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**Teachers' Attitudes towards the Use of Technology in
Teaching
The Case of Teachers at the Department of English,
University of Bejaia**

A dissertation submitted in partial fulfilment of the requirements
for a **Master's degree in linguistics**

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Dedication

I dedicate this humble work to my beloved parents; my father who supported me all along my studies and to my mother. Thank you for your help and your prayers,

To my dear friends: Souad, Drifa, Biba. Thank you for your help and advice. You have supported me all along my research and you have always been present in the hard moments,

To my lovely sisters: Hanifa, Aida,

To my dear brothers: Mohand Sghir, Koussaila and Ghilas.

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To my cousin Sylvia and to all the members of my family

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Abstract

Today more than ever, the role of technology in teaching is of great importance. The present study investigates the attitudes of the teachers in the Department of English at the University of Bejaia towards the use of technology in their teaching. We have opted for a quantitative method consisting of a questionnaire. To report the gathered data, a descriptive statistical analysis is used. The findings have revealed that teachers have positive attitudes toward the use of technology in teaching. For them, it enhances their motivation and facilitates teaching both inside and outside the classroom. Besides, the use of technology is regarded as an impetus to transform their way of teaching from a traditional to a modern one. However, teachers reported having found some difficulties when using technology. For them, it is both effort and time-consuming and constrained by lack of materials, locations, and resources.

Key words: Attitude, Teachers, Technology, Teaching.

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List of and Acronyms and abbreviations

CD: Compact disc

EFL: English as a Foreign Language.

EHEA: European Higher Education Area

FRE: Frequency.

ICT: Information and Communication Technology.

IT: Information Technology.

LMD: Licence, Master, Doctorate.

MALLET: Machine Learning for Language Toolkit.

PER: Percentage.

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GENERAL INTRODUCTION

1. Statement of the Problem

Technology has become a necessity in our daily life in different domains, and education is no exception. The use of technological devices and procedures such as data show, computer, smart phone, and e-learning platform is gaining ground in education. The main reason behind using these tools is to support and transform education in order to make it easier for both teachers and students. Besides, technology is found to facilitate active engagement with the learning material and to make the teaching and learning process more interactive as affirmed by Raja and Nagasubramani (2018) who stated that “technology enhances teaching and learning because it has to be understood that visual explanation of concepts makes learning fun and enjoyable for students, and even teachers get a chance to make their classes more interactive and interesting” (p.34). Hence, the use of technology aims to benefit both the teachers and the students. Michael (2009) asserted that “modern technologies have changed the way teachers teach and learn to teach” (p.433).

In higher education, using technology for teaching purposes has been fostered by the Bologna Process which seeks to ensure comparability in the standards and quality of higher education qualifications in Europe (Hidayet and Bereksi, 2014). According to Baum, Korary, Scott, Tan, Velibeyoglu, Yigitcanlar (2008), the Bologna Process has promoted new orientations in higher education through the use of technology “...which posed an ambitious new agenda in the development and application of contemporary ... policy” (p.246).

The promotion of technology embodies the shift in paradigm from the teacher-centered approach to the learner-centered approach. This shift has been emphasized in the different Bologna Process Communiqués which have made a strong connection between teaching and learning at higher education institutions and the process of digital transformation. In the Yerevan communiqué (2015 as cited in Orr and Rampelt, 2018), it is stated clearly that :

We will encourage and support higher education institutions and staff in promoting pedagogical innovation in student-centered learning environments and in fully exploiting the potential benefits of digital technologies for learning and teaching.

(p.3)

Although the Bologna Process has started in Europe with the ultimate aim to build the European Higher Education Area (EHEA), it has extended beyond its boundaries. Many countries have adopted it, and Algeria is no exception. As a consequence of the Process, higher education in Algeria adopted the three-cycle degree known as the LMD system (Licence, Master, and Doctorate).

Within the LMD system, teachers are required to shift from the traditional way of instruction centered on the teacher to the one in which technology is given importance in order to be more competitive in the international arena and achieve quality of teaching. Alachaher (2014) claimed that “the LMD system emphasizes the integration of ICT” (p.1). Within the LMD system, it is recommended that teachers use technology as a consequence of shifting from the teacher-centered approach to the learner-centered approach.

However, in order that technology becomes an essential tool in the classroom, the teacher’s role is of paramount importance. To implement it, teachers are regarded as key agents. As such, it would be interesting to investigate their attitudes towards using it in teaching since technology has a great impact on teaching and learning. Besides, as claimed by Topaloglu (2008), the attitudes of individuals towards technology are important and the use of it in modern higher education system is significant.

2. Research Question

The present study aims to answer the following question:

- What are the attitudes of the teachers in the Department of English at the University of Bejaia towards the use of technology in teaching?

3. Research Hypotheses

a- Teachers in the Department of English at the University of Bejaia have positive attitudes towards the use of technology in teaching.

b- Teachers in the Department of English at the University of Bejaia have negative attitudes towards the use of technology in teaching.

4. Aim of the study

The main aim of this study is to investigate on the attitudes of the EFL teachers in higher education on using technological devices and processes in teaching which has become a distinctive feature of modern education.

5. Significance of the Study

Technology and attitude have attracted researchers' attention and many studies have been conducted in this domain. Most of them have studied the relationship between these two variables.

However, the number of investigations conducted on teachers' attitudes towards the use of technology is limited particularly in higher education. Gamez and Fernandez (2020) claimed that "few studies have been carried out that jointly analyze attitudes towards technology in teaching and research field of higher education teachers" (p.03). Hence, it needs further investigation with different populations and in various contexts.

Therefore, this study will be conducted in order to provide a snapshot of EFL teachers' attitudes towards the use of technology in teaching in higher education in Bejaia. The findings of the study would serve to understand how EFL teachers view the new way they are required to use in teaching within the framework of the LMD system which promotes the implementation of technology in the classroom.

Moreover, the present research could help decision-makers gain knowledge about the obstacles met in the implementation of technology in the classroom are the measures they need to consider in order to help teachers make full potential of technology in teaching.

6. Structure of the Study

The present work is divided into two main chapters. The first one provides a theoretical overview of the variables dealt with namely, the use of technology in teaching and teachers' attitude towards it. It is divided into two sections. The first one provides the reader with an overall picture about the use of technology by explaining its origins, its different types and effects in teaching, in general, and in higher education as an innovation within the LMD system, in particular. The second section deals with the attitudes of the EFL teachers towards the use of technology in teaching. First, it defines the term "attitude". Then, it identifies its different types, components and functions. Next, focus would be put on the teachers' attitudes towards the use of technology in teaching.

The second chapter represents the practical part of the study. It is divided into two sections. The first one is devoted to the description of the chosen design, method, population and sample and the procedure used to collect the data. The second section describes the results and discusses them. Finally, some recommendations are presented, a general

conclusion is drawn, and limitations of the study are listed followed by suggestions for future research.

CHAPTER ONE

THE THEORETICAL PART

Introduction

The following chapter deals with the literature related to EFL teachers' attitudes towards the use of technology in teaching in higher education. It consists of two sections. The first one deals with the issue of the use of technology in teaching. In this section, we will include definitions, origin, and effects of technology, the use of technology in teaching and finally, the use of technology as an innovation within the LMD system. In the second section, we will deal with the issue of teachers' attitudes towards the use of technology in teaching. We will include definitions, types, components, functions of attitudes and then we will deal with some of the studies conducted on teachers' attitudes towards the use of technology in teaching.

Section One: The use of technology in teaching

1.1. Definition of technology

Etymologically, the word "technology" has a Greek origin. It is composed of two words, "techne" and "logos". The former is a broad term which means "art", "skill" or "craft" while the latter is a complex word that denotes both language and reason (Schatzberg, 2018, p.8). The term technology was defined by many scholars. For Durbin (2012, p.136), Japanese scholars' philosophy of technology has discussed three types of definition:

- a- Technology as a kind of human capability;
- b- Technology as a kind of knowledge;
- c- Technology as a system of material means to a certain end.

Deyu and Changshu (1986 cited in Durbin, 2012, p.136) argued that "the three levels cited above at which technology is defined are one-sided. They consider technology as a "system composed of all essential factors which are interrelated, or a dynamic system or process". According to Tuchel (n.d, cited in Rapp, 2012), technology is:

the general term for all objects, procedures, and systems which on the basis of creative construction are produced for the fulfillment of individual and social needs, which through defined functions, serve certain purposes; and in their totality changed the world.

(p.35)

According to Kumar et al., (1999 cited in Sazali, 2012, p.62), technology consists of two primary components:

- 1- A physical component which comprises items such as products, tooling, equipments, blueprints, technology, and processes.
- 2- The informational component which consists of know-how in management, marketing, production, quality, control, reliability, skilled labor and functional areas.

For Volti (2009 cited in Carroll, 2017), technology is “a system created by humans that uses knowledge and organization to produce objects and techniques for the attainment of specific of goals” (p.6). According to Merriam-Webster (2013), technology is generally related to science. It is defined as:

The application of knowledge to the practical aims of human life or to changing and manipulation of the human environment. Technology includes the use of materials, tools, techniques, and sources of power to make life easier or more pleasant and work more productive. Whereas science is concerned with how and why things happen, technology focuses on making things happen.

(p.1)

As such, it can be considered as a “systematic knowledge and skill about making and operating” (Kanganian (n.d; cited in Durbin, 2012, p.136).

Many definitions have been given to the term technology. From the reviewed literature, we can define it as the materials, tools, techniques, and sources of power that make life easier and more comfortable for people.

1.2.Types of technology

There are many types of technology. They can be summarized into:

1.2.1.Information Technology (IT)

It is a branch of engineering that deals with the use of computers to retrieve information, store it and send it. According to Rajaraman (2018), information technology is “the study, design, development, implementation, support or management of computer-based information systems, particularly software applications and computer hardware” (p.6).

1.2.2.Communication Technology

It refers to “the hardware equipment, organizational structure, and social value by which individuals collect, process, and exchange information with other individuals” (Rogers, 1986, p.2). In other words, communication technology is the hardware system embodied in the physical equipment related to technology. Thus, communication

technology is a system that uses technical means to transmit information (data) from one place to another or from one person to another such as phone, computer, or fax.

1.2.3. Assistive Technology

This type of technology is used by people with disabilities, such as the use of off-road wheelchair (Robitaille, 2009). In education, assistive technology does not only assist disabled students, but can even make them more motivated to learn which is conducive to positive achievement.

1.2.4. Information and Communication Technology (ICT)

It is an umbrella term that includes “any communication device or application, and it is as a technology that covers any product that will store, retrieve, manipulate, transmit, or receive information electronically in a digital form” (Razani,2012, p.5). Thus, ICT focuses more on technologies that deal with communication, such as cell phones, internet etc... It refers to both computer and internet connections used to control and communicate information in order to achieve leaning needs. Hence, ICT can be divided into old technologies and new technologies as shown in the figure 1.2.4 below:

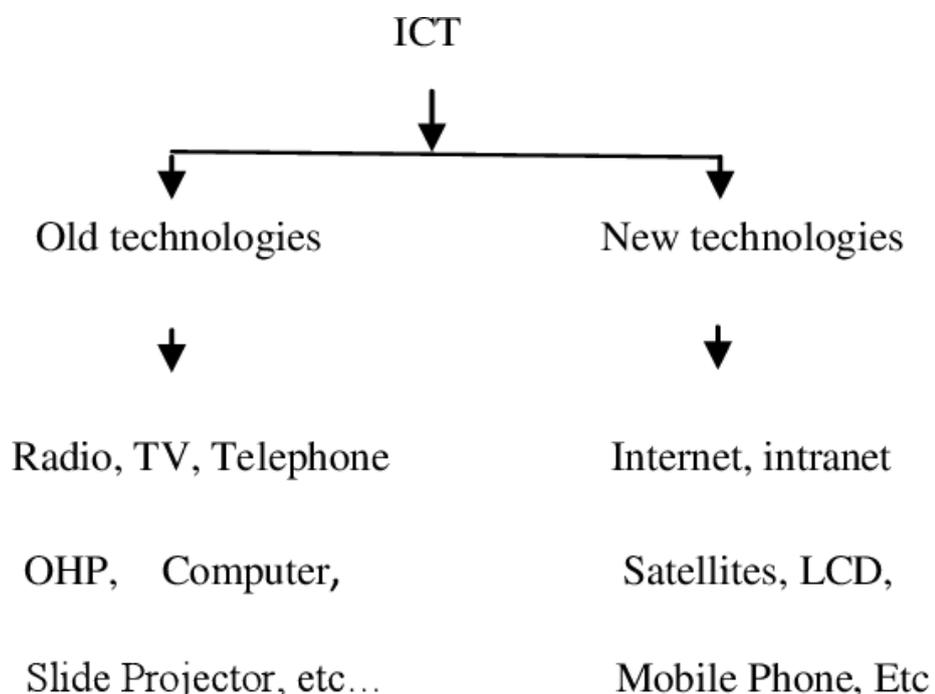


Figure1.2.4.Types of ICT (Swamina and Sekar ,2012, p.1)

1.2.5.Educational technology

It is “the application of modern skills and techniques to the requirements of education by manipulation of media and methods, and control of environments, as this reflects on learning” (Unwin, 1968 cited in Pathak, 2012, p.5). According to UNESCO (2001; Tripathi, 2019, p.13), educational technology is defined as “a communication process resulting from the application of scientific methods to the behavioral science of teaching and learning”. The time educational technology was used was in 1926 in the form of teaching machine by Sidney Pressey at Ohio University. The four perspectives that define educational technology include computer systems, media and audio-visual, instructional systems and design, and vocational training as it is shown in the figure 1.2.5:

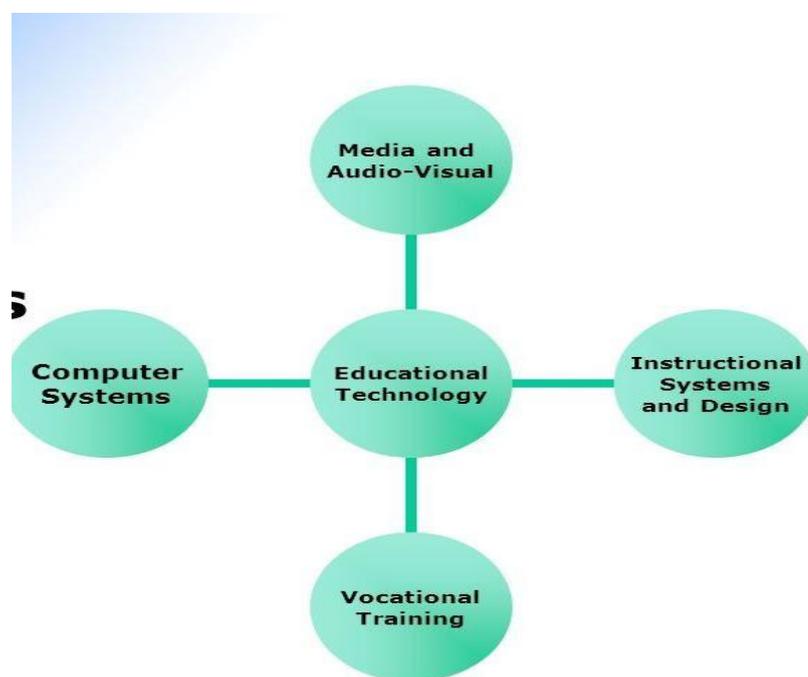


Figure.1.2.5. Four perspectives that define Educational Technology (O’Connor,2020, p.1)

According to Tripathi (2019, p.14), educational technology has gone through five stages that are based on its form and function. The first stage is concerned with the use of audio-visual aids like charts, models, maps etc. The second stage is associated with the electronic revolution through the use of devices as projectors, tape-recorders, radio and television in order to support teaching process. They were used for presenting the instructional materials. The third stage which is referred to as “communication revolution” is

concerned with the use of the mass media. The fourth stage is referred to as individualized instruction. It is based on self-instruction. Finally, the last stage is associated with educational technology which is “a systematic method of designing, carrying out and evaluating the teaching process in reference to the educational objectives”.

According to Stošić (2015, p.111), educational technology can be used in three (3) domains:

- 1- Technology as a tutor (computer gives instructions and guides the user).
- 2- Technology as a teaching tool.
- 3- Technology as a learning tool.

In language education, the technologies used may include:

- **Computer:** A computer is “a fast electronic device that processes the input data according to the instructions given by the programmer user and provides the desired information as output” (Arora, 2003, p.01). Merriam-Webster defines computer as “an automatic electronic machine that can store and process data”. According to Singh (2008), the term “computer” comes from a Latin word. Each letter forming it refers to one of its functions. Hence, **C= Calculate, O= Operate, M= Memorize, P= Print, U= Update, T= Tabulate, E= Edit and R= Response.**” (p.18)

Using computers both in teaching and learning has become a necessity both for teachers and students.

-**Internet:** “It is a global computer communication system that made all the services possible, in other words; internet has enabled the revolution that has changed our lives” (Comer, 2018, p.4). August (1995 cited in Zarouri, 2013, p.07) defines internet as “a worldwide collection of computer networks that serves as a means for communication and global exchange of information”.

-**Digital projectors:** They refer to “an interactive whiteboard, network switches, pickup intercom, transfer sound mixer, amplifier, speaker system, video and audio encoder, HD Encoder, automatic tracking camera system, multimedia network switching control systems” (Liu, Sung and Yao, 2014, p.1181).

-**Scanner:** According to Lewis (2012), a scanner is “a device which converts a document or text from its paper form into digital data” (p.1). It serves to reduce both time and effort when transforming information from a printed material to digital data. In other words, a scanner helps teachers to scan their documents in order to give them to their learners.

-Audio devices: They refer to web and audiocassette recorders, and compact discs (CD). These tools are used by modern language teachers when they teach listening skill, for example.

-Video-conferencing: It is a visual tool that leads two or more persons to communicate and see each other in any place and at any time. According to Bett and Rop (2012, p.2), it is “a method of communicating between two or more locations in which sound, vision and data signals are conveyed electronically to enable simultaneous interactive communication”. They classified the constituents of video-conferencing into three major elements including:

- The Hardware;
- The Intervening network that transmits the symbols between locations and;
- The Conference environment or room.

In education, video-conferencing is considered as an important tool. Caporali and Trajkovik (2012, p.120) claimed that “as an educational service, video-conferencing plays a key role in reaching and supporting students, improving communication between professors and students, and bringing together staff and across different campuses or different institutions”.

As such, video-conferencing permits to the teachers to be flexible in distance teaching and learning process. Besides, it is can save time since teachers may deliver one lecture via video-conferencing to all the groups whom they are in charge at once.

-Facebook: It is a social network site. It is defined by Gatwirth, Pouillet, and De Hert (2010) as “a web-based service that allows individuals to construct a public or semi-public profile within a bounded system” (p.119). As such, facebook can be used to allow chatting and exchanging photos with others (friends).

In education, facebook can be used by the teachers and the students to create academic groups in order to share lessons, queries, and explanations.

-Skype: It is “software that allows you to speak to, see and send instant message to other people who have Skype accounts wherever they are in the world” (Fraser, 2013, p.1). Hence, Skype in the classroom is a website especially designed for educational purposes. It is a platform where teachers and students can transmit information about their classes, share educational resources; find partners to share and work on projects, asking questions, and exchange ideas about lessons both with teachers and students. These exchanges can be conducted with or without video calls.

-Google: It is “one of the several web search engines or web tool for searching for information on internet by entering keywords. A web search using a search engine results in what are commonly called hits” (Anderson, 2010, p.8).

-Wikipedia: According to Anderson (2010), Wikipedia is “an internet-based encyclopedia that is written collaboratively by contributors around the world. It comes in many languages and is free to access”.

All the above-mentioned devices and processes related to educational technology are used to serve various purposes in education, in general, and language education, in particular. According to Singh (2008, p.16) summarized these objectives into the following elements:

- 1- To determine the goals and formulate the objectives in behavioral terms.
- 2-To analyze the characteristics of the learner.
- 3-To organize the content in logical or psychological sequence.
- 4-To media between content and resources of presentation.
- 5-To evaluate the learners’ performance in terms of achieving educational objectives.
- 6-To provide the feedback among other components for the modification of learners.

We can say that the above technological devices have become increasingly important to make available resources for research and learning for both teachers and students and to share and receive information in order to improve teaching and learning.

1.3.Effect of technology

In nowadays education, making use of technology is very beneficial, and it is becoming a necessity for teachers to accomplish an effective teaching process, thus it plays a significant role both for teachers and students.

However, it may have negative effects both on teachers and students.

1.3.1.Negative effects of technology

According to many researchers, technology can affect education negatively (e.g. Codey, 2001; Dunleavy et al, 2007; Jackson, 2004; Northwest Regional Education Laboratory, 2001; Oppenheimer, 1997; Valdez, 2005; Wright, 2000; as cited in Blazer ,2008, p.2) reported that all of them argued that:

1-Too many schools emphasize technology over learning. For example, the ability of doing or creating an attractive document doesn't mean that students have understood the concepts of the academic areas.

2-When spending on technology increases, spending on other programs and activities (such as art, music, and sports, etc) decreases which might result in lack of interest in studying.

3-Technology is not as cost-effective as other interventions because equipment requires extensive support.

4-Computers reduce students' opportunities for socialization and they may provoke physical problems such as, repetitive stress or eye strain which might limit students and teachers' thinking and motivation.

According to Raja and Nagasubramani (2018, p.35) technology may have other disadvantages:

- 1- It may affect negatively students' imagination. In other words, learners will be less creative that is their imaginations are limited, they use technology in a wrong manner, for example; play games, chatting, listen to music...etc.
- 2- Sometimes, it is also time-consuming from the teachers' point of view.
- 3- It is costly to install such technology issues too when used over limit.

According to other researchers (e.g. Fried, 2008; Wentworth & Middleton, 2014 Cited in Alhumaid, 2019, p. 13), technology has negatively changed education because it has:

- 1- Disintegrated students' competencies in reading, writing, and arithmetic. These skills are basic and any learner is expected to master them.
- 2- Dehumanized education in many environments and has distorted the ties relating teachers to their students.
- 3- Isolated students and has distanced them from any form of social interaction. As such, students are seen to live more in a virtual world than in a real one.
- 4- Deepened social inequalities between those students who can process technology and those who are unable to do so.

1.3.2.Positive effects of technology

According to some experts (e.g. Bebell, 2005; Gahala, 2001; Healey, 2001; Honey et al, 2005; Jobe and Peck, 2008; Waddorups, 2004; as cited in; Blazer, 2008, p.02) the use of

technology in the classroom can be very beneficial. Blazer (2008, p.02) reported some of these benefits for the students in the sense that it provides them with many opportunities:

1-It offers them access to learning at any time and in any location.

2-It helps them to acquire the technological skills they will need for future employment.

3-It can develop critical thinking, it means that it give an opportunities both for teachers and learners to be more creative. When using technology in the classroom writing, listening, speaking, and reading skills problem will be solved.

4-It helps them improve their communicative skills through the use of the social media,

5-It helps them to collaborate with peers and receive immediate feedback from them.

6-It gives opportunities for teachers and students to know their needs (Dunleavy et al. ,2007; Healey, 2001; Waddoups, 2004; cited in, Blazer, 2008, p.2).

7-Technology offers the teachers access to more authentic materials through such devices and processes as video- conferencing, data show, and audio tools to deliver their lessons.

According to Mollaei (2013), the integration of technology in classroom has become an important transformation for teaching. He argued that technology has developed the classroom environment, and has helped students to support their own learning process. Thus, instruction has become more learner-centered.

In sum, the pervious advantages of the use of technology both for teachers and learners have been summarized by Genc (2009) for whom:

Using computers and every kinds of technology equipment gives students the sense of freedom and encouragement. With the help of technology students can be active, motivated and involved in language learning process. High quality of authentic materials and low price can be other advantage of technology and increase the popularity of distance education”

(p.137)

These positive points have encouraged teachers to use technology in order to support the teaching/learning process.

1.4.The use of technology in teaching

With the spread of the process of globalization and the development of technology, teachers are required to shift from the traditional methods of instruction based on the teacher to the modern methods called the student-centered approach. Thus, Technology has become an important feature of modern education. We can feel its presence and its benefits in the

majority of schools and higher level establishments, and we can observe that learners switched from using books to the use of phones which makes the teaching/learning process easier and more effective.

According to Ivers (2003), technology is “a tool to help teachers gather and learn new information, locate lesson plans, participate in collaborative projects, engage in peer discussions and teaching forums, manage student records, and create instructional materials and presentations”(p.2). Some scholars argued that teaching with technology is more beneficial than teaching without it.

However, “the use of educational technologies varies according to the user. If a teacher does not have much experience with technology, it is important to start with a small group. As such, the teacher would practice using technology before demonstrating it and using it with a great number of students” argued Ciccomascolo and Sullivan (2013; p.224).

Diane (1994) affirmed that “ the Office of Technology Assessment (OTA) finds that technology can be a powerful tool for helping teachers with all the different parts of their job, enhancing instruction, simplifying administrative tasks, and fostering professional growth activities” (p.94).

Barasa (n.d; cited in Lawrence and Makura, 2017) looked at the effectiveness of digital technology in the teaching of literature at Pwani University in Kenya. This study found that “students are increasingly using digital technologies for more effective learning of literature and students are interested to learn using technology” (p.3).

Other researchers have, however, argued that teaching with technology is not beneficial. Roblyer (2003 cited in Caralah, 2009) stated that:

Technology-using teachers never can be a force for improved education unless they are first and foremost informed, knowledgeable shapers of their craft. Before integrating technology into their teaching, educators must know a great deal, for example, why there are different views on appropriate teaching strategies, how societal factors and learning theories have shaped these views, and how each strategy can address differing needs.

(p.37)

Couros (2019; cited in Parblu, 2020) said that “technology will not replace great teachers but technology in the hands of great teachers can be transformational” (p.61).

1.5.The use of technology as an innovation within the LMD system

The Algerian higher education system has witnessed a reform called the Licence-Master-Doctorate system abbreviated into LMD. It was launched since the academic year 2004/2005. The decision to adopt this system was made by the then ministry of higher

education to shift from the classical system to implement the European educational system model known as Bachelor-Master-Doctorate system or BMD.

The LMD system is a consequence of the Bologna Process which started as “the result of the action of four education ministers in 1998 (French, Italian, English, German) at the Sorbonne University” (Benson and Lunt, 2011, p.18). A year later, “ministers from 29 European countries met in Bologna and put their names to a declaration which stated an intention that by 2010, a European Higher Education Area (EHEA) would be in existence” (Great Britain: Parliament: House of Commons: Education and Skills Committee, 2006/2007, p.09-10).

Although the Bologna Process is considered as the most important political event which was initially intended to reform higher education in the European continent, it has, then, extended to other regions in the world including Asian, Latin American and African countries. Algeria is no exception.

According to Lunt, Peiro, Poortinga, and Roe (2014, p.64), the six main priorities of the Bologna Process are summarized into the following elements:

- 1- To adopt a degree system based on two cycles system (undergraduate and graduate): the undergraduate cycle (Bachelor) lasting a minimum of 3 years, the graduate cycle (Master) of 2 years, and the Doctorate cycle.
- 2- To develop a credit system (the European credit transfer system or ECTS) as a common students' workload measure and of promoting student mobility.
- 3- To adopt measures to favor mobility, transparency and readily comparable qualification to the process.
- 4- To enhance a European co-operation in the field of quality assurance and evaluation with a view to developing comparable criteria and methodologies of teaching and learning assessment across.
- 5- Promotion of mobility for students, teachers, researches, and administrative staff.
- 6- Promotion of the European dimension in higher education in relation to curricula, inter Universities cooperation, mobility schemes and integrated programs of study.

The Bologna process is more open to the new global development, especially to technology. In this respect, Caeio (2004 cited in, Jingyuan, Pablos, Patricia, Robert, Tennyson, and Zhao, 2010, p.59) argued that “faced with the challenge proposed by the Bologna process, the use of ICT has obtained a significant role as tools involved also in the learning process”.

The adoption of the LMD system in Africa, in general, and in Algeria exactly at Bejaia University in particular aims to restructure and to reposition higher education in the international arena. To do so, the use of technology becomes a necessity. It "...offers to stakeholders/actors of higher education systems in Africa a lot of opportunities to transform the way of teaching, learning, and making research. Thus, ICT can facilitate the integration of the higher education system of Africa into the international system of LMD" argued Gutowski et al., (2020, p.13).

Section two: Attitudes towards the use of technology in teaching

2.1. Definition of attitude

According to Mostyn (1978), "the term attitude comes from the Latin term "apptitudo" and it is defined as "a subjective or mental state in preparation for action" (p.77). This definition is shared by the Dictionary of Cambridge in which it is stated that attitude is "a feeling or opinion about something or someone, or a way of behaving".

Spencer (1862; as cited in Mostyn, 1978, p.77) was the first who used the word attitude in 1862 in order to describe a mental concept. For Ajzen (2005, p.03), attitude can be either positive or negative. He defined it as "a disposition to respond favorably or unfavorably to an object, person, institution, or event". A similar idea is shared by Jowell (2005). For him, attitude is "a psychological tendency to view a particular object or behavior with a degree of favor or disfavor" (p.1).

According to Allen (2010), one's response to a certain object, person, or institution, be it favorable or unfavorable, relies on "...his evaluation of those attributes" (p.23). In this definition, attitude means to involve the expressions of an evaluative judgment about stimulus object. As such, it can be used to "explain the direction and persistence of human behavior" (Baker, 1949, p.10).

From the definitions above, we can say that attitude refers to a mental state of readiness that involves a complex interaction between mind, emotion, and physiology. It is concerned with value, belief, and feeling that could trigger a predisposition to behavior or action towards a person, a given object or an institution.

In this sense, we can say that attitude is the point of view or what people think and feel about someone or something. Moreover, attitude differs from one person to another.

2.2. Attitudes formation

Ricketts and John (2010) stated that attitudes are formed basically through our experiences. Our interactions with different people in our direct and indirect environment can help us differentiate

between what is right and what is wrong and the way we can respond to external stimuli.

According to Aquinas (2006, p.80) attitudes are acquired from two major sources namely, direct experience and social learning:

2.2.1. Direct Experience: According to Pranit (2010), attitude is “ a mental state of readiness, organized through experience, exerting a specific influence upon a person’s response to people, objects and situation with which it is related” (p.64). So, a personal experience - be it favorable or unfavorable - with an object, a person or an event through the different senses; seeing, tasting, smelling, hearing or touching helps us to form an immediate reaction (rewarding or punishing). For example; we have an immediate attitude when we taste a new kind of dish, we can either like it or not.

One reason why direct experience is so powerful to form attitudes is because of their availability. Therefore, when attitudes are available, people can call them quickly into consciousness. However, when they are not learnt from direct experience - they are, then unavailable – and as such, people would face difficulties to recall them.

This stimulus/response process can take different forms namely, classical conditioning, operant conditioning and vicarious learning (Aquinas, 2006). Each of them will be defined below:

1. Classical Conditioning: It is one of the basic principles of how people can form their attitudes. It refers to the fact that people develop associations between the different objects and the feelings they accompany them.

2. Operant Conditioning: It is made between a particular behavior and its consequence. This process is concerned with learning through both reinforcement and punishment. As such, those attitudes that are strengthened are maintained and those that are not are abandoned.

3. Vicarious Learning: It is based on the fact that individuals can develop their attitudes indirectly through observing others’ actions especially when they have no direct experience with a target object.

2.2.2. Social Learning: According to Aquinas (2006) social learning refers to learning to through social interaction which means that people learn from each other’s such as teachers, parents, friend, media,...ect. It means that this theory influenced by others attitudes. According to (Aquinas, 2006, p.81) claimed that “four processes must take place”:

- The learner must focus on the model.
- The learner must imitate what was observed from others.

- The learner must practice the behavior of others.
- The learner must be motivated to learn from others.

The social learning can take place through the following ways (Aquinas, 2006):

- The family: People learn attitudes from the imitation of their parents, sisters, brothers.
- Peer group: it is concerned with direct influence on people by peers, it means that the effect on an individual who gets motivated to follow their peers by transforming their attitudes, behaviors, or values to conform the group or individual. It can be either positive or negative.
- Modeling: It is concerned only with observation of others by individual when they acquire attitudes. As shown in the figure 2.2. below:

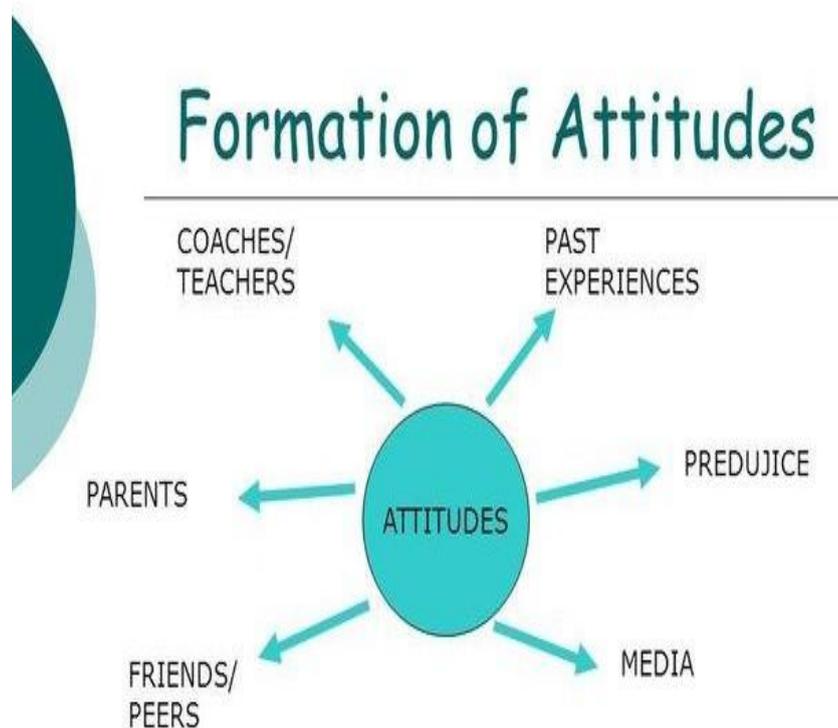


Figure.2.2. Formation of attitudes (Jannie, 2018, p.1)

2.3. Types of attitudes

Attitudes are classified into three main types namely, positive, negative, and neutral ones as shown in figure 2.3. Below:

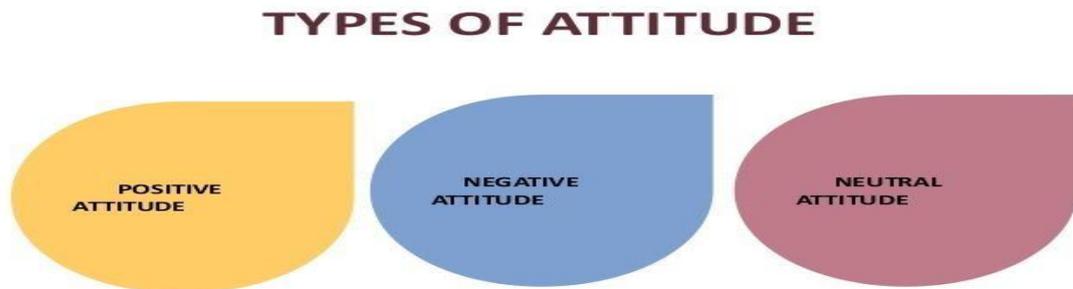


Figure.2.3. Types of attitudes (Baiday, 2015, p.4)

2.3.1. Positive attitudes

Positive attitude means positive thinking. According to FitzMaurice (2011 as cited in Sadoudi, 2016) “positive attitudes are your best friend in many ways... Work, efforts, dreams, and all achievement demand positive attitude” (p.41). Usually, people who think that there is something good in every situation are confident, satisfied and optimistic persons.

2.3.2. Neutral attitudes

Indifference and detachment are traits that represent neutral attitude. Also, people with neutral attitudes do not give importance to situations or events. They are unemotional and feel disconnected. However, neutral attitudes can be very important since they can be used when people are in-between (neither positive nor negative). “Neutral attitudes are not for accomplishment they are tolerance, understanding and peace” stated FitzMaurice (2011, p.42).

2.3.2. Negative attitudes

People with negative attitudes ignore the good things, situations, and events. According to FitzMaurice (2011), negative attitudes “help you with protection, prevention, and planning”.

To sum up, we can say that attitudes can be divided into three (3) main types which are positive attitudes (good things), negative attitudes (bad things), and neutral attitudes (neither negative nor positive).

2.4. Components of attitudes

According to Kategarrone (2012) has identified three (3) main components of attitudes called the ABC model. A stands for affective, B for behavioral and C for cognitive. The three components of attitudes are different from each other, but they are interrelated. Each component affects and is affected by another one as it is shown in the figure below:

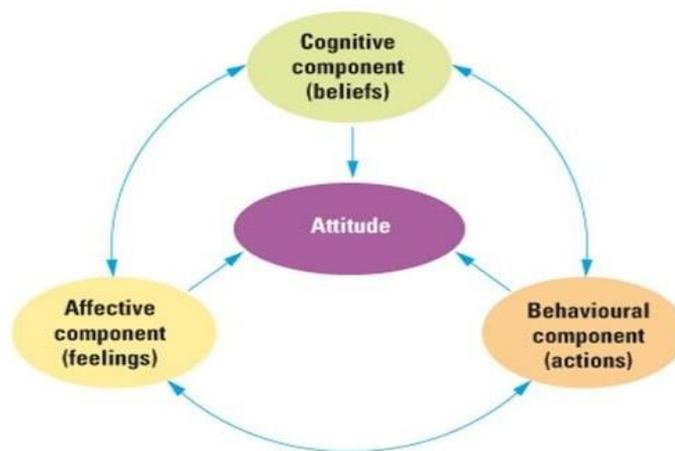


Figure. 2.4. The Three Component of Attitudes (ABC). (Kategarrone , 2012, p.7)

In what follows, each of the components will be defined respectively:

2.4.1.The affective component

Weiten (2012) stated that the affective component of an attitude refers to “the emotional feelings stimulated by an object of thought” (p.531). These emotions are “reflected in the statement “I am angry over how little I’m paid” (Robbins, 2009, p.72). In other words, it refers to the emotional aspect of attitude.

2.4.2.The behavioral component

Weiten (2012) stated that the behavioral component of an attitude “consists of predispositions to act in certain ways toward an attitude object” (p.531). It refers to the consistency by which the individual is performing the action to acquire the desired learning behavior.

2.4.3. The cognitive component

According to Weiten (2012), the cognitive component is “made up of the beliefs that people hold about the object of an attitude”. For Robbins (2009) the cognitive component “sets the stage for the more critical part of an attitude” (p.72). It refers, then, to one’s opinions or beliefs.

2.5. Functions of attitudes

According to Katz (1960, p.170), attitudes may have different functions namely, the adjustment, the ego-defensive, the value-expressive, and the knowledge function. The major point behind the functional approach to attitudes is that they help individuals to mediate between their own inner needs (expression, defense) and the outside environment (adaptive and knowledge) as shown in the figure 2.5. below:

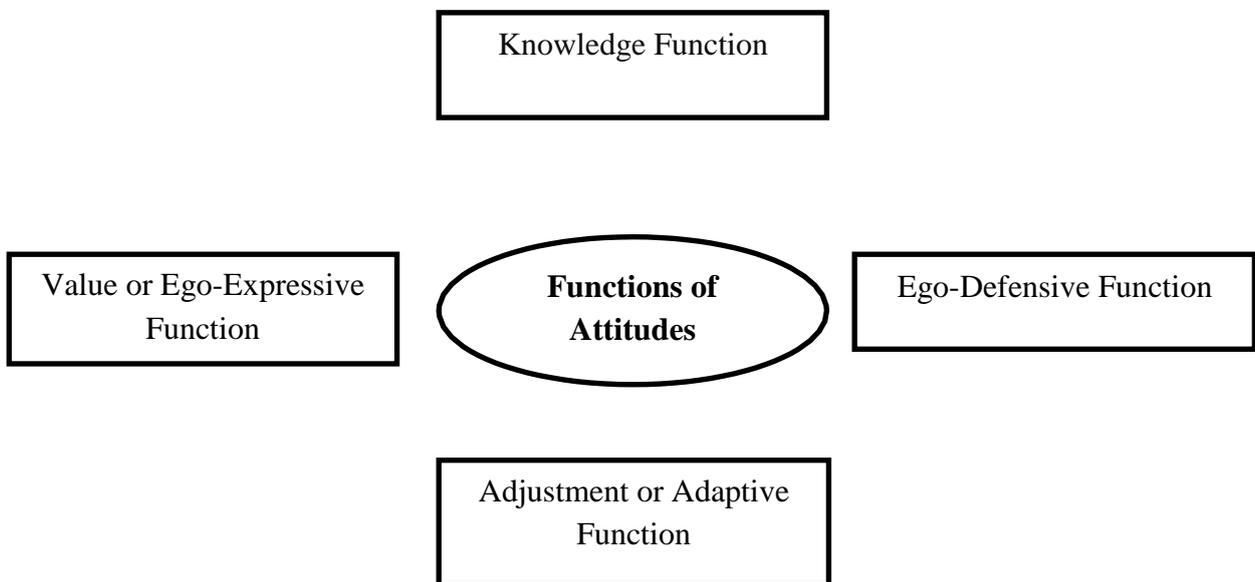


Figure 2.5: The functions of attitudes (Katz, 1960, p1)

In what follows, each of the functions of attitudes will be defined respectively:

2.5.1. The Adjustment Function

It is called as well, the adaptive function. It refers to the “people who attempt to augment the prize in their external environment and to reduce the penalties” (Katz, 1960, p.170).

2.5.2.The Ego-Defensive Function

It includes “people that do not only seek to make the most of their external world and what it offers, but they also expend a great deal of their energy with themselves” (Katz, 1960, p.170).

2.5.3.The Value-Expressive Function

It is called as well, the ego-expressive function. Maio and Olson (2000 as cited in Manferdo, 2009) stated that “attitudes can express personal values and other core aspects of how individuals view themselves” (p.82). As such, this function of attitude helps the individuals to show their feelings, emotions, values and opinions which facilitate communication with other people.

2.5.4.The Knowledge Function

It refers to “individuals that obtain beliefs in the interest of satisfying different specific needs, they also investigate knowledge to show meaning to what would otherwise be an unorganized confused universe” (Katz, 1960, p.170).

2.6.Characteristics of attitudes

Attitudes have several important characteristics. Pranit (2010, p.64) displayed some of them:

- Attitudes develop from our personal experiences in life. They can derive from both direct and indirect experience.
- Attitudes take place in a situation and can be influenced by it.
- Attitudes are not static. They do change and are consistent with the behavior they reflect.
- Attitudes relate to an object. This latter can be a product i.e a concrete thing or an action.
- Attitudes reflect a direction. They express one’s evaluation of an object, a person or a situation. This statement can be either positive (favorable) or negative (unfavorable).

Anderson (1981cited in Kohli, 1992, p.2) has described attitudes in relation to Five (5) features namely, emotion, consistency, target, direction, and intensity:

- **Emotion:** The affective characteristic of attitudes involves emotions about both persons and objects.
- **Consistency:** Attitude may be positive or negative towards objects, persons or particular situations and settings.
- **Target:** Attitudes are directed towards a target that can be an object, a person, a situation or an idea. As such, a target can be either physical or abstract.
- **Direction:** It refers to the positive or negative orientations of a person's emotions or feelings towards the target.
- **Intensity:** It refers to the degree or strength of emotions or feelings. By degree we mean how much a person either likes or dislikes a target. Some emotions are more intense than others. For example, the expression "I hate" is more intense than "I dislike". Intensity is related to the level of confidence of expression towards the object. In other words, it determines how strongly or weakly a person feels about his/her conviction.

In sum, we can say that attitudes must have an object and a direction. They differ in degree and intensity and are consistent with the situation.

2.7.Theories of attitudes

Reddy (2004) proposed three major theories of attitudes namely, cognitive consistency theories, functional theory, and social judgment theory.

2.7.1.Cognitive Consistency Theories: They refer to those theories that "are concerned with inconsistencies that arise between related beliefs, bits of knowledge, and evaluation about an object or an issue" (Reddy, 2004, p.85). For him, they are categorized into the following theories:

- **Balance Theory:** It deals with the theory of attitude change. It is concerned with how individuals tie relationships with other people and object in their environment.

- **Congruity Theory:** It is similar to balance theory. It is associated with the attitude change. In others words, it expresses some patterns of the relationships between two or more aspects.
- **Affective Cognitive Consistency Theory:** It deals with the examination of the relationships between attitudes and beliefs. Reddy (2004) called it as well “structural theory” because it focuses on “what happens within the individual when an attitude changes” (p.86). In others words, it is concerned with the relationships between both the affective and the cognitive components of attitude when it changes.
- **Cognitive Dissonance Theory:** It refers to the mental conflict that takes place when a person’s behaviors and beliefs do not match. The main difference between this theory and the previous one i.e. the Affective Cognitive Consistency Theory is that the former focuses on the behavioral tendency of attitude while the latter focuses on the affective one. It means that the Cognitive Dissonance Theory is concerned with the relationship between attitudes and behavior in relation to a particular object.

2.7.2. Functional Theory: Reddy (2004) defined that “functional theory considers how efforts are related to the motivational structure of the individual. An understanding of the functions served by attitudes is important for attitude change procedures since a particular method may produce change in individual whose attitudes serve one particular function, but may produce no change in an opposite direction in individuals for whom the attitudes serve a different function” (p.87). We can say that this theory is concerned with the kinds of social relationships that take place in social influence situations.

2.7.3. Social Judgment Theory: According to Reddy (2004), this theory “attempts to explain how existing attitudes produce distortions of attitudinally related objects and how these judgments mediate attitude change” (p.88). In other words, it refers to the relationship between the object and the attitude change.

2.8. Studies on teachers’ attitudes towards the use of technology in teaching

Today, the use of technology in teaching has become the main object of investigation of many research studies.

Al-Zaidiyeen, Fong, and Meli (2010) investigated the level of use of ICT for educational purposes by teachers in Jordanian rural secondary schools. They used quantitative data. The

results revealed that teachers hold positive attitudes towards the use of ICT.

Baser et al., (2016) examined teachers' attitudes towards the use of technology in social studies teaching. They used the quantitative survey method and cluster sampling to choose participants. The findings of the study showed that teachers have positive attitudes towards the use of technology. In addition, it showed that those who were teaching at private schools have importantly high attitudes than those working in public schools. They explained that this may be due to the fact that the former are provided with more materials and are offered in-service training to use technology in education.

In another context, Alharbi (2013) conducted a study to investigate teachers' attitudes towards integrating technology in two (2) different countries namely, Saudi Arabia and the United States. He used semi-structured interviews distributed to ten teachers from Saudi Arabia and United States in higher education. The results have shown that teachers from both countries have positive attitudes towards using technology.

When investigating the role of technology in language teaching, Richards (2015) showed the opportunities it offers to teachers and learners to support new technology-mediated teaching and learning. The study revealed that teachers have positive attitudes toward the use of technology to teach language.

Furthermore, some studies have been conducted to investigate the attitudes of the teachers towards the use of technology when teaching EFL. Mollaei and Riasati (2013) have investigated the attitudes of EFL teachers towards the use of technology in their classes and the factors affecting its implementation in Iranian language Institutes. They used descriptive statistics to analyze the questionnaire data. The result of the study showed that teachers have positive attitudes towards the use of technology.

Albirini (2004) explored the attitudes of high school EFL teachers in Syria toward ICT. The study investigated five independent variables: computer attributes, cultural perceptions, computer competence, computer access, and personal characteristics. He found that teachers have positive attitudes toward ICT use in education. The results have shown as well that EFL teachers' attitudes were predicated by computer attributes, cultural perceptions and computer competence.

Hismanoglu (2012), in his paper, investigated the attitudes of teachers in higher education toward ICT implementation in teaching EFL in Turkey. He found that the majority of the respondents had negative attitudes to ICT integration in the classroom. They did not

feel sufficiently competent to use ICT in their subject teaching and lacked prior knowledge about how to use technology for teaching.

Conclusion

To conclude, the present chapter gave an overview of the literature related to the present study. It dealt with two variables including technology and attitudes. Each concept was discussed in a section.

CHAPTER TWO

THE PRACTICAL PART

Introduction

The present research study investigates EFL teachers' attitudes towards the use of technology in teaching in the Department of English at the University of Bejaia. This chapter is divided into two sections. The first one presents a description of the research design and the method used, the population targeted and the sample chosen and the research tool employed to collect the data. In the second section, the results are discussed. Then, some recommendations are presented based on the findings of the study in order to help teachers develop positive attitudes towards the use of technology in their classrooms and to create a good atmosphere for its effective implementation. A general conclusion is, then, drawn, followed by the limitations of the study at hand and suggestions for further research.

Section one: Research methodology

1.1. Research design

The present study is a description of the EFL teachers' attitudes towards the use of technology in teaching in the Department of English at the University of Bejaia. A descriptive study is used basically to report the way things are. According to (Gay, 1996; as cited in, Jefferson, 2004) stated that "descriptive study involves the collection of data in order to test the hypothesis or to answer questions concerning the current status of the subject" (p.27).

1.2. Research method

To answer our research question, we have opted for a quantitative method. According to Sink (n.d) quantitative methods aim at developing and employing mathematical models, theories and hypotheses pertaining to natural phenomena. In other words, the quantitative method deals with numbers (statistics) and phenomena which are measurable, it intends to observe and the sample size involved is usually large.

1.3. Population and sampling

The population of our study concerns the EFL teachers in the Department of English at the University of Bejaia. The sample chosen is, however, limited to ten (10) of them only. According to Fridah (2002) defined population in the research as "a group of individuals, persons, objects, or items from which sample are taken for measurement for example a population of presidents or professors, books or students" (p.1). He also gave a simple

definition of sampling: “sampling is the act, process, or technique of selecting a suitable sample, or a representative part of a population for the purpose of determining parameters or characteristics of the whole population” (p.1).

1.4.Data collection tools

In this study, one instrument is used for data collection. A questionnaire is used in order to get data from the participants. Actually, a questionnaire is considered as an effective instrument which suits the quantitative method. It permits us to get quick answers since the participants are asked to answer anonymously questions or choose an answer from the suggested ones. According to Richard (2005):

Questionnaires are one of the most common instruments used. They are relatively easy to prepare, they can be used with large number of subjects and they obtain information that is relatively easy to tabulate and analyze. They can also be used to elicit information about many different kinds of issues such as, language use, communication difficulties, preferred learning styles, preferred classroom activities and attitudes and beliefs (p.60).

The questionnaire administered to the teachers consists of 22 questions. It is divided into 4 sections. The first one is composed of 6 items that are devoted to collect data concerning the participants' background information. They aim to identify respectively their gender, age, highest level of instruction, experience in teaching, the levels and the modules currently taught. The second section is devoted to the participants' use of technology in teaching. It includes items 7, 8 and 9. Item 7 deals with the teachers' experience with the use of technology in teaching. Items 8 and 9 are asked to find out the technological devices that are used regularly by the teachers in the department and the reasons behind that. The third section includes items 10 to 19. It investigates teachers' attitudes towards the use of technological devices in teaching. A five-level evaluation likert scale is used for this sake. Teachers are required to determine the extent to which they strongly agree (SA), agree (A), undecided, disagree (D) or strongly disagree (SD) with the items asked. According to Brown (2006), the five likert scale is important to evaluate attitudes because it includes statements that are divided into those that represent positive attitudes and those representing negative ones. The last section of the questionnaire deals with the teachers' use of technology in the future. It includes items 20, 21 and 22 that are asked to find out whether the teachers would

like to use some other technological devices in the future, the types of these resources and the difficulties preventing faculty members from using them (See appendix 1)

1.5.Data analysis procedures

For the sake of collecting data on EFL Teachers' attitudes towards the use of technology in the teaching, we made use of a descriptive design based on quantitative data. Yet, the data gathered needs to be summarized, organized and analyzed. In fact, the quantitative data gathered by means of the questionnaires is analyzed using the computer program called "the Statistical Package for Social Science software (SPSS)". In our study, we have displayed the results through descriptive statistics embracing frequency (FRE) and percentage (PER) as shown below.

Section two: Data analysis and discussion

2.1.Background information of the participants

2.1.1.Gender

Options	Male	Female	Total
FRE	02	08	10
PER	20%	80%	100%

Table 2.1.1: Teachers' gender

Table 2.1.1 shows the gender of the participants. The results in the table show that the majority of the teachers are females with a number of 08 teachers which represent 80% of the sample. Only 2 teachers (20%) are males.

2.1.2. Age

Options	Less than 30	31-40	41-50	Above 50	Total
FRE	05	03	01	01	10
PER	50%	30%	10%	10%	100%

Table 2.1.2: Teachers' age

Table 2.1.2. shows that half of the teachers are less than 30 years old followed by 30% of them who are between 31-40 years old. 10% of the respondents are between 41 and 50 and the other 10% are above 50. We can conclude that the majority of the participants are young and freshly graduated.

2.1.3. The highest level of instruction

Options	Licence degree	Master Degree	Magister degree	Doctorate degree	Professor degree	Total
FRE	00	05	03	02	00	10
PER	00%	50%	30%	20%	00%	100%

Table 2.1.3: Teachers' highest level of instruction

According to table 2.1.3 above, 50% of the participants have a Master's degree. 30% of them have a Magister degree and 20% of them have a Doctorate degree. None of the participants declared having a Licence or a professorate degree.

2.1.4. Teaching experience

Options	0-1 year	2-5 years	6-10 years	11-15 years	More than 15 years	Total
FRE	02	05	01	02	00	10
PER	20%	50%	10%	20%	00%	100%

Table 2.1.4: Teaching experience

The table 2.1.4 above reports teachers' experience in teaching at the Department of English (University of Bejaia). 50% of them have an experience of 2 to 5 years. 20% of the sample are new teachers in the department and the other 20% have an extended experience of 11 to 15 years. 10% of the teachers have 6 to 10 years of work at the department of English and none of them have more than 15 years of teaching experience there. The results show, then, that the majority of the participants (70%) have a short experience in teaching that does not go beyond 5 years.

2.1.5. The level(s) currently taught

Options	First year	Second year	Third year	Master 1 level	Master 2 level
FRE	04	02	06	03	03
PER	40%	20%	60%	30%	30%

Table 2.1.5: The level(s) currently taught

The table above shows that the majority of the teachers are in charge of students in the licence degree with 60% who are currently teaching the 3rd year level followed by 40% who are teaching the 1st year level and 20% are in charge of the 2nd year level.. Master one and Master two levels are taught by 30% of the participants.

2.1.6.The modules currently taught

Options	Linguistics	Civilization	Didactics	Methodology	Sociolinguistics	Literature
FRE	04	02	01	03	01	02
PER	40%	20%	10%	30%	10%	20%

Table 2.1.6.The modules currently taught

From the findings shown in the table above, we can observe that the linguistics module is taught by 40% of the participants. Teachers of methodology represent 30% of the participants. Additionally, 20% of them represent those in charge of civilization and literature modules. Only 10% represent teachers of didactics and sociolinguistics.

2.2.Participants' use of technology in teaching

2.2.1.Experience with the use of technology in teaching

Options	Non-user	Novice	Intermediate	Old hand	Total
FRE	00	06	04	00	10
PER	00%	60%	40%	00%	100%

Table 2.2.1. Experience with the use of technology in teaching

The table 2.2.1 above shows that all the teachers have used technology in their teaching in one time or another. The majority of them (60%) are novice. 40% of the participants have an intermediate level. No teacher has an extended experience in the matter.

2.2.2. The type of technologies used regularly by the participants in teaching

Options	Projector/data show	Computer/laptop	Smart phone	Social networking	eLearning platform	others
FRE	04	05	04	02	07	00
PER	40%	50%	40%	20%	70%	00%

Table 2.2.2. The type of technologies used regularly by the participants in teaching

Table 2.2.2 above demonstrates the technological devices that are used in the classroom at a regular basis. We notice that the teachers have used different devices. 70% of them have used the e-Learning platform regularly in teaching and 50% of them declare having used a computer or a laptop. Both projector/data show and Smart phone are used by teachers regularly in teaching with 40% for each case. However, despite their widespread, social networks are used for teaching purposes by a minority of the participants only (20%).

2.2.3. The reasons behind using a particular type of technology

The objective of this item is to know teachers' opinions about the reasons for choosing a particular type of device in teaching through technology. All the teachers stated that their choice has depended on the availability of these devices for the teachers and the students particularly when referring to e.learning. One of the teachers said “ learning through an academic platform is more interesting since students can find support and it is a very good solution mainly these last few days in order to address a large number of students”.

In addition to this, teachers argued that they chose technological tools such as computers and projectors because they found them more effective. Some teachers declared that they help raise both students' and teachers' motivation and engagement. One of them argued: “the use of data show allows me to deliver the lecture for the whole class and helps me support my lecture with vivid illustration and to keep me motivated and keep learners motivated and engaged”.

2.3. Teachers' attitudes towards the use of technology in teaching

2.3.1. Technology has changed the way I teach

Options	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Total
FRE	00	06	03	01	00	10
PER	00%	60%	30%	10%	00%	100%

Table 2.3.1: Technology has changed the way I teach

Table 2.3.1 above shows that the majority of the teachers (60%) agreed that technology has changed their way of teaching. 30% of them were undecided. Only 10% disagreed that technology has had impact on their manner of teaching. It may be the case for those teachers who do not have a long teaching experience.

2.3.2. Technology helps me to teach better.

Options	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Total
FRE	00	09	01	00	00	10
PER	00%	90%	10%	00%	00%	100%

Table 2.3.2: Technology helps me to teach better.

From the table 2.3.2, we can say that the majority of the participants (90%) have agreed that technology had helped them to teach better. Only 10% of them were undecided.

2.3.3. Technology helps me to overcome my individual teaching difficulties

Options	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Total
FRE	01	04	04	01	00	10
PER	10%	40%	40%	10%	00%	100%

Table 2.3.3. Technology helps me to overcome my individual teaching difficulties

From the results shown in the table above, we can notice that 50% of teachers agreed (40%) or strongly agreed (10%) that technology has helped them to overcome their individual teaching difficulties. The other half of the participants (50%) were either undecided (40%) or disagreed with the statement (10%).

2.3.4. Technology facilitates my work with my students inside and outside classroom

Options	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Total
FRE	01	09	00	00	00	10
PER	10%	90%	00%	00%	00%	100%

Table 2.3.4 Technology facilitates my work with my students inside and outside classroom.

The results in the table 2.3.4 above show that all the teachers agreed (90%) or strongly agreed (10%) that technology was very helpful to make teaching easier both inside and outside the classroom.

2.3.5. Technology improves students' learning.

Options	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Total
FRE	02	04	03	01	00	10
PER	20%	40%	30%	10%	00%	100%

Table 2.3.5: Technology improves students' learning.

From table 2.3.5 above, we can notice that the majority of the participants (60%) agreed (40%) or strongly agreed (20%) that technology had a positive impact on their students' learning. 30% were undecided and 10% of them did not agree with the statement.

2.3.6. Technology enhances students' motivation to learn.

Options	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Total
FRE	01	06	03	01	00	10%
PER	10%	60%	30%	10%	00%	100%

Table 2.3.6: Technology enhances students' motivation to learn.

Table 2.3.6 shows that the majority of the participants (70%) agreed (60%) or strongly agreed (10%) that using technology made their students more motivated to learn. 20% of them were undecided and 10% of them did not think that technology could foster their students' motivation. This may be due to the fact that teaching through some technological processes such as e.learning with no direct relation and interaction with the students does not offer to the

teachers the opportunity to measure effectively the impact of technology on their students' affect, particularly their motivation.

2.3.7. The use of technology in teaching is time-consuming.

Options	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Total
FRE	00	04	00	05	01	10
PER	00%	40%	00%	50%	10%	100%

Table 2.3.7: The use of technology in teaching is time-consuming.

Table 2.3.7 indicates that the majority of the participants (60%) disagreed (50%) or strongly disagreed (10%) that the use of technology in teaching was time-consuming. Yet, 40% of them agreed.

2.3.8. To use Technology in Teaching, faculty need to be trained.

Options	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Total
FRE	07	02	01	00	00	10
PER	70%	20%	10%	00%	00%	100%

Table 2.3.8: To use technology in teaching, faculty need to be trained.

From table 2.3.8, we can notice that the majority of the participants (90%) agreed (20%) or strongly agreed that it is necessary to provide faculty members with training sessions to

learn how to use technology in their teaching in an effective way. Only 10% of them were undecided.

2.3.9.To use of technology in teaching, facilities should be provided.

Options	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Total
FRE	06	04	00	00	00	10
PER	60%	40%	00%	00%	00%	100%

Table 2.3.9: To use technology in teaching, facilities should be provided.

The results in table 2.3.9 show that all the teachers agreed (40%) or strongly agreed (60%) that to use technology in teaching, material resources should be provided.

2.3.10.Faculty members who teach by using technology should be encouraged.

Options	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Total
FRE	05	05	00	00	00	10
PER	50%	50%	00%	00%	00%	100%

Table 2.3.10: Faculty members who teach by using technology should be encouraged.

Table 2.3.10 above shows that all the teachers agreed (50%) or strongly agreed (50%) that in order to encourage the use of technology, those who implement it should be rewarded.

2.4.The use of technology in the future

2.4.1.Are there some technological devices you would like to use when you teach?

Options	Yes	No	Total
FRE	09	01	10
PER	90%	10%	100%

Table 2.4.1. Are there some technological devices you would like to use when you teach?

Table 2.4.1 above shows that the majority of the teachers (90%) would like to make use of other technological devices in the future. Only 10% of them answered “no”.

2.4.2.The type of technological devices teachers would like to use in the future

Options	Data Show	Computer, and Social media	MALLET, Microsoft, Software	Video-conferencing, Tablets, Interactive boards.	Total
FRE	04	02	02	02	10
PER	40%	20%	20%	20%	100%

The type of technological devices teachers would like to use in the future

The table above reports the types of technological devices teachers would like to use in the future. Most of the teachers (40%) suggested the use of data show. 20% of them referred to computers and social media. Others suggested the use of video conferencing, tablets and interactive boards with (20%). More sophisticated tools such as a Machine Learning for

Language Toolkit (MALLEET), Microsoft and software have been referred to by 20% of the participants.

2.4.3. What is currently preventing you from using them?

The majority of the teachers (80%) stated that the difficulties encountered in the use of technology can be summarized into the following:

- Lack of materials and locations (e.g. amphitheaters are not well equipped);
- Lack of internet access;
- Lack of experience in using technological tools as a result of lack of training. One of the teachers said that “lack of materials provided by the university structure and adding to this it is really time-consuming since we are limited in sessions, I can’t venture to use it all the time”. Another teacher summarized these obstacles as follows: “having access to the media room and e-learning platform is quite challenging. The fact that it is centralized; the teacher is supposed to ask for permission from the department, send a formal request days before, check technical problems in advance makes it time and effort consuming for teachers who are essentially busy”.

Only 20% of the teachers argued that they could use technology with no difficulties. One of them wrote: “everything is fine; I have no problem in using technology in teaching”.

2.5. Conclusion

This study has investigated teachers’ attitudes towards the use of technology in teaching. The results obtained from the analysis of the quantitative data show that teachers have exhibited positive attitudes towards the use of technology. In this respect, we found that they have agreed that technology helped them to teach better. Furthermore, the results have shown that the majority of the participants (90%) agreed that technology facilitates the work of the teachers with their students both inside and outside classroom. Besides, the results revealed that the majority of the participants stated that technology gave more opportunities to raise their students’ motivation and engagement.

2.6. Recommendations

Technology has revolutionized the field of education, in general, and higher education, in particular. Despite its newness, it has managed to capture teachers’ interest. However, based on the results of the study at hand, it appears that some conditions should be gathered in order to make full potential of technology in teaching by fostering teachers’ positive attitudes. The

provision of adequate resources, sufficient time, professional training and development, and rewarding mechanisms are of paramount importance.

2.7.General conclusion

The new generation uses technology in their daily life. Therefore, the presence of new technological devices is growing in different domains. Education is no exception. In the teaching/learning process, using it has become very common. Accordingly, because of the use of technology is noticed in the Algerian universities particularly after the implementation of the LMD system, we have attempted to investigate EFL teachers' attitudes towards using it in teaching. The study has concerned teachers in the Department of English at the University of Bejaia.

The present research aims at shedding light on teachers' attitudes towards the use of technology in teaching.

The study is divided into two chapters. The first one is theoretical in which we have attempted to provide an overview of the different variables of the study. It consists of two sections dealing with the use technology in teaching and attitudes in which the relation between technology and attitude is shown. The second chapter is practical. It consists of two sections. The first one presents a description of the research methodology and design used in this study including population and sampling, data collection tools and analysis procedures. The second section is devoted to the analysis, interpretation and discussion of the findings.

The results of the present study have revealed that teachers have positive attitudes towards the use of technology in teaching claiming that its use is necessary and beneficial both for the teachers and their students.

2.8.Limitations of the study

In the course of the study, we have encountered many difficulties. The first and the most affecting limitation that we have faced is the appearance of the corona virus covid-19. Because of the pandemic, it was extremely difficult to hand the questionnaires to the teachers. They were mailed which explains the limited sample of the study. Only 10 teachers responded to the questionnaire. The limited sample will certainly affect the generalization of the results.

2.9.Suggestions for further research

The present study has investigated EFL teachers' attitudes towards the use of technology in teaching at the Department of English (University of Bejaia).

However, because teaching is tightly related to learning, it would be interesting to investigate the students' attitudes towards using technology. To do so, the study should not be restricted to one level. Students from different levels should be included.

Besides, the sample size should be larger in order to get more reliable data and attempt to generalize the findings to a greater number of teachers.

Moreover, the primary data collection procedure used in the study is the questionnaire. In fact, it is difficult to quantify attitudes using this instrument. Hence, conducting interviews with the teachers in order to consider deeply their attitudes would be very interesting and could be done in the future.

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Appendix

Teachers' towards the use of Technology

Questionnaire

Dear teachers

Thank you for taking part in this study to help us collect the necessary data for our research work dealing with your attitudes towards the use of technology in teaching. We will be very grateful if you provide us with precise and honest answers. Your responses will be kept confidential and the collected data will be analyzed and solely used for the purpose of this study.

Section One: Background Information

Tick the appropriate answer

1- Gender:

Male

Female

2- What is your age?

a) Less than 30 years old

c) Between 41 and 50 years old

b) Between 31 and 40 years old

d) Over 50 years old

3-What is your highest level of instruction?

a) Licence degree

d) Doctorate degree

b) Master degree

e) Professor degree

c) Magister degree

4-How long have you been teaching in the Department of English at the University of Bejaia?

a) 0-1 year

d) 11-15 years

b) 2-5 years

e) More than 15 years

c) 6-10 years

Section Two: Teachers' attitude towards the use of technology

5-What are the levels you are currently teaching?

a) First year level

d) Master I level

b) Second year level

e) Master II level

c) Third year level

6- What are the modules you are currently teaching?

.....
.....

7- In the use of technology in teaching, do you consider yourself to be a:

- a- Non-user c- Intermediate
b- Novice d- Old hand

8- What are the technologies that you use regularly in teaching?

- Projector/ data show
-Computer/ laptop
-Smart phone
-Social networking
-e.learning platform
-Others (Please, specify)

.....

9- When you teach, what are the technologies that you use on a less regular basis?

- Projector/data show
Computer/ laptop
-Smart phone
-Social networking
-e.learning platform
-Others (Please, specify)

.....

10- Can you explain why you have chosen to use that piece of technology?

.....
.....

11- Please, tick the box that suits you best.

Items	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
- Technology has changed the way I teach.					
- Technology helps me to teach better.					
-Technology helps me to overcome my individual teaching difficulties.					
- Technology facilitates my work with my students inside and outside classroom.					
-Technology improves students' learning					
-Technology enhances students' motivation to learn.					
-The use of technology in teaching is time-consuming.					
-To use technology in teaching, faculty need to be trained.					
-To use technology in teaching, facilities should be provided.					
- Faculty members who teach by using technology should be encouraged.					

12) Are there some technological devices you would like to use when you teach?

a-Yes

b- No

13) If yes, what are they?

.....

14) What is currently preventing you from using them?

.....
.....

Thank you for your collaboration!

Résumé

Aujourd'hui, la place de la technologie dans l'enseignement est d'une grande importance en raison de ses avantages. La présente étude examine les attitudes des enseignants du Département d'Anglais à l'Université de Bejaia à l'égard de l'utilisation de la technologie dans leur enseignement. Nous avons opté pour une méthodologie quantitative consistant en un questionnaire. Pour rapporter les données recueillies, une analyse statistique descriptive a été utilisée. Les résultats ont révélé que les enseignants ont des attitudes positives à l'égard de l'utilisation de la technologie dans l'enseignement. De ce fait, cela renforce leur motivation et facilite l'enseignement tant à l'intérieur qu'à l'extérieur de la classe. En outre, l'utilisation de la technologie est considérée comme une incitation à transformer leur façon d'enseigner d'une méthode traditionnelle à une méthode moderne. Cependant, les enseignants ont déclaré avoir rencontré des difficultés pendant l'utilisation de la technologie dans l'enseignement. Pour eux, elle demande à la fois des efforts et du temps, et est limitée par le manque de ressources en matériels et en locaux et surtout en stage professionnel de perfectionnement.

Mots Clés : Attitude, Enseignants, Technologie, Enseignement.