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# Investigating the ICT Sources Perception and Usage by the Algerian EFL Teachers

## The Case of Secondary School EFL Teachers

Thesis submitted in partial fulfillment of the requirements for the degree of  
Master of Arts in Applied Linguistics and ELT  
at the University of Béjaia

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# Dedication

All thanks and praise be to Allah the most high for all the strength he gave me

I dedicate this work

To my enormously beloved mother

To my affectionate father for his faith in me

To my lovely sisters and brother for their unconditional support

To Cherif, Rania, Lynda, and Faten for their love, great words and contribution

To the soul of my dearest grandmother who left us recently but she will always and ever remain in our heart

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## Abstract

As the Algerian educational system has known a lot of changes and improvements especially after the adoption of the Competency Based Approach into our teaching in 2003, there was a continuous call for investing more in Information and Communication Technologies. This interest is due to the need to transform and update the quality of education. The aim of this study was first to investigate the Algerian secondary school EFL teachers' perception about ICT tools' use in their EFL classes. A mixed methodology based on questionnaires (N=62) and interviews with teachers (N=9) was used. The results revealed that EFL teachers were aware of the importance of ICT in the EFL teaching and learning. Besides, the findings showed that most teachers used computers and data projectors when teaching English. The results also revealed that teachers considered ICT integration in their teaching as a source of motivation for their learners. In addition, lack of ICT tools and lack of training and support on their integration were reported as the major barriers that prevented secondary school EFL teachers from successfully integrating those sources in their classes. Training on ICT integration, technical support and ICT tools facility in Algerian secondary schools are highly recommended to overcome the ICT barriers.

**Key words:** Algerian education, CBA, EFL, ICT, secondary schools.

## **List of Abbreviations**

e.g.: *exempli gratia*

Fig.: Figure

i.e.: *id est*

N: total number of teachers

## **List of Initialisms**

B.C.: Before Christ

BBC: British Broadcasting Corporation

C: Century

CAA: Computer-Aided Assessment

CD: Compact Disc

DVD: Digital Versatile Disc

EFL: English as a Foreign Language

ELT: English Language Teaching

EMEA: Europe, Middle East and Africa

FL: Foreign Language

G3: Generation 3

HTML: Hyper Text Markup Language

ICT: Information and Communication Technology

IT: Information Technology

LMS: Learning Management Systems

MP3: Moving Picture Experts Group MPEG Audio Layer 3

MP4: Moving Picture Experts Group MPEG Advanced Video Coding 4

MPICI: Ministry of Post, Information and Communication Technology

OECD: Organization for Economic Co-operation and Development

OET: Office of Educational Technology

SD: Statistical Deviation

SPSS 20: Statistical Package for Social Sciences 20

USB: Universal Serial Bus

VCR: Video Cassette Recorder

VHS: Video Home System

WBI: Web-based Instruction

WWW: World Wide Web

### **List of Acronyms**

E-learning: Electronic learning

MOOC: Massive Open Online Course

MOODLE: Modular Object-Oriented Dynamic Learning Environment

UNESCO: United Nations Educational Scientific and Cultural Organization

### **List of Symbols**

%: percentage

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## **Glossary of Some Terms<sup>1</sup>**

**Authorware** is the leading visual authoring tool developed by Adobe Systems for creating rich-media e-learning applications for delivery on corporate networks, CD/DVD, and the Web.

**Camcorder** is a video camera that records pictures and sound and that can be carried around.

**Compact Disc (CD)** is a small disc on which sound or information is recorded. CDs are played on a special machine called a CD player.

**Director** software helps people create and publish compelling interactive games and e-Learning courses for the web as well as integrate virtually any major file format.

**Device** is an object or a piece of equipment that has been designed to do a particular job.

**Dreamweaver** is a software program for designing web pages, essentially a more fully featured HTML web and programming editor. The program provides a what-you-see-is-what-you-get interface for users to create and edit web pages in a more user-friendly environment.

**Digital Videodisc/ Digital Versatile Disc (DVD)** is a disk on which large amounts of information, especially photographs and video, can be stored, for use on a computer or DVD-player. It is an abbreviation for 'or '.

**Epidiascope** is a device which displays opaque materials by shining a bright lamp onto the object from above. It is used to used to project images of book pages, drawings, etc.

**Flash Authoring tools** allow the user to add interactivity and animation to web pages. These flash authoring tools are even letting the user to create rich internet applications.

**Hardware** is the machinery and electronic parts of a computer system.

**Infrastructure** is a collection of physical or virtual resources that supports an overall IT environment: server, storage and network components.

**iPod** is a small, portable, digital music player which can store thousands of pieces of music, made by Apple.

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<sup>1</sup> Definitions are extracted from Oxford Advanced Learner's Dictionary Compass (7<sup>th</sup> ed.), Adobe Systems Incorporated website, Trivantis and Listserv websites (see references).

**Lectora** is an Electronic learning (e-learning) development tool, also known as authoring software, developed by Trivantis Corporation. It is used to create online training courses, assessments, and presentations. It is also used for the conversion of Microsoft PowerPoint presentations into e-learning content.

**Listserv** is the original and industry standard email list management software. It provides everything one need to manage all of the opt-in email lists, including email newsletters, announcements, discussion groups and email communities.

**Massive Open Online (MOOC)** course is a model for delivering learning content online to any person who wants to take a course, with no limit on attendance.

**Modular Object-Oriented Dynamic Learning Environment (MOODLE)** is a learning platform designed to provide educators, administrators and learners with a single robust, secure and integrated system to create personalised learning environments.

**OpenCourseWare (OCW)** is an educational initiative developed by the Massachusetts Institute of Technology (MIT) to make the core teaching materials for all MIT graduate and undergraduate classes available at no cost to Internet users around the world.

**Overhead projector** is a piece of equipment that projects an image onto a wall or screen so that many people can see it.

**Toolbooks** is an authoring tool that empowers subject matter experts and learning professionals to rapidly create the richest, most interactive learning content, quizzes, assessments, and software simulations.

**Slide Projector** is a piece of equipment for displaying slides (= small pieces of film held in frames) on a screen.

**Software** is the programs, etc. used to operate a computer.

**Universal Serial Bus (USB)** is a lightweight, removable flash storage device that connects to a computer's USB port.

# General Introduction

Information Communication Technology (ICT) is becoming part of our life. It is gaining more importance in business, education, and so on. Within education, ICT has begun to have a presence as it is one of the most rapidly growing fields. It is becoming accepted in the educational system in most worlds' countries. Its use is highlighted by the Organization for Economic Co-operation and Development "OECD" (2001, p. 11) to be of a crucial importance for increasing "the breadth and richness of learning". The Ministry of Education in Algeria has made investments in an attempt of attaining the goal of improving the quality of education with the help of educational software and technology especially after the adoption of the Competency Based Approach. It is stated in 'the report: Algeria 2010' that "the ambitious e-Algerie plan was launched in 2006 and since then 80% of high schools and 20% of middle schools have been equipped with computers". The aim of the e-Algerie plan is to encourage the use of ICT in education.

## **1/ Aim of the Study**

The present work sheds light on the perception and usage of ICT tools by Secondary School EFL teachers. More specifically, it aims at considering the various variables which affect the success of the implementation of these resources. It examines how teachers perceive the importance of ICT in English Language Teaching (ELT). It also documents those barriers that EFL teachers face when using ICT. Investigating all these issues would pave the way to an appropriate integration of ICT to improve the quality of teaching and learning in the Algerian schools.

## **2/ Statement of the Problem**

With the increasing technological development and the growing popularity of ICT all worldwide, there is a necessity for teachers to be prepared for the use of ICT in education (McCannon, & Crews, 2000). Thus, the integration of ICT will provide a potential to transform and enhance education. In the Algerian context, after the educational reform of 2003, the National Ministry of Education expected that the introduction of ICT into education settings would improve teachers' performance by encouraging them to apply software and technology in their jobs. Algerian secondary schools are claimed to be equipped with computers, data- shows, printers, internet, etc. The aim of all these equipments is "to modernize its education system" (The report, 2008, p. 214). However, providing schools with software and technologies is not sufficient. There must be enough

teachers' training and support on the use of ICT. The effectiveness of ICT tools depends much on teachers' understanding of how to use them (Webb, 2014, p. 72). There must also be an integration of ICT in classrooms, and in different teaching and learning activities. Thus, investigating this issue stems from a personal interest in the field of education motivated by our interest in teaching where it is witnessed that some teachers do not fully integrate ICT in their teaching.

### **3/ Research Questions**

Though the Ministry of National Education in Algeria claims to have made great efforts to introduce ICT in our schools, there are some EFL teachers who still do not integrate ICT tools in their teaching. Therefore, before we undertake our research, we ask the following questions:

- Are EFL teachers aware of the importance of using ICT in their own teaching?
- What are the different ICT resources EFL teachers use at school and in their EFL classes?
- Are EFL teachers being trained on the use of ICT?
- Is there any relation between teachers' perception of ICT related tools and their usage in EFL classes?
- What are the barriers which hinder the use of ICT in EFL classes?

### **4/ Hypothesis**

In the light of the previous questions, we hypothesise that the lack of teachers' training and understanding of the importance of ICT and the insufficient access to it can be the causes of its insufficient integration in their teaching. Hence, if EFL teachers have a positive perception of ICT tools and access to them, they would become effective agents who would successfully integrate ICT into their core subject.

### **5/ Limitations of the Study**

We are aware that the scope of ICT and education is so broad and there are many issues to be discussed. But we have deliberately limited our study to the perception of Algerian teachers of English regarding ICT usage and the limitations of their integration in their teaching. Our study concerns also a limited population which is teachers of English in some secondary schools in Algeria. This sample population was limited to sixty two (62) secondary school EFL teachers due to time constraint as well as teachers' insufficient contribution either via the different secondary school EFL teachers groups on Facebook,

emails or in different schools where we have submitted the questionnaires. Therefore, its results can be generalised only if the same results are obtained by other studies conducted under the same circumstances and research protocol.

## **6/ Instruments**

To answer the research questions and to test the validity of the hypothesis, a survey was conducted using a questionnaire and an interview. The former was administered to sixty two (62) teachers of English in randomly selected secondary schools in Bejaia, Setif, M'sila, Blida, Algiers, Media, Tamenrasset, Oran, Relizan, Souk Ahras, etc. The development of the questionnaire was guided by literature review and scales used in different educational backgrounds. The questionnaire included a part for investigating teachers' gender, their age, computer and internet access both in schools and at home, and ICT usage training. The second part was related to teachers' perception regarding the use of ICT tools in their teaching. As far as the interview is concerned, we interviewed nine (9) EFL teachers. The interview sought to find out about the different ICT resources EFL teachers use, the factors encouraging them to use ICT as well as the barriers that hinder its use.

## **7/ Procedure for Collecting and Treating Data**

In order to collect the data on teachers' perception and usage of ICT tools, we conducted a survey. A mixed method was used to gather the quantitative and qualitative data on our investigation. First, a questionnaire was administered to sixty two secondary school EFL teachers so as to explore teachers' perception regarding ICT. This would enable us to know whether Algerian secondary school EFL teachers are aware of the importance of ICT in their classes. The data gathered from the questionnaire were treated using two computer programmes (EXCEL 2007 & SPSS 20). We also interviewed nine secondary school teachers of English to investigate the different ICT tools they use as well as to highlight the obstacles that prevent the successful implementation of ICT in EFL classes. The results of the two gathering tools were discussed, interpreted and compared with the existing empirical literature in order to answer our research questions and reach a conclusion.

## **8/ Research Methodology**

The research methodology which helped us conduct such an investigation and answered the research questions mentioned above was a descriptive method. It was based on the collection of data from a questionnaire that was administered to sixty two (62) secondary school EFL teachers as well as an interview with nine teachers of English.



## **9/ The population and Sample**

Population is defined by Polit, Beck & Hungler (2001, p. 233) as “the entire aggregation of cases that meet a specified set of criteria.” To obtain the necessary information regarding ICT perception by Algerian teachers of English, a total number of sixty two (62) secondary school EFL teachers were chosen randomly to participate in the study. Nine of those participants accepted to be interviewed in order to elicit more information about ICT usage by teachers of English in secondary schools.

## **10/ Division of the Thesis**

The present study is divided into two chapters. Chapter one is a literature review on Information and Communication Technology. It consists of two sections. The first section is about the historical background of ICT. The second section reviews the literature pertaining to ICT tools, devices and application in EFL teaching and learning, the advantages and disadvantages of ICT, the integration of technology in education as well as the barriers to their successful implementation reported by different researchers. Concerning the second chapter, it is the practical part of the thesis. It consists of three sections. The first section is about the description of the study. It describes the participants, outlines the design adopted for the study, and discusses the tools used to collect quantitative and qualitative data. The second section presents, explains and discusses the results of both the quantitative and qualitative analyses whereas the third section reports the limitations of the study, recommendations as well as suggestions for future research.



# Chapter One

## **Introduction**

This chapter tackles the historical background of ICT in education, the different ICT tools, their current application in English language teaching and learning context and as well as the barriers that hinder its integration into EFL classes. This chapter is divided into two sections; the first one is devoted to ICT historical background in Education (evolution and definitions), whilst the second one deals with ICT in EFL classes (tools, current use in English language context, advantages and disadvantages, ICT integration and barriers).

### **Section One: Historical Background of Information and Communication Technologies**

The introduction of technology in education started a long time ago. In the early ages, transmitting knowledge was done orally. The cave drawings and paper of the ancient era (1900 B.C.) resulted in the appearance of the written communication. That is to say, technology is not only limited to tools that work with electricity. In the nineteenth century, there were more advancement in the educational tools. According to the website of Purdue University, “in 1870, technology advanced to include Magic Lantern, a primitive version of a slide projector that projected images printed on glass plates ... by the time the chalkboard came around 1890.” These advancements clearly show learners’ eagerness for more advanced educational tools. According to Smart Technologies EMEA (Education) channel on YouTube (2011), the history of technology in education can be classified into different ages:

#### **1/ The Audio Visual Age**

In the earlier twentieth century (20<sup>th</sup> C.), there was a shift from focusing on inventing technological tools that enhance only the written communication to more advanced educational tools that would improve the listening skills too. The invention of the radio was of a great contribution to the field of education. The first lesson was sent over the radio by the Board of Education in New York City in 1925 (our ICT website, 2015). According to Bates (2014),

*“The British Broadcasting Corporation (BBC) began broadcasting educational radio programs for schools in the 1920s. The first adult education radio broadcast from the BBC in 1924 was a talk on Insects in*

*Relation to Man, and in the same year, J.C. Stobart, the new Director of Education at the BBC, mused about 'a broadcasting university' in the journal Radio Times."*

New waves for learning were promoted by the radio. In the 1930s and 1940s, film strip projector and overhead projector were other new invented educational tools. According to "Our ICT" website (2015),

*"the overhead projector became widely used in the classroom which provided teachers with a more convenient alternative to the blackboard. An overhead projector used transparent sheets which could be written on with an erasable marker. The teacher could write on the reusable transparency while facing the class. The notes were reflected on a screen during the classroom presentation."*

In the 1950s, headphones were introduced in classrooms to enhance the listening skills of learners. Moreover, videotapes' use also emerged during the 1950s (our ICT website, 2015). It had created more motivated classes as methods of instruction were more exciting (Purdue University Online).

## **2/ Information Age**

The period after the 1950s witnessed more improvements in the introduction of more educational tools. In the 1960s, television had made significant shift as it was used as a source in classrooms. In this, Brown (2009, p.58) stated that the use of television was made direct in education as a tool for teaching. In the 1970s and 1980s, Video Cassette Recorder (VCR) and Video Home System (VHS) were used in education. A VCR, as defined by Ronan (1994,p. 03), is " a device that records to and plays back sound and picture information from magnetic tape housed in a plastics cassette"; whereas, a VHS is " a composite, analogue format using ½ - inch wide tape" (Rea, & Irving, 1995, p. 218). These tools preceded the Digital Versatile Disc "DVD" and Compact Disc –Rom "CD" implementation in education. EFL teachers usually used these tools to play videos and audios when teaching especially the listening skills. This is mainly due to the wide encouragement of the adoption of audiovisual method during this period.

### **3/ Computer Age**

During the 1980s, there was a huge technological revolution: the computer. Lepeltak (2006, p. 121) pointed out that in 1984, the first Personal Computer “PC” with a graphical interface was brought into use by the “Apple” company. Its use was limited to some consumers and small business markets. In fact, this PC formed the basis of a modern personal computer. In fact, computers started to have an important role in schools. According to “our ICT” website (2015), Teachers used the computer for different learning purposes. They also created and completed their assignments using computers instead of typewriters. Moreover, this shift brought by the availability of computers had further its impact on schools. Pelgrum & Law (2003, p. 19) stated that “many countries started to build their own brand of microcomputer (BBC, Acorn, Tomson) and distributed these to schools.” They further added that Information Technology “IT” replaced the term “computers”. Besides, they argued that there was a shift from computer technology to the capacity of storage and retrieval of information.

In the early 1990s, SMART interactive whiteboards were introduced. Zarco & Vaughn-Shavue (2013, p. 301) defined a SMART Board to be “simply a whiteboard displaying the image from the computer monitor with the surface operating as a giant touch screen. The computer is controlled from the board itself through touching or using an electronic pen.” These boards facilitated to work for the teachers who were using them. They revolutionised education as they are still being developed and used nowadays in all the subjects including EFL classes.

### **4/ The Digital Age**

The invention of the computer and the rapid growth of technology have never stopped. According to the website of Purdue University,

*“In 1990, The World Wide Web was given life when a British researcher developed Hyper Text Markup Language, or HTML, and when the National Science Foundation (NSF) removed restrictions on the commercial use of the Internet in 1993, the world exploded into a frenzy of newfound research and communication methods.”*

In the 1995, the internet revolution made its rapid advancement into the educational field. Schools, in some parts of the world, started to be equipped with computers and internet. Our ICT website (2015) argued that “as more people caught on to the potential of the Internet and the value it could add to learning, it began to be used in education.” However, the connection was limited. This digital age paved the way for more improvements. Internet has been recognized as very important tool in education. Besides, ICT “Information and Communication Technology” replaced IT “Information and Technology” when e-mail began to be available and accessible to the general public (Pelgrum & Law, 2003, p. 19). That is to say, ICT refers to both computer-assisted information processing technologies, computer-assisted communication technologies, and computer-assisted decision support technologies (Andriessen & Koopman, 1996, p. 321).

## **5/ Interactive Age**

The digital compression and the high-speed internet access of 2000s are still making huge advancement in education. Class interaction is not limited to the physical school. Thanks to computers/ laptops, internet, cameras, etc, lectures can be attended online and downloaded wherever the learner is. Teachers and learners can be in a virtual class. According to Bates (2014),

*“The Massachusetts Institute of Technology (MIT) started making its recorded lectures available to the public, free of charge, via its OpenCourseWare project, in 2002...YouTube is increasingly being used for short educational clips that can be downloaded and integrated into online courses. The Khan Academy started using YouTube in 2006 for recorded voice-over lectures using a digital blackboard for equations and illustrations.”*

Even the social media sites as Facebook and Twitter have contributed more in enhancing learning. Moreover, online learning environments, as Massive Open Online Course (MOOC) and Modular Object-Oriented Dynamic Learning Environment (MOODLE), are helping both educators and learners.

Though the definition of ICT changes according to its era, researches tried to define it accordingly. Abilasha & Ilankumaran (2014, p. 218) defined it as “the utility of technology to support the effort of conveying information and communication specifically in the area of

education.” They further added that digital technologies are used to facilitate both learning and teaching. These technologies include computers, internet, cell phones, etc. Furthermore, according to “ICT Education” article (n.d.),

*“Information and Communications Technologies (ICT) education is basically our society’s efforts to teach its current and emerging citizens valuable knowledge and skills around computing and communications devices, software that operates them, applications that run on them and systems that are built with them.”*

Thus, Information and Communication Technologies cover all the products that have the ability to calculate, account, record, store, retrieve, duplicate, process, reproduce, transmit, receive, or manipulate electronic information in a digital manner.

This section tackled the different periods ICT passed through. There were many tools used in each age. Innovation in ICT was the basis for the improvement that marked each age.

## **Section Two: Information and Communication Technology in English Language Teaching and Learning**

The overview of the historical background presented in the first section shows that ICT tools have been used in language classes since a long time ago. This indicates teachers’ eagerness for using different tools in their classes. In this section, we will deal with ICT in English as a Foreign Language context, their application and integration as well as the obstacles that hinder their successful integration.

### **1/ Information and Communication Technology Tools, Devices, and Infrastructures in English as a Foreign Language Context**

English as a Foreign Language teaching and learning has greatly evolved especially after the 1950s. New teaching methods and tools were introduced in EFL teaching contexts. United Nations Educational Scientific and Cultural Organization (UNESCO) (2004, p.4) pointed out that “facilitating access to other cultures and languages is the chief goal of the language teaching profession, and using ICT resources effectively in their teaching represents one of the chief challenges facing language teachers today.” The application of ICT in EFL classroom aims at serving the objectives of English language learning and teaching.

Therefore, ICT tools enable students to improve their language skills. Teachers, in their turn, can use them to help their learners improve their level in English language. There are different technological types, ranked into ICT, commonly used in English language context. Some of these technologies have an important role in EFL teaching and learning processes such as:

#### **a. Web-Based Tools and Applications for Managing Learning and Teaching**

Nowadays, EFL teaching is not limited to traditional classrooms. Learners can learn this language thanks to distant learning. Besides, teachers can deliver their instructions over distance thanks to the internet. Accordingly, Web-based Instruction (WBI) as defined by Khan (1997, p. 6) is “ a hypermedia-based instructional program which utilizes the attributes and resources of the World Wide Web (www) to create a meaningful learning environment where learning is fostered and supported.” Thus, Web-based instruction aims at managing learning and teaching. Khan (1990, p. 5) further asserted that “Web-based instruction (WBI) can be viewed as an innovative approach for delivering instruction to a remote audience, using the Web as the medium.”

With the universal use of World Wide Web (WWW), many educational institutions can manage the application of these technological tools offered by the internet. Internet can serve in achieving English language learning and teaching objectives, which are put to improve students’ performance in different skills. As Pitler, Hubbel, Kuhn, & Malenoski (2007, p. 29) demonstrated:

*“Teachers can use the vast resources of the Internet as a guide when setting objectives during the planning process. One way of applying web resources to this end is to access standards online, transform them into objectives, and incorporate these objectives into a rubric that students can personalise.”*

Therefore, teachers’ use of web resources in the classroom would easily pave the way for the students to develop their skills and abilities in mastering English without difficulties.

#### **i. Learning Management Systems**

The web provides facilities for managing learning thanks to such infrastructures as Learning Management Systems. According to Pina (2010, p.1), “a learning management system (hereinafter referred to as an LMS) is a server-based software program that interfaces with a database containing information about users, courses and content.” The internet software offers the students opportunities of managing, reporting and tracing their interaction with the content or with the teacher. This software enables students to indicate course completions. It also allows for teachers' assessment of their students' performance in different



tasks which are related to language skills development. In Algeria, we generally find LMS in higher education where online learning environments as Moodle and Mooc are promoted. Unfortunately, there is no record of the availability of LMS in our secondary schools.

## **ii. Online Collaborative Workspaces**

Collaboration is vital in our schools as it keeps colleagues as well as learners in constant contact. Thanks to the progress in technology, more room for online collaborative workspaces is enabled. This latter are “.. collaborative work environment such as intranets or knowledge portals” (Dalkir, 2008, p. 100). Teachers can use online collaborative workplaces to collaborate with each other even if they are from different schools and regions. This is what Nasirifard, Peristeras, Hayers, & Decker (2009, p. 643) pointed out when they said “online shared workplaces provide necessary tools and technologies for users to share various objects, synchronize them and collaborate together.” In addition, online collaboration can also be between learners too. Girard, Willoughby, & Berg (2007, p. 52) stated that “virtual collaboration provides the students the ability to meet the course and individual team goals, create class and team learning communities, collaborate on documents development, and successfully complete the team project.” For instance, audio-visual aids, which are used online, enable the learners to work collaboratively in a particular task or project. Therefore, these online tools (as email, audio-visual conferencing, online texts, audio lessons, etc) can be regarded as a medium for English language instruction.

## **iii. Virtual Classroom Systems**

Thanks to the development in ICT, there is a remarkable shift in education from traditional classroom to virtual one. Hiltz (1994, p. 3) defined a virtual classroom as

*“... a teaching and learning environment located within a computer-mediated communication system. Rather than being built bricks and boards, it consists of a set of group communication and work “spaces” and facilities, which are constructed in software. Some of these communication structures resemble facilities or procedures used in traditional classrooms. Others support forms of interaction that would be difficult or impossible in the “face-to-face” environment.”*

He further added that students can access their lectures or lessons online. All they need is to type and read from their computers which are connected to the main computer which operates the Virtual Classroom software.

These systems can deliver a real interactive environment to students with computer and internet connection. They can be considered as interactive multimedia or digital media which

contain electronic texts, moving pictures, graphics, and sounds. They allow students to interact by using those digital data for appropriate purposes. As Allyson (2010, p. 39) noted

*“Improvement such as the ability to 'raise one's hand by clicking on an icon provide the instructor and other students of a visual indication of who is in line to speak. The chat feature can serve as a means of providing simultaneous feedback while a classmate is speaking. Emoticon buttons such as happy face, applauding hands or thumbs-up also work well for simultaneously communicating with the speaker in the absence of body language or verbal cues. Whiteboards, note-taking pods and polls allow for collaboration with the whole class or in smaller break-out rooms.”*

Therefore, teacher-learner interaction or learner-learner interaction does not require face to face presence of both. The digital data offer the possibility of connecting auditory or visually with any teacher or any learner at any time. Concerning virtual classrooms in Algeria, “Global Understanding” was an interesting project that aimed at establishing cultural exchange between the University of Tlemcen and other distant universities from different countries. It aimed at linking EFL learners and teachers of Tlemcen University with their colleagues and peers from other universities worldwide to discuss different linguistics issues related to EFL and how to promote its teaching and learning (Meziane & Sari-Mitchel, 2014). However, there is no record about any virtual classroom in any secondary school in Algeria.

## **b. Learning and Teaching Tools**

As a consequence of the technological revolution, new technological devices are invented to facilitate the process of EFL teaching and learning such as:

### **i. Projected Aids**

Projected aids, according to Dash & Dash (2007, p. 124), “refer to those aids where a bright light is passed through a transparent picture by means of a lens and an enlarged picture is thrown or projected on the screen or the white wall.” Slide projectors, overhead projectors and epidiastroscope are examples of projectors. The latter have the ability to present digital files by projecting the computers’ desktop onto the board’s surface where users project the shown data stored in their computers or a Universal Serial Bus (USB). EFL teachers generally use projectors when teaching the language skills, especially listening, speaking and sometimes writing.

## **ii. Personal communication**

A digital communication tool enables both teachers and students to interact with each other using web forums such as social networks (Facebook, Twitter, Viber & Skype). Millea, Green, & Putland (2005, p. 58) pointed out that

*“Web forums, sometimes called Internet forums, message boards, discussion boards, or bulletin boards, are available on the web and provide a mechanism for asynchronous communications ...Some web forum software enables users to receive and contribute via email and the contributions are published in the web forum automatically.”*

The process of interaction may allow the students to create an atmosphere in which they exchange different information in English. Moreover, the overuse of English when chatting gives opportunities for the students to develop their level of either receptive or productive skills. Millea, Green, & Putland (2005, p. 58) also added that “web forums enable teachers/tutors to assess student contributions to class discussions in a considered way. Students are also able to contribute at a time convenient to them.” Thus, teachers can know the weaknesses and strengths of their learners through analysing their students’ online discussion.

## **iii. Personal Digital Entertainment Devices and MP3 Players**

Personal digital entertainment are devices which “.. enable users to download, store and play audio, photo and video files and in many cases to also undertake other tasks or participate in other activities” (Millea, Green, & Putland, 2005, p. 64). They include smart phones, Moving Picture Experts Group MPEG Audio Layer 3 (MP3), Moving Picture Experts Group MPEG Advanced Video Coding 4 (MP4), iPods, etc. Hence, learners equipped with the necessary materials can learn and stay in touch with the English language. Teachers, on their turn, can also use these devices in their classes to better illustrate different language points.

## **iv. Laptops**

Millea, Green, & Putland (2005, p. 70) defined a laptop to be “a mobile computer that is operated with a battery away from power sources. Newer versions are now wireless and can connect to the internet in wireless hotspots.” Laptops are widespread nowadays. They are used almost in all domains including education. Street (2005, p. 159) highlighted that “laptops when used by teachers and pupils together can be very powerful resource for learning and teaching.” Both teachers and learners, for instance, can use laptops to make a PowerPoint presentation.

## **v. Storage Devices**

There are two types of data storage: primary and secondary storage. According to Norton and Clark (2002, p. 160), “hard disks are your primary storage devices.” Whereas “secondary storage devices are the ones to which you copy data from the primary devices (or vice versa).” For example, some EFL teachers use DVDs, CD-ROMs, floppy disks, Tape drive, and USB which store their lessons, tests, exams, etc.

To sum up, learning and teaching tools are so useful in EFL context that every teacher cannot deny their importance. These tools help both teachers and learners to store and retrieve data, to project different lessons, and to communicate and collaborate.

## **2/ Current Application of Information and Communication Technology in English Language Teaching and Learning**

Nowadays, Information and Communication Technology play an important role in facilitating the communication between people. As far as EFL context is concerned, ICT have a significant role as the medium linking the learning process between the teacher and the student although they are in two different places in a certain time. With the teacher's instruction, guidance and explanations, the students can follow and receive progressive program to learn lessons in English language. Fitzpatrick & Davies (2003) identified seven ways in which ICT are applied in English language teaching and learning: presentation, practice, authoring, publishing, communication, simulations, and Computer-Aided Assessment (CAA):

### **a. Presentation**

One of the advantages of ICT is related to the presentation of language learning materials. “Text-based materials and audio or video materials may be used to present or recycle new language to learners” (Fitzpatrick & Davies, 2003, p.23). Students’ understanding of these materials can be improved positively through text-based and audio- video presentations.

### **b. Practice**

ICT provide learners with certain tasks which can be analysed and given feedback by the teacher. These tasks and exercises can be done online, or downloaded and printed. Fitzpatrick and Davies (2003, p. 23) stated that

*“A wide range of different exercise types are possible with ICT, incorporating the presentation of stimuli in varying combinations of text, audio and video materials, format. ICTs also offer the possibility*

*of analyzing of learners' responses, with appropriate feedback and branching.”*

Thus, ICT make the learning and teaching of English language more active.

### **c. Authoring**

In order to easily convert different lessons into e-learning, EFL teachers can benefit from different authoring tools available on the web. Seel (2012, p. 391) defined an authoring tool to be

*“a software package which is to build courseware like programming language, but easier. It also decreases the build time. It is famous for Toolbooks, Lectora, Authorware, and Director. It can be an authoring tool such as Flash and Dreamweaver which supports authoring on the web.”*

For example, when applying ICT for EFL, the teacher can bring text-based materials as books, novels, magazines for further illustration, or create his own tasks and PowerPoint files relying on various authoring tools. Thanks to these tools, teachers can easily create quick assessment of his learners' work too.

### **d. Publishing**

One of the main purposes of ICT tools is to enable English language teachers and learners to publish their works in easier way and keeping them connected to a specific local network. In “Communications: The Real Power of the Web” article (2003, p. 01), it is pointed out that:

*“In most successful classrooms we have found, publishing on the Web is really the beginning of the story (...) for publishing on the Web opens the door of the classroom to reaction from the audience in the outside world, and provide wonderful opportunities for the Web author dialogue with that audience.”*

There are various ways in publishing teachers and learners' data. For instance, teachers can publish online presentations which require such software as Microsoft Office (Word, PowerPoint, Excel, etc) on the social media “Facebook”. EFL teachers publish their lesson plans and presentations, as well as share their tests and exams in different groups available on Facebook as Algerian Association of English Language Teachers, Algerian Secondary School English Teachers, and English Language Teachers of Secondary School - Biskra Province, Algeria- (see the links in the appendix 06). There are also forums, such as “Dz Batna” “Teachers of English Forum”, “Djelfa Info” and “p48 Physique Relizane”, where Algerian

EFL teachers exchange different tests and exams with their colleagues from different provinces (see the links in the appendix 06). Another way, publishing some works requires the use of such recording tools as camera and audio recorder which are useful to record interviews, role play, and discussions.

#### **e. Communication**

Thanks to different ICT tools, people can communicate easily wherever they are. This is what Cameron (2006, p. 4) asserted as she said that “new ICT tools such as websites, extranets, email applications, Listserves, telephone and video conferencing and online surveys allow people to communicate as often as necessary.” Thus, Information and Communication Technology has the preference of making the process of communication between teachers themselves and between the teacher and the learner easier. This can be by exploiting its tools for exchanging information. For instance, email and Skype chat offers the opportunity for English language learners to communicate with other English language learners from different countries. EFL teachers can also communicate via different blogs, emails and different social media groups and pages.

#### **f. Simulations**

The computer can stimulate the students and generate their discussion, and critical thinking. This is what Fitzpatrick & Davies (2003, p.26) affirmed as they stated that “the computer can act as a stimulus which generates analysis, critical thinking, discussion and writing. Programs which include simulations are especially effective as stimuli.” In addition, some computer programs like video conferencing act effectively as stimuli by providing English language learners with real world tasks and discussions on different topics.

#### **g. Computer-Aided Assessment (CAA)**

In order to easily and quickly assess learners’ learning, teachers can make use of Computer-Aided Assessment (CAA) tools. “CAA refers to any instance in which some aspect of computer technology is deployed as part of the assessment process” (Atkinson & Davies, 2012). Computer-Aided Assessment media play an important role in English language teaching and learning. Teachers can use these media to assess and test their students’ performance after receiving some courses in English. Therefore, CAA facilitates, manages and supports the task of assessment for teachers.

To sum up, the different applications of ICT in English language teaching and learning pave the way for EFL teachers to be up-to-date. Learners also benefit from these applications as learning English nowadays is promoted by ICT.

### **3/ Advantages of Information and Communication Technology**

The special nature of ICT gives it numerous advantages. The main use of ICT is not only limited for entertainment aspect but also for educational purposes. According to Naciri (2015, p. 467),

*“It (ICT) increases flexibility so that students can access educational resources regardless of time and space. ICT fosters the learning environment and enhances the learning experience. The usage of ICT also improves the student’s potential as it enables collaborative development of skills and capacities to create knowledge...it also develops the digital competence and technical competence that are needed for employment, education, and self-development.”*

Thus, besides encouraging English language learning, ICT motivate students and give them the possibility to do specific activities at the same time. Moreover, ICT provides various advantages to teachers as well. According to Klimova & Poulova (2015), teachers tend to use ICT as a support to traditional way of teaching. They further added that the teacher becomes “a kind of facilitator, advisor or mentor in the technology-enhanced instruction.” In addition, Houcine (2011, p. 1) listed the following advantages of ICT to the teaching process:

- ICT makes it possible to adapt the teaching materials according to circumstances, learner’s needs and response;
- ICT offers access to authentic materials on the web;
- It is possible to provide a quick feedback;
- It is possible to combine/use alternately (basic) skills (text and images, audio and video clip...);
- Learners become more interested and active in lectures as they are more interesting and less ordinary;
- The focus on one aspect of the lesson (grammar, spelling, etc) becomes possible with ICT.

The ICT advantages in English as Foreign Language Learning and Teaching can be summarised as following:

### **a. Anytime, Anywhere**

One of the main features of ICT is the abbreviation of time and space. According to Mihai (2014, p. 226), teachers and learners "... can easily initiate and/or take part in webinars and 'virtual office hours' anytime and from everywhere, with the only condition of having a computer with the internet connection." English language learning through ICT is characterised by time lag between the delivery of instruction and its reception by the students. Online courses, for example, are available all the time. Furthermore, audio-visual aids allow teachers to send simultaneous instructions such as audio and video to their learners. Learners, in their turn, can use the mobile phones as well as internet (e.g. Generation "G" 3 connection) to look for any information they need wherever they are. They can even listen to English native speakers' pronunciation, for instance, or read e-books and online articles, or use English dictionary by one click on their mobile phones or laptops.

### **b. Promote Collaboration**

Group work was lacked in English language classes in the past. However, thanks to ICT, there is a remarkable shift in collaborative work throughout the field of English language teaching and learning. Majumdar (n.d., p.09) pointed out "ICT encourages interactions, development of collaborative culture, utilization of active learning and introduction of feedback in proper context." In their research about ICT and collaborative learning, Garcia-Valcarel, Basilotaa & Salamanca (2014) found out that ICT enhances interaction among students. Internet courses, for instance, allow learners to be self starters in addition to enabling them to work collaboratively with others via net and phones through communication channels as email, Facebook discussion groups and chat rooms. Likely, English language teachers can also collaborate with their colleagues thanks to the communication channels provided by ICT.

### **c. Motivating to Learn**

ICT most useful tools such as videos, television and computers have a vital role in the combination of texts, sounds, and moving images that can be used as authentic materials. These materials can help learners to engage in the English language learning process. According to Semenov (2005, p. 161), ICT are "facilitating learning for children who have different learning styles and abilities, including slow learners, the socially disadvantaged, the mentally and physically handicapped, the talented, and those living in remote rural areas." In addition, Klimova & Poulouva (2015, p. 297) conducted a research on the role of ICT in raising learners' motivation to learn English. They concluded that "ICT really have a very positive and motivating effect on students' learning. Teachers should take advantage of this



fact and implement ICT into their teaching of English”. As a result, ICT role in enhancing learners’ motivation cannot be denied.

#### **d. Facilitating the Acquisition of Basic Skills**

ICT facilitate students’ thinking skills and creativity as they offer some exercises and practices. Repetition and reinforcement enable learners to transmit those skills. According to Naciri (2015, p. 466), “the usage of ICT also improves the student’s potentials as it enables collaborative development of skills and capacities to create knowledge.” For instance, computer-based learning contains written and oral programmes to teach numbers, shapes, pronunciation of English words, etc. These programmes would improve learners’ thinking skills.

#### **e. Enhancing Self-centeredness**

Twentieth century education is focusing on the importance of learner self-centered learning. The teacher is expected to be a facilitator for his learners. Thus, ICT would help both teachers and learners in the teaching and learning process. Naciri (2015, p. 468) pointed out that ICT

*“.. encourages students to take responsibility for their own learning and offers problem centered and inquiry based learning which provides easy access and information based resources. In this perspective, learning empowers individuals in an ever changing society and fosters lifelong independent learning skills.”*

Therefore, ICT enhances more learners’ independence in their learning process. This would certainly have effects on their achievements.

The advantages mentioned above would make of ICT a powerful tool for improving English language teaching and learning. Teachers’ work would be facilitated by these tools. Besides, learners can access different lessons thanks to technology facilities.

### **4/ Disadvantages of Information and Communication Technology**

Though ICT have many notable advantages in EFL field, one should not be so optimistic when it comes to the application of ICT tools in the teaching and learning of English. ICT have disadvantages which we had better not ignore.

#### **a. Search Engines Reliance**

Both teachers and learners may blindly seek for resources and information on research engines. They may abandon different manual researches which actively engage them in direct discussion with people or seeking information in libraries. Munro (2002, p. 181) claimed that “ the Web may well prove to be Holy Grail of education but current over-reliance on it, and

unquestioning commitment to it, really does teaching and learning a disservice.” Therefore, search engines can result in passive teachers and learners. This is what Serlin (2005, p. 14) highlighted when he tackled the disadvantage of online PowerPoint presentations. He stated that “students are not forced to pay attention and take notes (which can do much to internalise and force concentration) because they may think that they can always just look at the slides later.” Teachers may also download these presentations and other available teaching documents on the net without checking their authenticity, correctness and appropriateness.

#### **b. Invading Teachers and Students' Privacy**

Web personal privacy is a worldwide issue. According to Doyle (2008, p. 168), “with the introduction of ICT systems... it is very hard for an individual to keep aspects of their personal life private. It is also hard for an individual to control the flow of personal information about themselves.” For example, the net is full of hackers and opportunists who are constantly looking for internauts’ personal information. Thus, both teachers and learners’ privacy may be threatened if they share their personal information with strangers on the net.

#### **c. Exclusion of Low Income Students**

Though ICT facilitates learning for learners with different learning styles and abilities, its access is still limited. Low income students are excluded. In her study about the links between students’ socioeconomic status, beliefs about information and communication technologies, and out-of-school learning resources, Vakiri (2010) found out that students from low socioeconomic status families expressed lower confidence in their ICT skills. In addition, owning computers by those students is almost difficult. Even if they get computers, the majority of them lack the internet accessibility because of the high cost of connection.

#### **d. Plagiarism**

The net offers students unlimited opportunities to download as much information as they need. These information can be used wrongly by learners in their researches. They sometimes download ready-made projects without any efforts to refer to the source of the information. Rihtere-Zunte (2007, p. 111) stated that the major cause of the increase of plagiarism in higher education institutions is the rapid development of new technologies. This is what Kirkwood (2013, p. 3) confirmed when he said

*“Growth in use of ICT has increased the potential for plagiarism among students. The ‘copy and paste’ facility makes it easy for students to assemble an assignment from a variety of sources, while sophisticated search engines make it easy to locate sources from around the world.”*

Thus, plagiarism is a real obstacle to innovation and creativity in any learning context including EFL one.

To sum up, ICT is a sword of two edges. It has advantages and drawbacks. Teachers and learners should know how to benefit from the advantages. They also had better learn about their disadvantages so as to avoid them when teaching and learning English.

## **5/ ICT Integration in Education**

ICT integration into schools is a widely discussed topic. There are many attempts to generalise ICT usage in different schools worldwide. A lot of teachers in Europe (80 per cent) considered ICT integration very important at schools as it helps enhance creativity (European Commission, 2009). In the United States of America, the National Educational Technology Plan has been developed by the Office of Educational Technology (OET, 2016) aiming at using technology to improve the educational level in the country as well as ensuring equity of access to transformational learning experiences enabled by technology. As far as East Asia is concerned, ICT tools are introduced in different schools. Trucano (2012, p. 101) argued that ‘enthusiasm for the use of computers and other information and communication technologies in education is undeniable and widespread.’ Concerning African countries, Traoré (2008) reported that though African countries complain of limited access of ICT tools as well as some difficulty in integrating them into learning and teaching process, there are some African countries where ICT began to play a vital role in education as South Africa, Tunisia, etc.

The schools’ need to be up to-date necessitates the introduction of ICT into education. This would promote the quality of learning and result in forming technologically competent learners (Adom & Kbangban, 2010, p. 5, Patra, 2014, p. 155, McRobbie & Thomas, 1998, & Peat & Franklin, 2003). Syed (2005, p. 2) claimed that

*“the use of information and communication technology in the educative process has been divided into two broad categories: ICTs for education and ICTs in education. ICTs for education refer to the development of information and communications technology specifically for teaching/learning purposes, while ICTs in education involves the adoption of general components of information and communication technologies in the teaching learning process.”*

This clearly indicates the importance that is given to technology in education. Besides, there are other reasons behind the call for ICT integration in education. According to Ng, Miao, & Lee (2009, p.67),

*“ICTs can improve access to and improve equity in education by providing educational opportunities to a greater number of people of all ages.... ICTs can enhance the quality of teaching and learning by providing access to a great variety of educational resources and by enabling participatory pedagogies.”*

The Algerian Ministry of National Education has made significant efforts to introduce technology in our schools. The e-Algerie plan is a program that aims at modernising all sectors including education. According to “the report” (2010, p. 216), “in January 2009, the education minister, Boubekour Benbouzid, announced that the government would distribute computers to every school in the country and would encourage their use in all fields of study.” This report further added that “the ambitious e-Algerie was launched in 2006 and since then 80% of high schools and 20% of middle schools have been equipped with computers.” This percentage is rising from year to another. Gherbi (2015, p. 6) pointed out in his research that the statistics of Ministry of Post, Information and Communication Technology (MPICI) revealed that “over 9000 schools of various levels (23% represent primary schools, 77% are middle schools, and 88% are secondary schools) are actually connected to the national internet network where teaching courses in schools are being digitised.” These statistics demonstrate the great efforts to introduce ICT in our schools so as to improve the educational level of our learners and encourage the efficacy of the adopted teaching method “Competency Based Approach”. Moreover, Gherbi (2015, p. 6) added that

*“another programme spread over to 2020 concerns the providing of the tactile digital tablet replacing the classic satchel to more than 8 million students, by two steps. Initially, the operation will cover 2000 schools from 2014 to 2016 and the second stage will concern 5000 middle schools and 18000 primary schools.”*

Moreover, according to “the Ministry of National Education” website (2016), the Ministry of National Education and MPICI have recently signed four contracts on April, 18<sup>th</sup>, 2016. These contracts attempt to highlight the efforts of the ministry in encouraging the modernisation of education. They also aim at providing many facilities for teachers including the advantage of the internet and electronic library “Fimaktabati” discounts (see appendix 07). Hence, these programs will modernise our schools and ensure our learners’ competence in learning as well as using technology effectively.

Introduction of ICT in our schools should be followed with a significant integration in order to improve the quality of both learning and teaching. This integration is said to be of a

crucial importance in different school subjects including EFL because, as Mekhoukh (2012) stated, ICT “can offer a wide range of multimedia resources, opportunities for intensive one-to-one learning in language laboratories and resources for authentic materials, which can be motivating to both students and teachers.”

Yet, both the introduction and integration of ICT in schools should be followed by an adequate training on its use. There must also be an emphasis on considering it as a means not as an end. This is what Al-Bataineh & Brooks (2003, p. 479) highlighted when they argued that “teachers must receive adequate ongoing training, technology use must be matched to curriculum’s philosophy and theory of learning, and an adequate numbers of computers must be conveniently located within the classroom.” Thus, teachers need to know how ICT is used as a teaching and learning tool. This would better facilitate its integration. In Algeria, there were some workshops and conferences which train both teachers and inspectors on ICT tools. For example, it is mentioned in the Panafrican Research Agenda of Pedagogical Integration of ICT (2010) that there were 90 Algerian teachers and school principals who were trained by the British council, Algeria. Some inspectors, in their turn, train teachers whenever there is a workshop on how to integrate ICT in their EFL classes.

Teachers need to consider Information and Communication Technology as a facilitator. Integrating ICT in teachers’ plans sometimes depends on teachers’ perception of their ability to implement them in their teaching. Jones (2001, p.35) pointed out that “if teachers do not feel comfortable with the technology, they are less inclined to incorporate it into their plans.” This is what Pasquerilla (2008, p. 73) approved when he stated that some teachers still prefer the traditional way of teaching and their fear of ICT use resulted in their reluctance to integrate those tools in their lectures. Therefore, there must be an encouragement either through training or through ongoing support on ICT resources usage. Gilakjani (2013, p. 265) proposed that “teachers should make use of technology while they are aware of its purpose, its effectiveness, and the factors that lead to the better teaching and learning into their classrooms.”

To sum up, ICT are so crucial in our schools nowadays that we should plan seriously on its effective integration. The availability of different tools is a necessity and training on their integration is highly required. In fact, the aim behind all this interest in ICT integration is mainly the modernisation of education.

## **6/ ICT Application Barriers**

A lot of literature reviews on ICT and education discussed the factors affecting the successful implementation of Information and Communication Technology in schools (Mumtaz, 2006, Espino, 2012, & Buabeng-Andoh, 2012). Hence, several factors have been pointed out as barriers to ICT usage and integration in teaching. These barriers include, but not limited to, lack of time for training on the use of ICT, lack of competence to use ICT, lack of training programmes, lack of ongoing support for ICT usage, etc. Hennessy, Ruthven, & Brindly (2005, p. 06) pointed out that "... increasing investment in technology infrastructure has not been matched by investment of time and resources to develop new ways of learning and teaching". Therefore, there must be more efforts to support teachers in their integration of ICT tools in their teaching. If educators are themselves not convinced with ICT importance in education, then there would be little or no chance for the ICT implementation to be successful. According to Behar & Mishra (2015, p. 73), "the main reason for the lack of success of these highly promoted projects (ICT integration into education) is that they have ignored the single most important person in the education and learning of the child: the teacher." There are teachers who have received no training on ICT tools. Others consider their use of ICT resources in the EFL class as a waste of time. This is what Mwalongo (2011) supported when he stated that teachers use ICT for their personal use. They generally do not use these tools to change their pedagogical practices, but rather to sustain their traditional practices. Thus, providing schools with technology will be of no significance if there is no or limited efforts for encouraging both teachers and learners on using them for the better quality of teaching and learning. On the other hand, there are teachers who know about Information and Communication Technology tools but they face problem as they cannot access them. Accordingly, Adelabu & Adu (2014) found out that teachers are willing to use ICT resources and are aware of the existing potential, but they are facing problems in relation to accessibility, and to ICT resources. In addition, according to many research studies findings (Kersaint, Horton, Stohl, & Garafalo, 2003, Awan, 2011, & Ang'ondi, 2013), teachers' attitudes and perception of ICT usage have a great influence on the successful implementation of the educational technologies. Cox, Webb, Abbott, Beauchamp, & Rhodes (2003, p. 03) stated that "many teachers still fear some forms of technology, which prevent them from making much use of technology." Thus, when teachers believe they are capable in using technology in their classroom, this will enable them to develop positive attitudes towards ICT usage. For example, Awan (2011, p. 359) found out that "teachers felt confident and happy

with the ICT they were using in their classroom and this resulted in positive learning experiences and attitudes to further ICT training and use in their lessons.” Therefore, teachers’ perception of ICT sources may play a role in the teachers’ usage of ICT.

This section provides a general overview of the different ICT tools, devices and their application in English Language Teaching and Learning. It also highlights some of the ICT advantages and disadvantages. Most importantly, it deals with ICT integration in education and demonstrates some of the barriers that hinder the successful integration of technology in school as reported by different research studies.

## **Conclusion**

Throughout this theoretical chapter, we have attempted to discuss the evolution of ICT in different periods of history as well as their usage in English language teaching context. In the first section, we have sought to present a brief overview of the different ages ICT passed through. We have opted for this section to have a clear vision of ICT definition and the different tools used throughout history. The second section has been devoted to ICT and English language teaching and learning. We have attempted to overview the different ICT tools used in English language teaching contexts. We have also aimed at reporting the literature concerning the ICT integration in education including in our schools. As there were many studies which pointed out that ICT introduction and implementation is not always facilitated, we have sought to mention some of the obstacles that were set out as barriers to the successful integration of ICT at school.



# Chapter Two



# **Methodology, Results and Discussion**

## **Introduction**

The aim of this current study is to investigate the various variables which affect the success of the implementation of ICT tools. It examines how Algerian EFL teachers perceive the importance of ICT in English Language Teaching (ELT) context. It also documents those barriers that teachers may face when using ICT. To provide a clear and meaningful explanation of that, we have presented in the previous chapter an overview of the related literature that allows us to have a clear idea about our topic and research objectives. Afterwards, this chapter aims at providing an answer to our research questions and hypothesis. For this need, we divide it into three sections. The first section is all about the description of our methodology. In the second section, we provide the reader with our findings and discussion. The last section is about the limitations of the study and the possible implications; then, it is concluded with suggestions for future research.

## **Section One: Description of the Study**

This section provides a detailed description of the study. We present our methodology, describe our subjects and the instrument used for data collection; then, we explain the procedures of data collection and analysis.

### **1/ Participants**

The study was conducted with the participation of sixty two (62) secondary school EFL teachers from 28 different provinces of Algeria, who voluntarily participated in the study (see in the appendix 02). The choice of participants from different provinces was based on our interest in diversity and not the rate. The background information of our informants revealed that our sample consists of 28 males (45.2 %) and 34 females (54.8 %). The age of those teachers is between 23 and more 50 years old. Their teaching experience ranged between 1 to more than 15 years. Moreover, nine (09) randomly selected participants were asked to take part in the interview, six of them were females whereas the other three were males. Participants were reminded that this research would not be used for any assessment purposes and that personal details would be kept confidential.

## **2/ Design and Methods**

Research, as defined by Saini (2010, p. 03), is a systematic methodological approach to collecting and analyzing data in order to create new knowledge. Highlighting the aim of the research, collecting data, and discussing the results are the processes that make of the research a systematic one. In our current research, we aimed at finding out the various variables which affect the success of the implementation of these resources. It also examined how teachers perceive the importance of ICT in English Language Teaching (ELT). Besides, it documented those barriers that some teachers faced when using ICT. Our research is based on a mixed methodology relying on both quantitative and qualitative methods.

### **The Instruments**

After an extensive literature review of the instruments utilised to investigate ICT perception and usage (Gulbahar & Guven, 2008, Nedjah, 2008, UNESCO, 2009, & Soussi, 2015), a questionnaire was developed to gather data about the perceptions of Algerian secondary school EFL teachers towards ICT tools, rather than using an existing one (see appendix 01). The questionnaire consisted of two parts with close-ended questions. The first part asked about personal information of the informants such as gender, age, EFL teaching experience, the availability of some ICT at the school and home as well as ICT training. The second part of the questionnaire contained seventeen items based on a 3-point Likert scale, ranging from 2) agree, 1) neutral, 0) disagree. These items were designed to elicit teachers' perceptions of the use of technology in EFL language classrooms. The informants were asked to rate statements based on their level of agreement or disagreement to indicate their perceptions towards technology. Some teachers were contacted via email and Facebook because they were from different parts of Algeria, whereas others were handed the questionnaire in their schools. After the explanation of its objectives and terms such as ICT, the questionnaire was administered to teachers on February 23<sup>rd</sup>, 2016. It took us 32 days to collect them.

Later, after the collection of questionnaires' data, individual interviews were conducted with nine secondary school EFL teachers from Adrar, Blida, Setif, M'sila, Bourdj Boureridj and Souk Ahras. The qualitative methodology aimed at eliciting information about teachers' ICT implementation in their own teaching contexts as well the different barriers they face when integrating ICT tools in their EFL classes. Even though an interview via video chat tools was planned, it was not used since some of the EFL teachers did not have equal

opportunities to access any video chat tools while female teachers were so conservative concerning video recording. These nine respondents were interviewed throughout one week beginning from April 4<sup>th</sup>, 2016. The informants were contacted via cell phone, Facebook calls while some of them preferred to record their answers and send them to us via email. There were only two face-to-face interviews. Some of our participants' answers were recorded using LG voice recorder and Windows 7 Free Sound Recorder program. All these interviews were transcribed for analysis.

### **3/ Data Analysis**

The quantitative data from the questionnaires were analysed using descriptive statistics. In our statistical analysis of the data, we used two computer software programmes, one designed for general statistics (Microsoft EXCEL 2007) and the other is Statistical Package for Social Sciences computer programme (SPSS 20) which would provide more accurate results. The demographic variables for this study were discrete data (nominal and ordinal); therefore, descriptive statistics were utilised to run for percentages, mean and standard deviation. Then, the interview data were also analysed to see how they supplement the quantitative data.

## **Section two: Results and Discussion**

The following section presents the findings emerging from the questionnaires as well the interviews according to the research questions.

### **1/ The questionnaire**

The findings of the questionnaire are reported using percentages, means and standard deviation.

**Table 1. The Overall Mean for Age, Teaching Experience, Hours Spent Using a Computer and Internet a Week**

	<b>Mean</b>	<b>SD</b>
<b>Age</b>	1.65	.749
<b>English Teaching Experience (years)</b>	1.84	.814
<b>Hours Spent Using Computer in a Week</b>	3.85	1.123
<b>Hours Spent Using Internet in a Week</b>	4.15	.956

N=62

In the previous table (1), the descriptive statistics of age, teaching experience, and hours spent using computer and internet in a week are presented.

As can be seen in table 1, the mean for age scores is 1.65 (SD=.75), that of English teaching experience 1.84 (SD=.81), that of hours spent using a computer a week 3.55 (SD=1.12) and that of hours spent using internet a week 4.15 (SD=.96).

The overall mean for age is between the points “23-29 years old” and “30-39 years old”. This indicates that the majority of our informants were young.

The overall mean for teaching experience is between the points “1-3 years” and “4-10 years”. This implies that the majority of our participants have medium experience teaching English as a foreign language.

The overall mean for the hours teachers spent using the computer is between the points “2-6 hours” and “7-10 hours”. This indicates that most of our respondents use approximately the computer at least one hour per day.

The overall mean for the hours teachers spent using the internet is between the points “7-10 hours” and “more than 10 hours”. This suggests that EFL teachers are aware of the importance of internet in their life.

**Table 2. Availability of Computers and Internet**

	Yes (%)	No (%)
<b>Have Computer at Home</b>	98.4	1.6
<b>Have Internet Connection at Home</b>	95.2	4.8
<b>Have a Computer at School</b>	67.7	32.3
<b>Have Internet Connection at School</b>	62.9	37.1

N=62 (100%)

Table 2 above aimed at gathering data on the accessibility of ICT tools for EFL teachers. We limited the ICT tools in this question to computer and internet for sake practicality. From this table, 98.4 % of our informants stated that they have computers at home, while 1.6% (1 teacher) said that he doesn’t have one. In addition, 95.2 % of our sample population indicated that they have internet connection at home; however, 4.8 % of them pointed out that they do not have access to it. Thus, the majority of teachers are familiar with some ICT tools. As far as schools are concerned, 67.7 % of our informants pointed out that

they have a computer. On the other hand, 32.3% of them stated that there is no computer at school. Moreover, 54.8% of the participants indicated that they have access to internet connection at school while 35.5% said that they don't have internet connection at school. These results demonstrate that though some ICT tools, namely computers and internet connection, are available in some secondary schools, there are still some schools which have a lack of those tools. This can be a barrier for EFL teachers to fully implement ICT tools in their classes.

**Table 03. Time Spent Using the Computer and Internet in a Week**

	None (%)	Less than an hour (%)	2-6 hours (%)	7-10 hours (%)	+ 10 hours (%)
<b>Hours Spent Using the Computer in a Week</b>	3.2	4.8	37.1	14.5	40.3
<b>Hours Spent Using the Internet in a Week</b>	0	3.2	29.0	17.7	50.0

N=62(100%)

Concerning the time spent using ICT tools in a week, we limited again the scope of those tools to computers and internet for the sake of practicality. Table 03 indicates that 40.3 % of our informants use the computer more than 10 hours a week. In addition, 14.5% of them stated that they spent 7 to 10 hours a week using the computer. While 37.1% of our participants pointed out that they spent 2 to 6 hours a week using the computer, 4.8% of them stated that they use it for less than an hour and 3.2% of teachers indicated they don't use computers at all. Concerning the internet use, the results are a little bit approximate to the one of the computer use. Half of our informants (50%) stated that they spent using the internet more than 10 hours a week. While 17.7% of our participants indicated that they connect to the internet between 7 to 10 hours, 29% of them pointed out that they spent 2 to 6 hours a week connecting and 3.2% of our sample population said they spent less than an hour a week using the internet. These results show that teachers' use of some ICT tools reflects their awareness of the importance of technology in their life, mainly in teaching English.

**Table 04. Training on ICT Integration**

	Yes (%)	No (%)	No, I learnt by myself (%)
<b>Training on ICT Integration</b>	25.8	14.5	59.7

N= 62 (100%)

In order to gather data on ICT integration, we asked our informants whether they have received any training on how to integrate ICT tools in their EFL classes. Table 04 above

summarises the findings. As it can be seen, 59.7% of our informants indicated that they have not received any training on how to integrate ICT in their classes but they learnt by themselves. Moreover, 14.5% of the participants pointed out they did not receive any training and they did not learnt by themselves too, whereas 25.8% of our sample population stated that they were trained on ICT tools integration. As can be noticed, there is a lack of teacher training on integrating of ICT tools. This can be as a barrier for EFL teachers to successfully introduce and use these tools in their teaching of English in different secondary schools.

**Table 05. Areas of Training on ICT Tools**

	Yes (%)	No (%)
<b>Basic Computer Literacy</b>	25	75
<b>Computer Applications</b>	68.75	31.25
<b>Computer Integration</b>	37.5	62.5

N=16 (100%)

As there were some teachers (25.8 %) who stated they were trained on ICT tools, we asked them to indicate the different areas of their training. Our aim is to find out whether there is an appropriate training on ICT integration or not. Table 5 above summarises the results. 25% of those teachers stated that they learnt some basic computer literacy as On/Off operations, how to run programs, etc, while 75% of them said they did not receive this type of training. Moreover, 68.75 % of our participants indicated that they were trained on computer applications as Word processing, Excel, etc; but 31.25% of them said they have not received this type of training. Furthermore, 37.5 % of our informants indicated that they were trained on computer integration whereas 62.5% stated they did not receive any training on computer integration mainly in their classrooms. These results show that there is a lack of appropriate training on ICT tools integration in education as most of the training is generally limited to computer applications.

**Table 06. ICT Training**

	Online courses (%)	College/university (%)	A private school (%)	Other (%)
<b>Valid Percent</b>	12.5	50	12.5	25

N=16 (100%)

In order to find out where our respondents received their ICT training, we asked them indicate the source by choosing from the given options. Table 06 above summarises the

different places. As indicated in the table, 12.5% of them stated that they learnt about ICT thanks to online courses (e.g. Youtube), 50% of them pointed out they were trained on ICT at the college and/or university, and 12.5% of them said that they had their certificate on ICT from a private school. Yet, 25% of them indicated that a family member, a friend, or their teacher helped them learn about ICT techniques and tools. Thus, both the university and college have a significant role in training teachers on ICT tools.

Studying teachers' perceptions about technology use aimed at identifying some factors affecting their usage of technology in their EFL teaching. To elicit information about their perception, the participants used a three-point Likert scale (i.e. 2=agree, 1 neutral, 0=disagree) to rate their level of agreement on the seventeen (17) statements related to their perception.

**Table 07. Algerian EFL Secondary School Teachers' Perception on their Ability to Use ICT Tools**

<i>Perceptions</i>	<i>Agree (2)</i>	<i>Neutral (1)</i>	<i>Disagree (0)</i>	<i>Mean</i>	<i>SD</i>
<b>1. I use computers as much as other resources (books, overhead projectors etc.) for instructional purposes.</b>	47	8	7	1.6452	.67985
<b>2. I am aware of the opportunities that computers offer.</b>	62	0	0	2.0000	.00000
<b>3. I can provide help for my students to use computers.</b>	51	9	2	1.7903	.48374
<b>4. I am sure that I am able to use computers and related technologies efficiently in my classes.</b>	51	7	4	1.7581	.56352
<b>5. I want to use computers in my classes.</b>	56	2	4	1.8387	.51831
<b>6. I can handle different learning instructional preferences of my students having different learning styles by using technologies.</b>	43	15	4	1.6290	.60690

N=62

Table 07 above indicates teachers' perception on their ability to use ICT tools. The means of the items 1, 3, 4, 5, 6 score > 1.6, demonstrating as agreement. Yet, the SD of the items 1 and 6 is > .60, which is a little bit high. This suggests that the informants are not 100% sure of their ability to use ICT tools for instructional purposes in their classes.

Nevertheless, the mean of item 2 scores 2 (SD=.0). This indicates that the respondents are aware of the opportunities that computers offer. Hence, the respondents are aware of their ability to use ICT tools. This awareness would facilitate the effective integration of ICT tools in education, more importantly in EFL classes.

**Table 08. Algerian EFL Teachers' Beliefs on the Use ICT for Communication**

<i>Perceptions</i>	<i>Agree (2)</i>	<i>Neutral (1)</i>	<i>Disagree (0)</i>	<i>Mean</i>	<i>SD</i>
<b>7. I believe that tools like e-mail will make communication with my students easier.</b>	32	17	13	1.3065	.80141
<b>8. I believe that tools like chat will make communication with my students easier.</b>	26	14	22	1.0645	.88468
<b>9. I believe that tools like e-mail will make communication with my colleagues easier.</b>	57	3	2	1.8871	.40911
<b>10. I believe that tools like chat will make communication with my colleagues easier.</b>	58	3	1	1.9194	.32885

N=62

Concerning Algerian secondary school EFL teachers' beliefs on the use of ICT for facilitating communication with students and also colleagues, table 08 summarises the findings. The use of ICT tools as e-mail and chat to communicate with students received different opinions. The means of the items 9 and 10 score  $> 1.8$  ( $SD > .32 < .41$ ), demonstrating as agreement by the respondents. That is to say, the overall mean is between the points "neutral" to "agree". Hence, the participants have a positive belief regarding communication with their colleagues via email and chat. The mean of the item 7 is 1.3065, demonstrating agreement. As far as item 8 is concerned, its mean scores 1.0645. That is to say, the overall mean is in the point "neutral". But the SD of item 7 ( $=.80141$ ) and item 8 ( $=.88468$ ) is high and this implies the negative belief teachers have in using emails and chats to communicate with learners. These results indicate that Algerian secondary school EFL teachers believe that ICT tools are useful for communicating with their colleagues. Yet, there are some of them who are still reluctant and conservative to enlarge the scope of its use to communicate with learners.



**Table 09. Teachers' Perception on the Importance of Some ICT Tools in their Teaching of English**

<i>Perceptions</i>	<i>Agree (2)</i>	<i>Neutral (1)</i>	<i>Disagree (0)</i>	<i>Mean</i>	<i>SD</i>
<b>11. I think that technology-supported teaching makes learning more effective.</b>	59	2	1	1.9355	.30681
<b>12. I think the use of instructional technologies increases students' interest toward courses.</b>	58	4	0	1.9355	.24768
<b>13. I think the use of instructional technologies increases the quality of courses.</b>	53	9	0	1.8548	.35514
<b>14. I think that usage of instructional technologies makes it easier to prepare course materials (assignments, handouts etc.).</b>	58	4	0	1.9355	.24768
<b>15. I think instructional technologies as data shows and computer help me achieve my teaching objectives.</b>	57	4	1	1.9032	.34875
<b>16. I think using instructional technologies makes me more productive as a teacher.</b>	57	4	1	1.9032	.34875
<b>17. I think that using technology makes it easier to reach instructional resources</b>	58	4	0	1.9355	.24768

N=62

Table 09 above shows the results obtained regarding Algerian teachers' perception on the importance of ICT tools in the EFL teaching and learning. As it can be clearly noticed, the means of the items in this table score  $> 1.85$  ( $SD > .24 < .35$ ), demonstrating as agreement by the respondents. That is to say, the overall mean is near the point "agree". According to the scoring rules, the higher SD scores represent negative thoughts. As it can clearly be noticed, SD is low in all the items in this table (09). This reflects the positive thoughts teachers have on the importance of some ICT tools in their teaching of English. Thus, the respondents think that ICT tools are important and acknowledge the advantages they offer to them when teaching English as a Foreign Language.

## **2/ The interview**

To elicit information about Algerian secondary school EFL teachers' perspectives on ICT implementation in their own teaching contexts, interviews were conducted with nine teachers

(see appendix 04 & 05). These interviews aimed at gathering qualitative data to complete the results we got from the questionnaire. The table (10) below summarises the background information of the interviewees.

**Table 10. Demographic Properties of the Interviewees**

	Age	Years of experience	Gender	Province
<b>Teacher 01</b>	26	4	Male	Souk Ahras
<b>Teacher 02</b>	27	5	Female	Setif
<b>Teacher 03</b>	31	6	Female	Setif
<b>Teacher 04</b>	39	15	Female	Setif
<b>Teacher 05</b>	28	3	Male	Adrar
<b>Teacher 06</b>	32	9	Female	Setif
<b>Teacher 07</b>	30	4	Female	Blida
<b>Teacher 08</b>	26	3	Female	M'sila
<b>Teacher 09</b>	27	2	Male	Bourdj Bouraredj

N=09

Our interviewees were asked about their use of ICT tools at school and more specifically in their EFL classes. All of them mentioned different resources they generally use as laptops, data projectors, speaker, internet, etc. Besides, most of them pointed out that they use them as helping tools. For instance, teacher 1 asserted that:

*“I’ve always preferred to prepare my lessons using my laptop with the help of internet of course”.*

This reflects the role that ICT play in lesson preparation. He added that

*“I copy the audio files on my mobile and I use them with the Bluetooth speaker, so they become easier to be managed...”*

In doing so, the teacher can share these files with his/her colleagues and even with learners. Besides, teacher 3 and 4 pointed out that they generally printed duplicated handouts for their learners. Concerning ICT use in EFL classes, all the interviewees stated that they used them in order to achieve their teaching and learning objectives. Some of them mentioned some online language programmes they advised their learners to use. Teacher 1, for instance, stated that he encouraged his learners to use “Rosetta Stone” programme at home in an attempt to help them to improve their level in English (see the link in the appendix 06). In addition, some of the interviewees pointed out that they used ICT to warm up the new unit or lesson (teacher 3 & 4) whereas others used different downloaded pictures and videos which enabled their learners to

grasp new vocabulary and learn the pronunciation of new words (teacher 2, 3, 4 & 6). Moreover, ICT were used to explain grammar lessons using PowerPoint presentations, as well as to teach different EFL language skills. Furthermore, all the interviewees deemed that ICT provided many advantages which facilitated the EFL teaching and learning. They asserted that ICT tools made objectives achievable as learners get involved in any lesson. Teacher 09 even indicated that

*“the factor that encourages me more to integrate ICT tools in our lessons is because of the new ministry programme (CBA)..”*

That is, EFL teachers found it a requirement to use ICT in their lessons as these tools help their learners to be more competent especially when teaching different language skills (teacher 03 & 05). For instance, teacher 02 stated that

*“..show is better than tell, i.e to show our learners pictures or listen to a video done by a native speaker is better than delivering our endless speeches.”*

This indicates that teachers considered ICT as facilitators for better achieving the objective of each lesson. When asked about school facilities for the use and integration of ICT tools, we had two points of views. Only teacher 08 stated that ICT tools were facilitated in her school. She asserted that

*“we can use ICT during our classes, very provided whenever we need, there is no problem with the administration”.*

Yet, most teachers indicated that ICT tools availability and use were not facilitated in their schools especially by their administration. They emphasized that they depended on their own tools (teacher 01 & 09). Besides, all of the interviewees mentioned different obstacles to the right introduction of ICT in the Algerian secondary school EFL classes. Some of those barriers are related to the lack of equipments, lack of administration and technical support. These obstacles are going to be listed and discussed in the next section.

### **3/ Discussion**

This study highlights a number of issues relevant to understanding Algerian secondary school EFL teachers' perception and usage of ICT tools in their classes. Here, we discuss the results shown in the previous section. The interpretation of our findings will enable us to answer our research questions.

### ***a) Teachers' Perception about ICT Tools Use***

There are many studies that attempted to find out on teachers' perception about ICT tools use. Laggoun (2013), in her Master's thesis about Computer Assisted Language Learning (CALL) effects on learners' speaking, reported that secondary school EFL teachers asserted their positive perception of the usefulness and advantages of ICT in language teaching. Likewise, the results of the questionnaire revealed that the overwhelming agreement among Algerian secondary school EFL teachers stresses their awareness of the importance of ICT tools and their use in their EFL classroom. This agreement reveals positive perception towards ICT. Therefore, we find out that teachers of English know about ICT. Similarly to the findings of Benettayeb (2012), our respondents were also aware of the opportunities ICT offer to both teachers and learners. This was highlighted by teacher 4 in the interview when she said:

*"I believe that such things are very very necessary nowadays, any teacher cannot rely on the classical time, using his just voice. We need to use such tools to transmit the message quickly.."*

This indicates that ICT are very important very the better transmission of the information. Teacher 02 agreed on this when she asserted that

*"Since old methods or ways of teaching demotivate learners to acquire any foreign language, ICT is the best choice to boost our learners to be higher achievers."*

Besides, though there are some teachers who were still reluctant to use emails and chat for communication with learners according to the results of the questionnaires ( $SD > .80$ ), there are still some others who pointed out in the interview that they used tools like Facebook to communicate with their learners. For instance, teacher 1 said:

*"...I also send some files to my students via Facebook which contain activities to be dealt with, inside the class, most of the time or some links for extra activities..."*

These findings answer our first three research questions. They show that EFL teachers are willing to use ICT because of their importance. Hence, EFL teachers' positive perception of ICT tools may encourage them more to integrate these tools in their EFL classes.

## ***b) ICT Tools Use***

On the issues of the access, use and training on ICT tools, the results of the questionnaires showed that there was a lack of ICT tools access namely computers and internet in some secondary schools in Algeria. In addition, teachers agreed on their use of some ICT resources, as emails, chat, computers, and overhead projectors to prepare course materials. Some interviewees also mentioned some tools they usually use when teaching English as USB, laptops, speakers, printers, PowerPoint, social media, camcorder, etc. They pointed out that these tools enable them to collaborate with their colleagues, not only in their respective schools but also throughout Algeria (teacher 5). Additionally, the interviewees indicated that they use ICT tools in their EFL classes as they are helpful. For instance, teacher 3 mentioned the following:

*“ICT tools help in presenting the lessons and teach new vocabulary through videos and pictures. For instance; we use them to warm up the lessons and the new units. In addition, we use them to teach listening and sometimes writing.”*

Yet, most of the respondents of the questionnaires indicated that they have not received any training on ICT integration. This may justify their negative perception of their ability to use ICT tools for instructional purposes in their classes. This is what teacher 4 stated:

*“I needed a lot of time to be familiar, to know how to use them like the data-show, in my classroom, I waste a lot of time, without the help of my pupils, I cannot really use it.”*

Thus, teachers learn how to integrate ICT tools in their classes during their presentation of different lessons. Being unfamiliar with some ICT tools may be a problem for many EFL teachers. This is what Teacher 5 also insisted on when he said

*“..I know how to install the data-show into a computer and USB but I need training in effective ways of using ICT tools to enhance my teaching and to convey my message to benefit my students.”*

Even though there were respondents who indicated that they received training on ICT, the results of the questionnaires revealed that this training was mostly related to some computer applications as Word processing, Excel, etc. Most importantly, there was not a sufficient training on how to integrate those tools into the classroom. Only one interviewee (teacher 1)

stated that he is good at computing and he does not have any problem with ICT integration in his EFL classes.

In their study about ICT and secondary school teachers' professional development in Algeria, Guemide & Benachaiba (2012, p.46) suggested that the teacher is the key to the effective integration of ICT in EFL classes. Indeed, our findings demonstrated that secondary school EFL teachers use different ICT tools. However, there is a lack of training on ICT integration as most of those teachers learnt how to integrate these tools in their classes by themselves. Thus, our fourth and fifth questions are answered.

### *c) Factors Promoting ICT Integration in EFL Classes*

Previous studies into Algerian EFL teachers' use of ICT have identified different factors for promoting ICT integration in different educational contexts (Nedjah, 2010; Alachahar, 2014; & Guerza, 2015). For instance, in her study on the challenges of using ICT in Algeria, Boukhatem (2015) highlighted that considering ICT as instruments to modernity help to enhance the quality of Algerian education. This is what our findings indicated. Indeed, our informants mentioned some factors that encourage Algerian secondary school EFL teachers to introduce and integrate ICT in their teaching-learning process. These factors can be summarised and listed as the following:

**i/ Motivating.** Similarly to the findings of Barkaoui (n.d.), Benmansour (2015); Reguig Berra (2015); and Meiloudi & Mebarki (2015), the results of our questionnaire indicated that teachers believe that ICT tools motivate learners to learn and enjoy their learning. They also think that these tools make of a teacher a productive one. Furthermore, these results were reinforced by the answers of the interviewees. For instance, teacher 6 pointed out that ICT tools

*"..attracts my learners' attention, they become more active and more attentive.."*

This was agreed on too by teacher 1, 2, 7 and 9 who added that these tools can improve the interaction between the teacher and his learners.

**ii/ Usefulness.** Throughout the analysis of the questionnaires and interviews, we found out that most participants tend to use ICT tools because they save time and energy (teacher 1,2,3,4, 6, & 8). This is justified by the high agreement on the importance of the use of ICT in the classroom. The positive perception was also reinforced by the interviewees' answers. For

instance, teacher 7 pointed out that ICT make of her learners more self-confident. She also added that they enable her learners to understand the lesson easily. Moreover, teacher 4 stated:

*“to save time, to get them involved, I m giving them a clear picture or a vision about the topic or the city, showing the natural disasters, when they see them, they can produce after..”*

Besides, the interviewees pointed out that ICT enable them to achieve the goals of their lessons.

**iii/ Modernism.** Some interviewees indicated that ICT attract their learners’ attention as they are living in technology era. For example, teacher 4 said that learners

*“admire such tools, sometimes they help me, let’s say, they are keen in using such tools .It is their age, age of technology.”*

Thus, ICT use in EFL classes enables both teachers and learners to be up-to-date with the technological development in the domain of education.

These findings answer our sixth question. They showed that teachers believe that technology will bring to them advantages, and they will motivate their learners too. These advantages encourage them to integrate ICTs in their classes.

#### ***d) Barriers to ICT Integration***

Some Algerian researchers who worked on ICT integration in EFL classes mentioned many barriers constraining ICT implementation. For example, in her Magister thesis on EFL Teachers’ Attitudes and Beliefs toward the Implementation of E-Learning, Nedjah (2010) reported that though EFL teachers were increasingly recognizing the value of Information and Communication Technology in their profession, there were different barriers within educational context which often thwarted them from successfully integrating ICT tools. Similarly, we have noticed that most of our interviewees focused a lot on the barriers that hinder the successful technology integration. They pointed out that lessening these barriers would successfully help them to effectively use technology in their EFL classes. The shortage of resources and lack of training on how to integrate technology effectively were highlighted by most interviewees. Most of teachers indicated that they depend on self-learning. They even considered the use of ICT as a challenge, similarly to the findings of Idri (2013). In addition, some teachers stated that there are students who do not know how to use ICT in the class to

present their projects whereas other learners have negative attitudes towards the benefits of ICT for learning (teacher 01 & 02). They also mentioned a large number of technical problems that can be listed as follows:

- ✓ Lack of electricity
- ✓ Problems about accessibility to existing hardware (computer, overhead projector etc.) in the school
- ✓ Technically inappropriate and inadequate ICT tools
- ✓ Lack of a ready show-room or a language laboratory that would better save time
- ✓ The absence of a technical support and Internet facility by school administration on the use of ICT
- ✓ Inefficiency of teachers' technical knowledge to prepare materials based on technology
- ✓ Inefficiency of instructional software/electronic resources

These findings answer our last question. Hence, the Algerian Ministry of Education attempts for ICT integration in most secondary schools should be followed with a considerable competent staff. This latter would charge with responsibilities to provide the necessary assistance on how to integrate ICT tools in different classes, namely EFL ones.

Throughout this section, we have reported the results of the present investigation. Then, we discussed and interpreted these results in accordance with the previous findings. The scrutinizing of EFL teachers' perception about ICT tools use as well as the deep analysis of the interviews revealed that Algerian secondary schools EFL teachers do not lack the understanding of the importance of ICT. Thus, this is not the reason for the insufficient integration of technology in their teaching. In addition, our findings demonstrated that teachers of English integrate ICT in their classes with different degrees in spite of the obstacles that impede such integration (the insufficient access to ICT tools and the lack of training on their integration). Above all, EFL teachers would become effective EFL agents who would successfully integrate ICT into their core subject when these barriers are overcome. As a result, our assumption is confirmed only when the barriers are got over.



## **Section Three: Limitations, Recommendations and Suggestions for Future Research**

This study can be only a springboard for further research about ICT and the Algerian schools. The research about secondary school EFL teachers' perception on ICT answered our questions, but there are still many other questions unanswered. In this section, we list the limitations of our study, as well as the implications and suggestions for future research.

### **1/ Limitations of the Study**

We are aware that the scope of ICT and education is so broad and there are many issues to be discussed. But we have deliberately limited our study to the perception of Algerian secondary school teachers of English regarding ICT usage and the limitations of their integration in their teaching. Besides, the findings we reported in the questionnaire were based on our informants' perception rather than hard evidence. That is, this perception may not reflect the existing conditions. In addition, our study concerns a limited population which is teachers of English in some secondary schools in Algeria. This sample population was limited to sixty two (62) secondary school EFL teachers due to their insufficient contribution either via the different EFL secondary school teachers groups on Facebook, emails or in different schools where we submitted the questionnaires. Many teachers did not answer back our questionnaires though we insisted on the importance of their participation for our research. Moreover, many teachers were using Generation three (G3) connection via their cell phones. They could not open the word document we sent them. Thus, we were obliged to send them question by question to facilitate the job for them. In our turn, we were copying down their answers on a questionnaire and save it in our laptop. As far as the interviews are concerned, we ensured our interviewees that their personal details would be confidential and would be used only for the purpose of our actual research. However, there were many teachers who refused to be interviewed because of fear to express their opinions concerning the barriers they face when using ICT in their schools. Therefore, the findings of our study can be generalised only if the same results are obtained by other studies conducted under the same circumstances and research protocol.

### **2/ Recommendations**

Most of the implications were recommended by our interviewees. We list them as follow:

- Algerian Ministry of National Education should prioritise the investment on teachers' training on ICT integration. The ongoing in-service training on ICTs would facilitate teachers' use of technologies as means in their EFL teaching. Seminars, workshops, and school sessions by ICT competent professionals would certainly promote the successful and effective implementation of technology in our schools.
- As the Algerian Ministry of National Education is claiming that ICT tools are encouraged and should be available in every school, it should put more efforts to providing those tools as computers, internet, printers, data projectors, modern language laboratories, etc. This would illuminate the obstacles that deter teachers from using ICT and encourage using them more in their classes. It is also recommended to have an ongoing follow up on the availability and adequacy of those tools in every school.
- Technical support and internet facility should be provided and facilitated by school administration.
- EFL teachers should bear in mind that ICT are means that help them achieve the objectives of their lessons and not an end. Their integration would motivate their learners to be more involved in the lesson. Thus, they would play an active role in the teaching-learning activities.
- It is high time our government thought of generalising the use of ICT as computers to all the pupils. This would push the Algerian education to more advancement. Thus, EFL teaching and learning would witness remarkable progress.

### **3/ Suggestions for Future Research**

The suggestions we provide pertain to ICT and EFL teaching and learning. Although there are many studies worldwide about ICT and education, we still need more researches related to ICT and the Algerian education context. In addition, investigating ICT tools use in different schools in Algeria requires more time and also the use of more data collection tools as class observation. This would provide some more evidence on teachers' use of technology in their classes and highlight the barriers faced during its implementation. Moreover, data about the ICT infrastructures in different schools are still limited. Thus, we suggest trying to contact the Algerian Ministry of Education and/or Ministry of Post and Information Technology and Communication for further helping statistics. Furthermore, we suggest investigating the role of schools' administration in facilitating ICT integration in EFL classes. This proposition stems from a personal interest in the field of education motivated by our

interest in teaching. Additionally, future researchers can examine the impact of technology integration in EFL classes on learners' achievements too. Investigating learners' perception about ICT in EFL classes would be of a great importance.

In this section, we have shed light on the limitations of our study as they may influence our results. We have also provided some recommendations which are mostly suggested by our interviewees. These implications may be taken into account by educators, researchers, and even official authorities for future action related to ICT integration in secondary schools. Finally, we have given some suggestions for future research in an attempt to call for more researches on the topic of EFL classes and Algerian schools.

## **Conclusion**

In this chapter, we have discussed the results of the current study. We have come out that Algerian secondary school EFL teachers have a positive perception concerning ICT tools. In spite of the barriers, they use those tools in their EFL classes with different degrees. Our findings cannot be wholly generalised as our sample population is small in addition to time constraints. Recommendations of effective ICT integration were suggested. We have concluded this chapter with suggestions for future research.

## General Conclusion

Information and Communication Technologies are widely spread all over the world. The digital generation of learners as well as the need to improve the quality of education reinforce the important and crucial role ICT play in EFL classes. As we have witnessed a lack of ICT integration in some Algerian schools, we attempted through the present work to investigate the Algerian secondary school EFL teachers' perception and usage of ICT tools. In fact, the study dealt with two chapters. The first theoretical chapter aimed at reviewing the literature about ICT from a historical background, different ICT tools and their integration in education. The second chapter is the fieldwork. It examined the findings, discuss and interpret them so as we could reach a conclusion.

At the beginning of this study, we have hypothesised that if EFL teachers have a positive perception of ICT tools and access to them, they would become effective agents who would successfully integrate them into their core subject. To test our hypothesis, we used a mixed methodology: quantitative and qualitative methods of data collection. The aim of the questionnaire was to examine teachers' perception about ICT tools. It was administered to sixty two EFL teachers from different secondary schools in Algeria. The results of the questionnaire indicated a positive perception regarding ICT. Besides, the interview aimed at eliciting information about teachers' ICT implementation in their own teaching contexts. It also attempted to take a closer look at the barriers that hampered them from successfully integrating technologies in their teaching process. The results implied that EFL teachers believed that ICT tools make of their EFL classes more appealing. However, the technological scarcity and the lack of sufficient and effective training on the use of these technologies were highlighted as obstacles to successful and effective integration of ICT in EFL classes. Thus, providing continuous support, training as well as the equipments is a necessity to ensure the effective implementation of those tools in educational contexts, more specifically EFL classes.

Relying on the literature we examined as well as the results of our investigation, we came out with some recommendations. First, we recommend that training on ICT integration should be prioritised by the Ministry of National Education. ICT tools' availability and adequacy in different secondary schools should also be followed up by the authorities. Besides, EFL teachers should regard ICT tools as means that would help them to get their learners involved and motivated in different lessons. The last recommendation concerns the

generalisation of the use of ICT as computers to all learners in an attempt to modernise our schools.

To conclude, we suggest conducting more research on ICT and their usage in EFL classes in secondary schools using different data collection tools over an extended period of time. This would enable researchers to gather more evidence on teachers' use of technology. Further research is also needed to investigate other issues as the role of school administration in providing ICT facilities as well as learners' perception of technology in EFL classes.

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### **Electronic Image**

(2016) المراسلة الرسمية لفروع اتصالات الجزائر و الأسعار المطبقة لتخفيضات الانترنت للأساتذة

Retrieved from: [http://taiba-dz.blogspot.com/2016/05/blog-post\\_6.html](http://taiba-dz.blogspot.com/2016/05/blog-post_6.html)





# Appendices



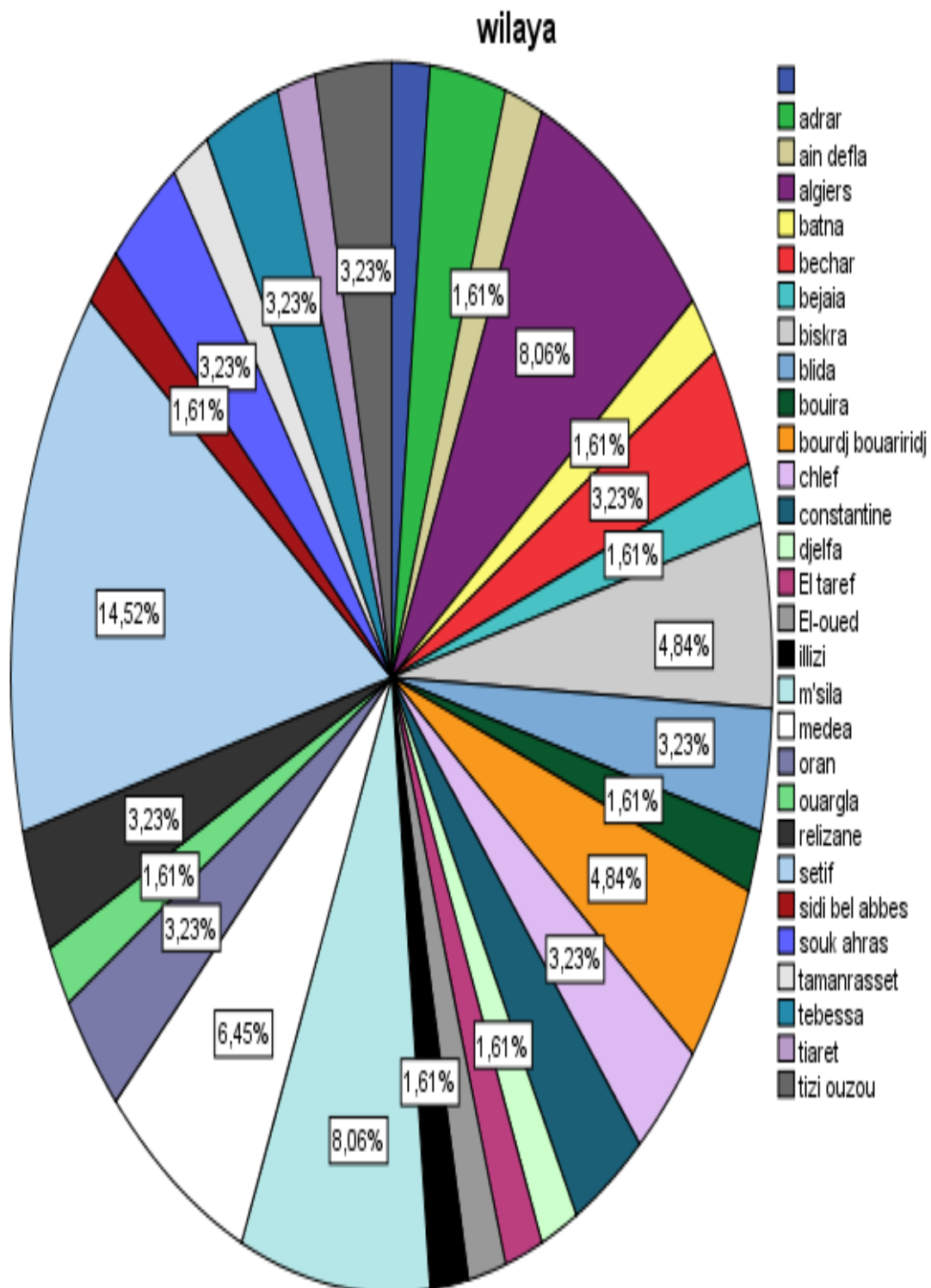
Where did you receive your training?

Online courses ( )      College/University ( )      A private school ( )      Other ( ) .....

<b>Perceptions about use of ICT</b>	<i>Agree</i>	<i>Neutral</i>	<i>Disagree</i>
I use computers as much as other resources (books, overhead projectors etc.) for instructional purposes.			
I am aware of the opportunities that computers offer.			
I can provide help for my students to use computers.			
I am sure that I am able to use computers and related technologies efficiently in my classes.			
I want to use computers in my classes.			
I can handle different learning preferences of my students having different learning styles by using instructional technologies.			
I believe that tools like e-mail will make communication with my students easier.			
I believe that tools like chat will make communication with my students easier.			
I believe that tools like e-mail will make communication with my colleagues easier.			
I believe that tools like chat will make communication with my colleagues easier.			
I think that technology-supported teaching makes learning more effective.			
I think the use of instructional technologies increases students' interest toward courses.			
I think the use of instructional technologies increases the quality of courses.			
I think that usage of instructional technologies makes it easier to prepare course materials (assignments, handouts etc.).			
I think instructional technologies as data shows and computer help me achieve my teaching objectives.			
I think using instructional technologies makes me more productive as a teacher.			
I think that using technology makes it easier to reach instructional resources.			

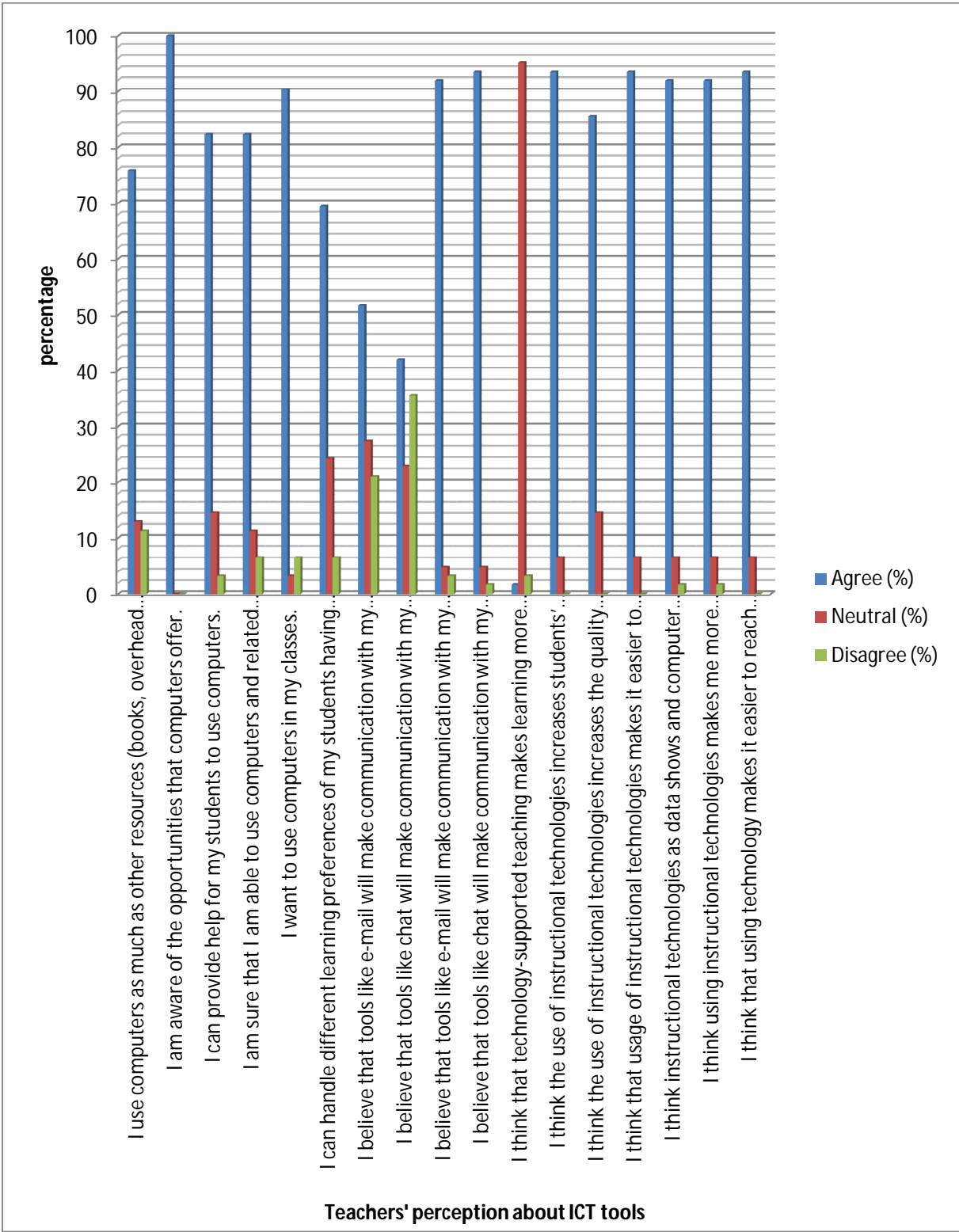
Thank you for your collaboration!

## Appendix 02



**Fig. 01 of the Different Provinces Participation**

**Appendix 03**



**Fig 02. Algerian Secondary School EFL Teachers' Perception about ICT Tools Usage**

## **Appendix 04**

### ***Teachers' Interview***

Dear Colleagues,

This interview is about the different ICT tools you use in your teaching of English. It also aims at shedding light on the barriers you face when you integrate ICT tools in your EFL classes.

- a) What are the technological tools available in your school?
- b) Is there any encouragement to implement Information and Communication Technology (ICT) tools in your EFL classes? Please explain!
- c) What are the factors that encourage you more to integrate ICT tools in your lessons?
- d) How can ICT sources help you in your teaching of English?
- e) What are the barriers which hinder your ICT tools usage in your EFL classes?
- f) What are your recommendations concerning ICT tools use?

## **Appendix 05**

### *The Transcription of the Interviews*

#### **Teacher 01**

a) I think when we talk about ICTs; we should start by the lesson preparation. I've always preferred to prepare my lessons using my laptop with the help of internet of course...I search for suitable topics and activities, then adapt them to my objectives and the competences that I am focusing on, I also prefer to print teaching cards. Inside the classroom, I sometimes use pictures, projected using a data-show in order to warm up for a lesson. I sometimes convert texts into audio form using some computer programmes like IVONA which will be listened to by the learners in the listening session...I copy the audio files on my mobile and I use them with the Bluetooth speaker, so they become easier to be managed especially...that start, the pause are frequent in the listening session. I also send some files to my students via Facebook which contain activities to be dealt with, inside the class, most of the time or some links for extra activities that's it.

b) In our school has got one laptop and two projectors.. so I depend on my own tools, I take my laptop and speaker with me whenever need them. For the projectors, they are always used by biology and physics teachers, so I am obliged sometimes to print pictures and handouts.....

c) Well there are a lot of things which encourage me to do that. The first thing is that I like technology and I am self motivated to use these tools in my work that makes things easier for me especially the preparation of the lessons. The other important thing is that these tools motivate the learners; they like to hear native speakers talking in English and try to imitate them. The ICTs also are very practical outside the class communication between the learners and the teachers, the learner can ask for help at for example 8:00 PM, the time he is revising at home, I am always there if my students need help..

d) ICTs motivate learners and teachers also, they can improve the teacher-learner interaction outside the class, apart from that laptop with internet and printer is a treasure for a teacher; Internet contains everything from materials to the programmes we need in teaching. Inside the classroom, I sometimes design PPT presentations which save a lot of time especially when teaching grammar. ICTs also enable a teacher to come up with authentic materials which is very important, these materials whether written or spoken are very important for the learners.

e) Talking about myself, I have no problem in using ICTs. I am good in computing so it is easy for me to do whatever I want, processing recording ,converting, designing and so on...

I sometimes notice that some pupils, let's say, dislike the session when I bring that speaker with me, I think it is because they find it difficult to grasp what the native speaker is talking about, however, they like it when they see the projectors of course if there is a movie or cartoon, or something motivating for them. Something else, I always pay attention to my relation with learners on Facebook because they start trying to be friends, you know at their age you can expect anything, so try to limit that relationship to teachers –student relationship.....

One more thing is that the learners spend a lot of time in front of PC, so they bring me something that I do not need; they waste their time. They depend totally on the internet in their research, and I think it hinders their abilities and has no benefit on their learning, so I always fall in the dilemma of either or whether encouraging them to use internet or not accepting that the works they give me because they are totally depended on Internet, on Google not Internet; they google everything..

f) It would be good to have course book that comes with DVD which contains at least the listening scripts, I mean the listening materials, audio files, or some extra audio-visual materials which would be sure helpful to teachers and learners, both of them, in addition, I suggest providing learners with some programmes to help them practise English at home, I've given mine Rosetta Stone which is a programme of learning English, and they liked it very much, and it helped me to develop their language skills especially listening and speaking.

### **Teacher 02**

a) As you know; technology and education are pretty intertwined recently and nearly every motivated teacher has a few favorite technological tools that make doing his /her job and working with students a little bit easier and with more fun. So, educational technologies help learners access content in new and often exciting ways and make life of teachers easier ...In our school Ain Legradj; we have some interesting technological tools but they are not very sophisticated. Among the technological tools that exist in my school are: an overhead projector, a CD player, a laptop and loud speakers.

b) Since old methods or ways of teaching demotivate learners to acquire any foreign language, ICT is the best choice to boost our learners to be higher achievers. We can say show is better than tell; i.e to show our learners pictures or listen to a video done by a native speaker is better than delivering our endless speeches .



c) There are many factors that lead the teachers to integrate the ICT:

1. To achieve high, I mean learners will speak & write like a native speaker.
2. Save time and energy, instead of spending many hours reading a passage a tape recorder can do it easier.
3. To facilitate leaning.

But the main factor is to motivate learners to acquire this language easily and with pleasure

d) I may use the data show to present a lesson with very interesting videos & pictures; or a tape recorder to present a listening lesson ...

e) Among the difficulties that hinder me to use the ICT is the lack of electricity to plug the PC; sometimes, I cannot operate the material with less time ; the tools sometimes distract the attention of my learners without knowing the purpose of the task , they thought it is done just for fun .....

f) No recommendations

### **Teacher 03**

a) Generally, I use them in preparing and presenting my lessons, in searching information in other domains and printing handouts.

b) In fact, it is difficult to use them in our school because there is a luck of tools and a lot of teachers of teachers who use them especially the teachers of biology and physics, so we find difficulty.

c) For me, they help in reaching the objectives for example; visualizing the ideas and attracting the learner's attention, they also help in saving time and efforts, as we know the learners learn more when they see and use all their senses, so ICT tools offer all this.

d) Concerning English, ICT tools help in presenting the lessons and teach new vocabulary through videos and pictures, for instance; we use them to warm up the lessons and the new unites ,in addition, we use them to teach listening and sometimes writing.

e) Well, the barriers are as I have said before, the luck of tools and sometimes we do not have electricity and the students comment negatively on the videos, so we do not reach our objectives. In addition, we do not have a show room which is ready to save time to connect and so on.....

f) Here, I do not get this question, but I can say; in my opinion, they are so useful and beneficial for both teachers and the pupils, so I suggest to have more tools in all the schools and help the teacher to use them easily....

#### **Teacher 04**

a) We use them, I mean the ICT tools to handout duplicated copies, as a PC in order to get information or print certain copies to pupils, we use the speaker for example in the classroom so as to, let's say enable the pupils to listen to Native English Speakers as a sort of flash disk, let's say working and collaborating with other teachers.

b) Concerning the administration it is not really facilitated due to sometimes the lack of materials but for the learners, I believe that they admire such tools, sometimes they help me let's say, keen in using such tools .It is their age, age of technology.

c) I believe that such things are very very necessary nowadays; any teacher cannot let's say rely on the classical time, using his just voice. We need to use such tools to transmit the message quickly, to save time, to get them involved, giving them a clear picture or a vision about the topic or let's say a city, showing them for example the natural disasters, when they see them, they can produce after; so giving them an image first, at the end they can produce a lot of things, I believe that such tools are very very necessary.

d) They help us, for example in listening and speaking phase, in grammar explaining the structure using the PowerPoint for example, in reading using such pictures, giving a chance to pupils to listen to the English native speakers. We need to use the ICT tools I think in all the rubriques that we plan during the lesson from all the skills mainly the listening and of course listening and reading, and speaking and why not writing.

e) Teachers sometimes, I speak about myself, sometimes I needed a lot of time to be familiar, to know how to use them like the data-show, in my classroom sometimes I waste a lot of time ,without the help of my pupils, I cannot really use it. But with time using it. It enables me with time to be familiar with such things, but the main barrier is that these equipments or these sorry tools are not found in our school all time, we need to search for them, and the classes they are not equipped with the PC or with a speaker or with a data-show ever the plug sometimes they do not work.

f) First of all, the first thing I believe that we teachers, we need a lot of let's say seminars days to show us how to use these tools, the benefits of these tools, to update our knowledge just not the data-show, to know how to use them, we need a lot of seminars explain us this things. The administration normally now should forget about the classical methods using just the voice of the teacher, or letting the pupils just imagine, we need to integrate both the teacher and the learner in order to get efficient learning.

## Teacher 05

a) Actually I do not use them very frequently except for preparing the lesson and handouts for the students

b) Well the role of my school authority namely the headmaster and those who work with him is of a little help and so limited I can find as an example that access to Internet it is so limited even when there is access there no strong connection and not for all the teachers more in addition to the scarcity of other ICT tools especially the printers and computer related tools

c) As far as I am concerned, the most important encouraging factor to use ICT tools in my teaching is training yes you know that most ... teachers know how to use ICT tools have that ability or that competence of using them for themselves as tools ... but as teaching aids, we may face problems in using ICT tools as teaching aids, I mean I know how to install the data-show into a computer and USB but I need training in effective ways of using ICT tools to enhance my teaching and to convey my message to benefit my students, this is my opinion

d) Well it helped a lot I think ICT integration to instructional English is facilitating teaching and learning in making the process of teaching and learning collaborative and in the active one .. when we for example use the social media and other ways for helping each other as teachers or as teachers and students this is an example that ICT can help us as teachers and students

e) Well many teachers of English have positive attitudes and competence when using ICT but they still make little use of it in their teaching due to a number of institutional factors in the first place. These factors include limited access to ICT tools especially Internet and other ICT tools especially computer related tools. Obviously the success of ICT integration in the classroom depends largely on access to ICT tools this is a big problem when there no resources so we cannot apply we cannot use ICT in our classes

f) Finally I would like to humbly and modestly suggest some recommendations about the use of ICTs. First, I would like to emphasize the importance of training on the use of ICTs if there is no training even if we use ICTs we will not achieve good results. In most cases, most ICT the most used ICT tool is the presentation... particularly power point and even this kind of ICT is not used respectively therefore I suggest that teachers should differentiate the use of ICT tools and use them effectively it is not about the use of power point or printed book it is about it is about the way and the benefit for students about the way the message is conveyed and the benefit for the student. I think most teachers of nowadays have positive attitude and perception towards the use of ICT but they do not use them why? Because simply they are not

available so the solution here or what I.. I recommend is that decision maker and administrators at the level of each school in our Algeria should provide teachers with ICT resources by illuminating the obstacles that deter teachers from using ICTs in their classes educational authorities are not only suppose to encourage teachers to integrate technology in their teaching but they should make the use of ICT in the ease of teaching a must for a teacher for example they should consider teachers' effort to integrate ICT in their classes in their assessment.

#### **Teacher 06**

a) In fact, there some ICT tools in our school like; data-show projector, laptop and comescope (camcorder).....

b) No answer

c) Personally, the factors that encourage me to use them are learners' tendency to use technological tools in classroom, and modernism, as well as the appearance and availability of new teaching resources and materials via internet and that demands the use of such tools.

d) ICT tools help me in my teaching of English in many sides for example brainstorming, unit entry, it attracts my learner's attention, they become more active and more attentive, it simplifies the lessons by using pictures, videos which provide a successful learning atmosphere for my auditory and visual learners, and thanks to ICT tools I spend less time and energy to reach my final objective.

e) However, there are some barriers which hinder my use of such tools, for example, our school does not have a special room which is equipped with such kind of tools and takes the teacher time to move from one class carrying these tools to another class. Another barrier is the tools provided in our school does not cover the need of all teachers, so we have to wait one day or two days in order to get our turn to use them.

f) No recommendations

#### **Teacher 07**

A) I use ICT tools in school through using computer, data-show, video, handouts, laptop, Internet, projectors, PowerPoint, and so on....

B) Our school, administration do not facilitate anything because we have one computer and one data-show and we have not internet

C) The factor that encourages me to integrate the ICT tools in my lesson; first, it develops my students' writing, speaking, spelling and listening skill. Students will be successful and motivated to learn more..... It increases my students' self confidence and self-esteem, they understand the lesson easily and also it saves time.

**D)** ICT tools can facilitate my teaching of English through different way: first, it helps the students to stimulate learning in experimental learning process. Number two, it creates interactive and enjoyable classes.

**E)** In my school, the barriers that faced me when I use ICT tools:

- 1) The lack of appropriate administrative support.
- 2) The crowded classroom, in each class 40 to 45 students
- 3)The lack of computer and other representative equipments in classroom like; black-sockets.
- 4) The lack of good rules modals for teachers who use ICT tools.
- 5) The lack of time.

**F)** The recommendation that I can suggest about the use of ICT tools is to provide training session to teachers; how to use the ICT tools creatively and correctly.

**Teacher 08**

a) Ok for this question I use ICTs regularly one session a week, I let my students enjoy ok. So I can say that using ICTs in the classroom is the best way for explaining the lesson and showing videos and pictures.....

b) Ok in fact our administration members encourage us using ICT during the classes, they provided data-show whenever we need, there is no problem with the administration members ....by using data show, using computer sometimes.... No problem.

c) The first factor is that using ICTs makes the process of teaching easier for both teachers and students ... It helps me make the lesson more achievable ... it is motivating too, I think... because using ICT in the classroom it encourages my students to pay attention during the lesson and concentrate as well ... it helps the teacher to gain time.. yes time management of the classroom and .. that are the factors that encourage me to use ICT in my classroom

d) ... it provide the learner with real life situations, either videos, pictures, or explaining the lesson, this is the major role of ICT tools.

e) The first barrier or the only, the sole barrier... is the problem of electricity because sometimes I prepare something more interesting and until when I come to my classes I find no electricity so this is the sole problem ...this is the sole disadvantage of using ICTs.

f) Ok I advise all teachers to use ICTs during their classrooms because it is interesting and motivating too.

## **Teacher 09**

**a)** You know in using ICTs in education, it really matters where you are teaching, and what type of ICTs you have in class, so we use data-projectors and computers; so we can give them the headlines to lead them to main subject and then to the conclusion, so they can understand and know the headlines that leading them to the answer and of course finally to the conclusion.

**b)** Here, actually it is not facilitated, because our school; you know most of the time, you need to depend on yourself, there is only one data-projector in the administration in the whole school. So it will not available all the time, and sometimes I have to use my personal laptop to show them videos or audios or TV programmes that can help them in the class, so I think we do not have much support from the administrator team or from the headmaster.

**c)** The factor that encourage me more to integrate ICT tools in our lessons is because of the new ministry programme, let's say mostly depends on using ICT tools and benefit from them, the most, and it is a lot helpful and very very useful to make you achieve the goal of the lesson ,and you can attract all the students to the lesson .....be passionate and attentioned for the lesson by bringing new methods and ways and using new technologies that are now available outside the school and even why not teach them how to use it and benefit from it.

**d)** Honestly, ICT tools facilitate my teaching of English, specially using computer and Internet because you can got all answers using this two important tools.....the easier way to make students understand the lesson and of course why not using radio and TV broadcasting.

**e)** When speaking about the barriers we faced in using ICT tools in EFL classes lets name just few: the luck of ICT tools and ignorance of using it.....I mean luck of training or luck of technical support.

**f)** Here, I would suggest most and important ICT tools in EFL classes like ;we can use special classes and rooms for radio and TV broadcasting, also for a data-projector to use in.....also we can use computers connected to the internet, I mean one computer toward student if it is possible of course, and I think that's all .

## **Appendix 06**

### ***Links to some Facebook groups of Secondary School EFL Teachers***

Algerian Association of English Language Teachers

<https://www.facebook.com/groups/1439203536409241/>

Algerian Secondary School English Teachers

<https://www.facebook.com/groups/444705645596043/>

English Language Teachers of Secondary School - Biskra Province, Algeria-

<https://www.facebook.com/groups/258490937688916/>

### ***Links to Some Forums***

Djelfa Info

<http://www.djelfa.info/vb/forumdisplay.php?f=150>

Dz Batna Forum

<http://www.dzbatna.com/f60>

p48 Physique Relizane

<http://www.p48bac.com/vb/showthread.php/25098-Algerian-English-teachers>

Teachers of English Forum

<http://02english.forumpro.fr/t1104-very-usefull-docs-from-algerian-secondary-school-teachers>

### ***Link to the Online Language learning programme “Rosetta Stone”***

<http://www.rosettastone.com/>

Appendix 07

Le client reconnaît avoir reçu et accepté de s'y conformer et de toutes les clauses contractuelles inscrites sur les factures qui découleront de l'usage de ce service. Frais préliminaires: 0 DA

العميل يعترف بأنه قد تلقى ووافق على الامتثال لجميع البنود التعاقدية الواردة في الفاتورة على أن يكون قد وافق على دفع قيمة جميع البنود التعاقدية الواردة في الفاتورة التي ستنتج عن استخدام هذا الخدمة. الرسوم الأولية: 0 د.ج

Offres IDOOM FIXE pour les fonctionnaires du secteur de l'Education Nationale

	offre 1	offre 2	Offre 3
Local	illimitée	illimitée	illimitée
National	Cout de la minute (3 DA / min)	illimitée	illimitée
Mobile	Compteur (8 DA / min)	Compteur (8 DA / min)	Compteur (réduction de 15 %)
International	Compteur (grille actuelle)	Compteur (grille actuelle)	Compteur (Tarifs préférentiels)
Prix avec réductions	200 DA / mois (soit une réduction de 20 %) (+ compteur)	350 DA / mois (soit une réduction de 30 %) (+ compteur)	600 DA / mois (soit une réduction de 40 %) (+ compteur)

Offres IDOOM ADSL pour les fonctionnaires du secteur de l'Education Nationale

OFFRE	PRIX	PRIX Avec Remise
IDOOM ADSL jusqu'à 2 Mbits	2100 DA	1407 DA (33%)
IDOOM ADSL jusqu'à 4 Mbits	3200 DA	2112 DA (34%)
IDOOM ADSL jusqu'à 8 Mbits	5000 DA	3250 DA (35%)

Offre Fimaktabati pour les fonctionnaires du Ministère de l'Education Nationale

OFFRE	PRIX	PRIX Avec Remise
Pack (03 licences) Fimaktabati	7800 DA	2990 DA (62%)

Station-Admission Clients PSI Commercial

A picture about Internet and Fimaktabati Discounts for Workers of the Ministry of National Education