear students**

As a part of the preparation of English Master's Certificate, we are required to prepare a questionnaire. The latter is meant to collect and gather data, and can only be done through mutual cooperation. The provided information will be used for the purpose of scientific research.

Thank you.

SECTION ONE: Background Information.

1-Gender:

a- Male

b- Female

2-Age:

a- 11

b- 12

c- 13

3-How do you evaluate your level of English?

a- Average

b- Good

c-Excellent

4-In which area of language do you have difficulties?

A-Reading

b-Listening

c-Oral expression

d-Writing

e-Grammar

SECTION TWO: ICT Usage in Daily Life:

1-Does the technology make life easier in all domains?

A-Yes

b-No

2-Do you use technology in your daily life?

B-Yes

b-No

3-According to you, which technology among the following ones is the most interesting nowadays?

a-Internet and associated applications

B-Smartphones and their associated applications

C-Tablets

D-Computers

4- Daily usage of Electronic Devices

a-Less than one hour

b-1-2 hours

c-2-4 hours

d-more than 4 hours

SECTION THREE: ICT usage for EFL learning

1-Do your teachers use technological items in the classrooms?

a-Yes

b-No

2-Do you prefer using technology rather than the traditional ways?

a-Yes

b-No

3-Do you think that the use of technology in classroom improves the learning process?

a- Always

b-sometimes

c-rarely

d-never

4-Does technology keep you motivated during the lesson?

a-Always b-sometimes c-rarely d-never

5-Do you think that the use of educational technologies improves your English language skills ?

a-Yes b- No

Thank you for sharing your thoughts with us, we appreciate your efforts and be sure that your answers will be take in consideration.

Résumé

La présente étude vise à étudier l'influence des technologies de l'information et de la communication sur processus d'apprentissage des élèves du secondaire. Elle se concentre essentiellement sur l'importance des TIC pour améliorer le processus d'enseignement et d'apprentissage. L'objectif principal de cette étude est d'examiner la relation entre les défis pédagogiques et le développement d'outils d'apprentissage des TIC. Ce travail est divisé en trois parties : Une partie théorique représentée par les deux premiers chapitres, qui discute les idées principales des TIC dans l'éducation. Nous avons également exposé les avantages ainsi que le rôle des enseignants en classe ; le terme TIC et de son importance dans l'éducation a été aussi discuté. Le troisième chapitre a traité la méthodologie adoptée afin de mener l'étude de recherche avec l'analyse des résultats, les données ont été recueillies à travers une série de questionnaires administrés à un échantillon de (69) élèves (collège de deuxième année d'Aissaoui Lakhdar à Ain Kermes). Les résultats de cette recherche révèlent que la majorité des étudiants ainsi que leurs enseignants font preuve d'attitudes positives à l'égard de l'intégration des TIC dans l'éducation. Par conséquent, les étudiants et les enseignants doivent disposer de TIC efficaces et profiter d'outils appropriés afin d'améliorer leur processus d'enseignement. Cette recherche se termine par des recommandations et des implications pour des recherches ultérieures.

Mots Clés: TIC, Education, Collégiens, Défis pédagogiques, Attitudes positives

خلاصة

تهدف الدراسة الحالية إلى دراسة تأثير تكنولوجيا المعلومات والاتصالات على عملية التعلم لدى طلاب المرحلة الثانوية. ويركز بشكل أساسي على أهمية تكنولوجيا المعلومات والاتصالات في تحسين عملية التعليم والتعلم. الهدف الرئيسي من هذه الدراسة هو دراسة العلاقة بين التحديات التربوية وتطوير أدوات التعلم في مجال تكنولوجيا المعلومات والاتصالات. وينقسم هذا العمل إلى ثلاثة أجزاء: الجزء النظري المتمثل في الفصلين الأولين، والذي يناقش الأفكار الرئيسية لتكنولوجيا المعلومات والاتصالات في التعليم. لقد حددنا أيضًا الفوائد وكذا دور المعلمين في الفصل الدراسي؛ كما تمت مناقشة مصطلح تكنولوجيا المعلومات والاتصالات وأهميته في التعليم. أما الفصل الثالث فقد تناول المنهجية المعتمدة لإجراء (الدراسة البحثية مع تحليل النتائج، وقد تم جمع البيانات من خلال سلسلة من الاستبيانات أجريت على عينة مكونة من 69) طالباً) السنة الثانية متوسطة عيساوي لخضر بعين كرمس. (تكشف نتائج هذا البحث أن غالبية الطلاب ومعلميهم يظهرون مواقف إيجابية تجاه دمج تكنولوجيا المعلومات والاتصالات في التعليم. لذلك، يجب أن يتمتع الطلاب والمعلمون بتكنولوجيا المعلومات والاتصالات الفعالة والاستفادة من الأدوات المناسبة لتحسين عملية التدريس لديهم. ويختتم هذا البحث بالتوصيات وعلى مزيد من البحث.

الكلمات المفتاحية: تكنولوجيا المعلومات والاتصالات، التعليم، طلاب المرحلة المتوسطة، التحديات التعليمية، الاتجاهات الإيجابية.