PEOPLE'S DEMOCRATIC REPUBLIC OF ALGERIA

MINISTRY OF HIGHER EDUCATION AND SCIENTIFIC RESEARCH

UNIVERSITY OF DJILLALI LIABES SIDI BEL ABBES

FACULTY OF LETTERS, LANGUAGES AND ARTS

Department of English

The Effects of Using ICT on EFL Teachers' Attitude and Anxiety

Case Study of Djillali Liabes University, Sidi Bel Abbes

Dissertation Submitted In Fulfillment of the Requirements for the Degree of Doctorate in Didactics of English Language.

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Academic Year 2017/2018

Dedication

To My Father

Boualem

Special thanks are also granted to my beloved family particularly, my mother Houaria and my siblings: Fatima, Amine, Samira, Mourad and Khaled for their unfailing moral support and assistance, which are undeniably constant sources of inspiration.

Moreover, special gratitude goes to the family of "Kessas" especially to my wife "Asmaa" and my little sister Zahira for her assistance in this work.

Finally, my gratitude goes also to all my friends, relatives far or close and especially to my cousin "Kamal".

Acknowledgements

I thank my supervisor prof. Melouk for the guidance, support and time given to me.

I also thank the members of the jury, which include "Prof. Merbouh Zouaoui, Dr. Menezla Nadia, Dr. Bouhassoun Azzeddine, Dr. Grazib Mohamed and Dr. Yahiaoui Habib", for reading and evaluating my dissertation.

I would like to take this excellent opportunity to express my appreciation to all the teachers and staff of the Department of English, Faculty of Letters, Languages and Arts, University of Djillali Liabes Sidi Bel Abbes.

I would like to thank all the people who have contributed significantly to the achievement of this work.

Abstract

Teachers' beliefs, views and attitudes towards information communication technology (ICT) can affect their teaching and behaviour. Hence, the aim of this study is to investigate factors that can affect teachers' attitude and anxiety towards the use of ICT in their language classrooms such as age, gender, teaching experience and computer training. The participants of this study are teachers of English at the English department of Djilalli Liabes University Sidi Bel Abbes. In order to find out the effects of using ICT tools on EFL teachers' attitude and anxiety, two main research tools used in this study: a questionnaire that was addressed to all the participants and an interview for 15 of them, randomly selected. The data collected were analysed and the results obtained from the questionnaire and interview revealed that teachers with all different ages, gender, teaching experience and computer training had generally positive attitude towards technology due to the social setting where they lived. Moreover, despite the fact that anxiety in foreign language classroom is inevitable, EFL teachers were less anxious when using ICT in their language classrooms.

List of Acronyms and Abbreviations

CAD: Computer Aided Design

COMPAS : Computer Anxiety Scale

CRM : Customer Relations Management

EFL :English as a Foreign Language.

ESL : Ensligh as a Second Language.

FL : Foreign Language.

ICT : Information Communication Technology.

IT : Information Technology

L2 : Second language

LAN: local area network

LMD: Licence Master doctorate.

OHP : Over Head Projector

PC : personal computer

TV: Televesion

UNESCO: United Nations Educational, Scientific and Cultural Organization.

WAN: Wide Area Network.

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General Introduction

General Introduction

In the age of technology, the integration of ICT in education in developing countries is seen by many policy makers as a sign of development. In northern Africa and especially in Algeria, we have witnessed a drastic change in the system of education and the country has recognized the use of ICT as important in improving the quality of education.

A huge support for using ICT in Algeria is proclaimed to develop the educational system by implementing an ICT policy[1]. The Algerian policy makers have focused on the improvement of ICT that is associated to human resources by establishing a commission that could find a successful strategy concerning the Algerian national information culture. The job of this commission has focused on creating synergies alongside with various sectors in the fields of research, training in addition to information systems and ICTs. This committee has also focused on identifying a national ICT working group, which would be in charge of framing short, medium and long-term action plans for its success. The ministry of post and information technology is responsible for implementation and management of the national ICT policy. Yet, the Algerian government has worked together with many international organisations to improve the use of ICT such as The United Nations Educational, Scientific and Cultural Organization (UNESCO) in addition to the Japanese government which has offered aid for teachers to get a proper ICT training programmes estimated up to USD$750,000 **1** .

The Algerian government has started a partnership with the World Bank in 2002 in order to improve and integrate plans to give easy access to ICT and creating an environment, which ICT can be used with a reasonable price for all. However, Algeria is still at an early age when it comes to the level of ICT implementation. It was until 2003 when a plan has started aiming to provide access to ICT use through the Computer for every home initiative. In 2005, the number of internet users was 1.92 million according to The World Factbook, which is still a low number.[2]

Other initiatives of national ICT have been designed in order to facilitate the access of Algeria into the world of information. Among those projects: The one of the Ministry of

[1] Survey of ICT and Education in Africa : Algeria Country Report : https://openknowledge.worldbank.org/handle/10986/10683
[2] The World Fact Book https://www.cia.gov/cia/publications/factbook/

Education to equip all schools with computers by 2005, the distance education project, the virtual university project[3].

Due the importance of ICT, which has become a reference for development according to the world economic forum in 2013, it is seen as the basic of any development strategy and that can help to avoid been left behind in a strong competitive global market. The report of World Economic Forum classifies 144 countries of the world using a number of indicators in relationship with economic context and political-regulatory, the socio-economic impact of ICT, its uses, its infrastructure and the cost of access combined with the availability of skills. Among those 144 countries, Algeria which held the 131st position while it was ranked 118th in 2002. In terms of those indicators, Algeria held the 143rd place when it comes to the economic context and political-regulatory, the 141st position when it comes to socio-economic impact of ICT, 140th position in terms of using it and 119th position in terms of its infrastructure and the cost of access combined with the availability of skills. However, Algeria held the 27th place among African countries, surpassed by countries such Uganda, Namibia, Mali, and Ethiopia.[4]

Due to the increasing demand to use ICT in education and to teach students the knowledge and skills needed in order to keep up with this trend, the Algerian government has recognized its crucial role in the development of the quality of education. The ministry of education has spent around 3 billion dinars in June 2002, following the reform of the educational process and insertion of ICT with a set of structure, which was included in the country's formal ICT policy [3.]

The Algerian ministry of education has made the use of ICT more accessible in all of its sectors by providing computer labs to all secondary schools with access to internet (10 computers for students and 5 for teachers) [3]. In addition to that, half of the middle schools have implemented ICT as a fundamental measure of the educational programme. As far the primary schools, the use of these tools is still limited to the administration and training of teachers [3].

[3] Survey of ICT and Education in Africa : Algeria Country Report : https://openknowledge.worldbank.org/handle/10986/10683

[4] The "*Global Information Technology Report*" results from a long-standing partnership between the World Economic Forum and the INSEAD, cf. "*The Networked Readiness Index 2013*", p : xxi, In http://www3.weforum.org/docs/GITR/2013/GITR_OverallRankings_2013.pdf.

In higher education, the use of ICT in Algerian universities is more appealing since computer labs are available to all universities in addition to the access of internet. Yet, each university is independent in its ICT policy to facilitate the educational process and provide more learning chances in virtual universities and with distance learning[5].

Improving the quality of teaching and learning is the prime focus of the Algerian ministry of education by integrating ICT in the educational field. Hence, they have adopted of some initiatives, which focus on e- learning. This adoption was set forth to encourage firstly the progress of e-learning resources. Second, to enable public-private partnerships that can organize resources in order to encourage the initiatives of e-learning. Moreover, to support the growth of the implemented e-learning curriculum that can be seen as backing up ICT in education. In addition, to encourage distance education and virtual universities, particularly in higher education and training. More importantly, to promote the establishing of a national ICT centre of excellence and finally to offer a reasonable basis to aid the distribution of knowledge and skill over e-learning platforms[5].

In order to compare the Algerian experience with other developed countries, it is important to say that there are not many researches concerning the integration of ICT in classrooms in Algeria in comparison to the developed countries. Rizza (2000) states that the use of ICT and computers cannot be remotely connected with efficient implementation of ICT in European and American classrooms. According to a study conducted by the department of education in USA in 2004, the feedback of teachers to technology was negative, as they have shown less confidence in using ICT. The results of this study also indicate that only 10 percent of public school teachers were well equipped and ready to use ICT in classrooms however 53 percent declared that they were "somehow prepared" while 13 percent revealed that they were not ready to use ICT yet.

Therefore, it is fair to say that although the use of ICT in classroom has brought enhancement in teaching and learning, we cannot fully assume that this is all resulted from the use of ICT. Many researchers such as Becker (2000), Kumar and Kumar (2003), Murphy (2000) Turnbull and Lawrence (2002) have connected the successful use of ICT by American and European teachers to teachers' attitude. Chin and Hortin (1994) state that teachers are expected

[5] Survey of ICT and Education in Africa : Algeria Country Report : https://openknowledge.worldbank.org/handle/10986/10683

to implement ICT in their classrooms and function as agents in charge of change in school settings of developing countries. Teachers' attitude towards the use of ICT can hold an important part in teachers' decision to hold the responsibility of efficient use of these tools.

Studies suggest that successful integration of ICT whether in business or education depends mostly on the cultural and social characteristics of the country in which it is engaged while the best use of ICT goes hand in hand with a successful training programs that can match with the demands of its local context.[6]

The history of ICT use in education dates back to the early 1990s, which can be regarded as an innovation (Porter, 1997). An innovation is defined as" ***"an idea, a practice, or object that is perceived as new by individual or other units of adoption"*** (Rogers, 1995). Rogers (1995) states that the comprehension of the local and cultural environment where a certain technology is used can provide a better understanding on how to integrate the innovation successfully. Attitude is a key concept in the successful integration of an innovation.

This leads to the belief that cultural opinions can decide how the users view the innovation. Many reasons can affect any individual by showing positive or negative attitude towards an innovation and therefore he can either implement or discard it (Rogers, 1995). In the field of education precisely, Spiegel (2001) states that teachers are seen as key players in making a successful implementation of any innovation.

Rogers (1995) states that attitude can be affected by many reasons. The first reason is "*relative advantage*" i.e. the belief that a new innovation is better than a previous one. Second, "*complexity*", which is the notion of how an innovation can be challenging to use. Moreover, Rogers (1995) adds another reason, which is "observability". It refers to how the use of an innovation can be advantageous. Finally, "*trialability*" is another reason, which can influence the attitude of a user. It is the notion of how an innovation is experienced before it is fully integrated or rejected.

While projecting Rogers' theories on the Algerian setting, we can suppose that teachers' attitude can be affected by these reasons; however, trialability is not one of those since the implementation of ICT by the Algerian ministry of education did not put into consideration the feedback of teachers (Hamdy,2007).

[6] http//:www.itu.int/osg/spu/wsis-themes/ict_stories).

Many researchers have put Rogers's theory under the test by conducting many studies focusing on the connection between teachers' attitude and variables such as computer competence and access and teacher demographics such as age, gender and teaching experience.

In addition to studies concerning Teachers' attitude towards ICT, Ursava and Karal (2009) state that the number of teachers who use ICT in classroom has increased nowadays; however, there are teachers who do not feel comfortable using these innovative tools. The level of computer anxiety of teachers are an important factor in the success of integrating ICT into language classroom. Russel and Bradley (1995) claim that the concern of computer anxiety has been part of the human life due to the suspiciousness of humans towards new inventions. Hakkinen (1994) argues that interaction between humans and computers may intrigue different emotional responses such as anxiety.

In Algeria, teaching of English along with the spread of ICT has been both promoted either by the Algerian government or by international organizations under the supervision of British Council or The American Embassy in Algeria. Hence, there should be many researches concerning accurate results whether Algeria is profiting from this implementation of ICT in education. Therefore, this study would attempt to provide some hints about the use of ICT by teachers in Algeria.

It has become a common knowledge that ICT is important for the development of individual's quality of life in all over the world. Wheeler (2000) states that integrating ICT into either economic or educational setting is affected by many factors. Many studies have been conducted in Europe and America that have concentrated on the teachers' attitude towards the use of ICT in classrooms (Woodrow, 1992; Chiero, 1999; Hardy, 1998; Hignite & Echternacht, 1992; Kendel, 1995; Koohang, 1987; Rizza, 2000; Spiegel, 2001). In Algeria, few studies have been concentrated on this aspect (Nedjah, 2010; Benettayeb, 2012; Linda, 2013; Melouk, 2014; Boukhatem, 2015). Yet, due to the absence of digital or hardcover prints, the researcher has not found any research that focuses on Algerian teachers' attitude and anxiety towards the use of ICT.

Since Algeria is considered as a developing country, its decision to implement ICT in many fields and specifically in education is seen a way to develop and follow the trend of modernization and globalization. Algerian teachers and especially university teachers are supposed to use ICT in their classrooms. Yet, we cannot ensure that the successful integration

of ICT has a direct link with teachers' awareness of the importance of ICT in their professional improvement and their students' accomplishments. This problem has been emphasized with regard to the human factor such as attitude and anxiety and the tool itself. So, for better understanding on what are the factors that make EFL teachers use ICT in their classrooms or reject it, teachers' attitude and anxiety towards ICT and specifically towards computers are investigated in terms of age, gender, computer training and years of teaching experience.

This study is somehow similar to those of many researchers on an international level in which EFL teachers' attitude and anxiety towards ICT are investigated. Based on the literature review and the concepts given, a number of research questions are raised:

1- What are EFL teachers' attitudes towards the use of ICT in classrooms?

2- What is the relationship between teachers' attitude and teachers' characteristics such as age, gender, teaching experience and computer training?

3- What are the teachers' points of view about ICT in terms of educational and cultural perceptions of ICT, Computer competency and computer access?

4- What are EFL teachers' levels of anxiety when using ICT?

5- How are gender, age, teaching experience and computer training affecting their anxiety level?

In regards of the aforementioned research questions, a number of hypotheses are formulated:

1- EFL teachers' attitude towards the use of ICT is to a large extent positive

2- Age, gender, teaching experience and computer training are not determining factors in changing teachers' attitude towards the use of ICT in classrooms.

3- EFL teachers are aware of the importance of ICT in education and culture whether they are self-taught or have received a formal training.

4- EFL teachers are less anxious when they use ICT in their classroom.

5- Gender, age, teaching experience and training are not affecting EFL teachers' anxiety level of computers while computer training is a factor in reducing anxiety level.

In order to test the above hypotheses, to answer the research questions, to gain a wide range of information and seek teachers' views, beliefs and perceptions and to determine reasons that can influence EFL teachers' attitude and anxiety towards the use of ICT in classrooms, this study is positioned within both qualitative and quantitative models. The tools used are a questionnaire and an interview.

The respondents for this study are EFL teachers at the department of English of Djilali Liabes University Sidi Bel Abbes, Faculty of Letters, Languages and Arts during the school year of 2015-2016. It is important to state that teachers are actually interested in teaching using ICT especially at the University of Sidi Bel Abbes and to be precise at the department of English, which make them the logical choice of participants in order to get concrete facts and feedback. This study attempts to provide an insight into the effectiveness of technology on teachers' attitude and anxiety especially when different tools such as presentation software like Microsoft Power Point is used in EFL classroom. If there is a positive outcome, this study may also be able to further support, encourage or promote the use of technology in teaching and learning.

The current study is divided into four chapters. The first one presents the methodology employed in the study; which are a survey questionnaire and an interview both addressed to EFL teachers at the department of English at the University of Sidi Bel Abbes, Algeria. Then, it describes the sample and instruments, elaborates the procedures of data collection before presenting the procedures for the data analysis of the survey.

The second chapter focuses on the theories and related readings in connection with teachers' attitude and anxiety that are related to language teaching and the use of ICT in teaching at the Algerian settings. This chapter also deals with the concepts of teachers' attitude and anxiety in the broader field in general and in the second/foreign language area in particular.

The third chapter discusses the analysis of data and findings collected from the questionnaires and interviews that are addressed to EFL teachers at the department of English at the University of Sidi Bel Abbes, Algeria. The final and fourth one provides some implications as well as tentative recommendations devised about the future of using ICT in the Algerian educational system in general and the successful integration of ICT in EFL classroom specifically.

Chapter One:

Methodology

Chapter One: Methodology

1.1 Introduction

This chapter presents the methodology used to conduct the study, which is a survey on the effects of using ICT on EFL teachers' attitude and anxiety at the English department, Faculty of Letters, Languages and Arts of Djilali Liabes University, Sidi Bel Abbes. This study aims to find if there is a direct link between teachers' attitude and anxiety and the use of ICT in EFL classrooms in terms of cultural and educational views related to ICT, computer competence and access and teacher demographics. Therefore, in this chapter, there is a clear description of the sample and instruments in this survey while presenting the objectives of it. The most useful tools of this study are questionnaire and interview, both addressed to EFL teachers in order to obtain data. The chapter then elaborates the procedures of data collection before presenting the procedures for the data analysis of the survey.

1.2 Objectives

It is commonly known that the objectives of the study should be based on the research questions.[1] Objectives are important features for leading a research, which are established to check the reliability and existing information and to discover the abnormality in existing knowledge.[2] In other words, to contribute a new knowledge to a current one.

Therefore, the main objective of this study is to determine reasons that can influence EFL teachers' attitude and anxiety towards the use of ICT in classrooms at department of English, Faculty of Letters, Languages and Arts of Djilali Liabes University, Sidi Bel Abbes. The findings of this study would reveal whether the use of ICT in language classroom could affect positively teachers' attitude and their level of anxiety or the other way around.

The objective of this study is also to determine the influence of the characteristics of teachers such as age, gender, years of experience and teacher training on the attitudes and the levels of anxiety among EFL teachers and their use of ICT in language classroom.

[1] http://www.erm.ecs.soton.ac.uk/theme4/aims_and_objectives.html
[2] http://mba-lectures.com/advance-research-methods/1360/what-are-the-objectives-of-research.html

This study is meant to find the relationship between teachers' attitude and anxiety and the successful integration of ICT in language classroom by exploring teachers' competency level and access to ICT and their view on the impact of ICT on education in culture. It is hoped that the findings would benefit the teachers of foreign language in general and the teachers of English and encourage them to make full use of the different resources available.

1.3 Research Design

Robson (2002) states that the approach and the method employed in a study must be suitable for the questions to be solved. Moreover, the nature of any study leads to choosing a research design. However, Robson (2002) adds that any strategy used should be taken into consideration the limitations of resources, location and time. In any research design, the style of researcher and his own ideals and preferences would have a direct effect on the research design (Robson, 2002)

This study is based on mixed model research paradigm in order to allow the investigation of teachers' attitude and anxiety towards the use of ICT, The choice of this research design is pointed by the aims of this study in addition to the type of data to be analysed and discussed. According to Creswell (2003), the basic features of well-designed mixed methods comprise of :

1. Collecting and analyzing both quantitative (closed-ended) and qualitative (open-ended) data.
2. Using demanding procedures in collecting and analyzing data appropriate to each method's tradition, such as ensuring the appropriate sample size for quantitative and qualitative analysis.
3. Integrating the data during data collection, analysis, or discussion.
4. Using procedures that implement qualitative and quantitative mechanisms concurrently or sequentially either with the same sample or with different samples.

In order to answer the research questions, it is necessary to gain a wide range of information and seek the views, beliefs and perceptions of the study participants. As a result, the use of qualitative and quantitative model is efficient because qualitative approaches allows direct interaction between researchers and participants at the time of the research (Creswell,

2003). In qualitative research, the researcher is invited into the respondent's world to see or understand the world through the respondent's eyes, that is, to explore their "lived reality" (Patton, 2002). In their attempt to differentiate between qualitative and quantitative methods, Vanderstoep & Johnston (2009) indicate that "***Quantitative research specifies numerical assignment to the phenomena under study, whereas qualitative research produces narrative or textual descriptions of the phenomena understudy".***

The choice of this study which traits both the qualitative and quantitative aspects seemed fruitful because of the countless advantages provided. Creswell (2003) states that using a mixed methods study has numerous advantages that are described as follows:

1. **Links quantitative and qualitative data:** Mixed methods are especially beneficial in understanding flaws between quantitative results and qualitative findings.

2. **Reproduces participants' opinion:** Mixed methods give a saying to study participants and guarantee that study findings are grounded in participants' practices.

3. **Promotes academic collaboration:** Such studies add coverage to multidisciplinary team research by boosting the interface of quantitative, qualitative, and mixed methods academics.

4. **Offers methodological flexibility:** Mixed methods have great flexibility and are adjustable to many study designs, such as observational studies and randomized trials, to clarify more facts than can be acquired in only quantitative research.

Zikmund (2001) states that one of the advantages of qualitative model is that instead of offering a wide-ranging interpretation of a phenomenon that can be generalized to the population, qualitative research seeks to clarify a present condition and only defines that situation for that particular sample. One of the advantages of quantitative model is that it is not necessary if the population is small or big as long as it contains every individual who is suitable for the group being investigated (Creswell, 2003). Another advantage of qualitative model is that it seeks to reach at a concept that describes the actions under observation while quantitative model seeks to confirm a tested and analysing a theory mathematically (Trochim, 2000). In this way, quantitative research is seen as more empirical and qualitative research is

more inductive (Trochim, 2000). While Miles & Huberman (1994) have designed features of qualitative and quantitative research, which are shown in the following table:

Qualitative research	**Quantitative Research**
The aim is a complete, detailed description.	The aim is to classify features, count them, and construct statistical models in an attempt to explain what is observed.
Researcher may only know roughly in advance, what he/she is looking for.	Researcher knows clearly in advance, what he/she is looking for.
Recommended during earlier phases of research projects.	Recommended during latter phases of research projects.
The design emerges as the study unfolds.	All aspects of the study are carefully designed before data is collected.
Researcher is the data-gathering instrument.	Researcher uses tools, such as questionnaires or equipment to collect numerical data.
Data is in the form of words, pictures or objects.	Data is in the form of numbers and statistics.
Subjective – individuals interpretation of events is important ,e.g., uses participant observation, in-depth interviews etc.	Objective: seeks precise measurement & analysis of target concepts, e.g., uses surveys, questionnaires etc.
Qualitative data is more 'rich', time consuming, and less able to be generalized.	Quantitative data is more efficient, able to test hypotheses, but may miss contextual detail.
Researcher tends to become subjectively immersed in the subject matter.	Researcher tends to remain objectively separated from the subject matter.

Table 1.1 features of qualitative and quantitative research (adapted from Miles & Huberman (1994))

Since the findings of any case study are not conclusive and cannot be used to make generalisations about the population of interest, the qualitative research developed an initial understanding and sound base for further decision making while the quantitative one was used here to recommend a final course of action.

Therefore, this study is positioned within both qualitative and quantitative models based on these previous features because of the countless advantages provided. The most important date used in this study are obtained from the closed-form questionnaire responses of the participants along with their responses to interview administered for them.

Case study method is used in this research, which is a suitable strategy to answer the research questions that aims for "a better and deep understanding of the real-life events" (Yin, 2009). It also allows a researcher to investigate not just the "what- the content of respondent's answer but the how" (Gubrium & Holsten, 1997). Furthermore, it provides a detailed account and analysis of one or more cases" (Johnson & Christensen, 2008).

1.4 Sample of Study

The respondents for this study are EFL teachers at the department of English of Djilali Liabes University Sidi Bel Abbes, Faculty of Letters, Languages and Arts during the school year of 2015-2016. There are many teachers who incorporated ICT in their teaching. The department of English composes of 41 teachers divided between 30 full time teachers and 11 part time ones. [3]

A representative sample should be better obtained by a casual random sample (Gay and Airasian, 2000). Researchers such as Rea and Parker (1997) calculate the required sample size of a sample in order to achieve a certain level of confidence for various populations; for example, for a population of 500, the required sample size is 250, which is half. However, in certain cases, in very small populations, a sample size of 50% of the population can be helpful to provide a certain accuracy (Rea and Parker, 1997). Having said that, it is fair to say that since the number of teachers was 41, a sample size of 21 teachers was appropriate for the purpose of this study. The researcher has given the questionnaire to all EFL teachers at the

[3] http://www.univ-sba.dz/flla/index.php/departement-de-langue-et-litterature-anglaise

department yet among those 41 teachers, which represented the sample population of this study; many teachers were unable to answer the questionnaire depending on their circumstances. Therefore, the final number of the population was 32, which is more than half of the total population (78 %).

At that particular stage of the study, the choice of participants is based on some standards, which makes the selection ideal. First, they are typical EFL Algerian teachers. Second, they are teaching at the Willaya of Sidi Bel Abbes, which make this convenient in location to the researcher in terms of access and delivery of the survey. Third, they are particularly exposed to ICT in general and they usually use ICT tools such data show in their classrooms. Finally, it seems likely that EFL teachers at the department of English, Faculty of Letters, Languages and Arts of Djilali Liabes University Sidi Bel Abbes, are qualified to propose or suggest some helpful insights about the use of ICT tools in EFL classroom.

1.5 Data Collection Instruments

In order to describe clearly definitions and concepts of our thesis, the instruments used are a questionnaire and interview. The data are gathered within validity and reliability dimensions due to the particularities of each of them.

This study employs a cross-sectional technique whereas the basis foundation of this procedure is gathering data at a specific period to maintain a stable population and avoid variables and changes of settings (Tate, 1998). Tate (1998) states that "***A choice of whether a specific study is to be confirmatory or exploratory … depends on whether there is an adequate basis in the research literature***".

Following this statement, this study can be seen as an exploratory since the researcher was unable to find neither digital nor hardcover prints of previous studies focusing on teachers' attitude and anxiety towards the use of ICT in EFL classrooms in Algerian settings.

1.5.1 Questionnaire

The quantitative method of data collection is through the use of a survey questionnaire. According to Macintyre (2000) a questionnaire is a "***…survey of different opinions from (usually) a large number of people who provide anonymous replies. The questions are standardized, i.e. each respondent receives the same number and kind."***

John Milne (1999) points out three main advantages of a questionnaire:

- The responses are gathered in a standardised way, so questionnaires are more objective, certainly more so than interviews.
- Generally, it is relatively quick to collect information using a questionnaire. However, in some situations they can take a long time not only to design but also to apply and analyse.
- Potentially information can be collected from a large portion of a group. This potential is not often realised, as returns from questionnaires are usually low. However, return rates can be dramatically improved if the questionnaire is delivered and responded to in class time.

In addition, a questionnaire is very cost effective when compared to face-to-face interview; this is especially true for studies involving large sample sizes and large geographic areas; a questionnaire is also easy to analyse. Data entry and tabulation for nearly all surveys can be easily done with many computer software packages. Furthermore, it seems to be familiar to most people, nearly everyone has had some experience completing questionnaires and they generally do not make people apprehensive. Finally, there are no verbal or visual clues to influence the respondent, as a result less bias.

On the other hand, questionnaires are known to have some disadvantages such as teacher might not wish to reveal the information or they might think that they would not benefit from responding; the reason that led the researcher to implement the study with an interview for more accuracy.

Based on these facts, the questionnaire used in this study is inspired from Albirini (2004), Samak (2006) and the Oetting's (1983) Computer Anxiety Scale (Compas). It was adopted and modified by the researcher to serve his objectives according to the features of the study. Moreover, it was designed to gather information on teachers' attitudes and anxiety when ICT tools were used to in foreign language classrooms.

The questionnaire is divided into five sections and each section contains one of the variables intended to examine in the research questions. The sections are categorised as follows: a) background information about the participants; b) computer competence level and access; c) attitude to ICT; d) views about ICT in education and culture; e) computer anxiety level. The questions that are asked about characteristics of the teacher in the questionnaire in Section A include age, gender, years of teaching experience and training experience concerning using computers. Section B contains six statements (1-6), which requires the respondents to provide information on their knowledge and competency level of computer and access. Moreover, section C contains 10 statements (7-16), which entails the respondents to provide information on their attitude towards the use of ICT while section D comprises 8 statements (17-25) which aim to reveal teachers' opinions and views about ICT in education and culture. The last section contains 10 statements (26-35), requires the participants to provide information about their computer anxiety level when they are using ICT tools such as computers.

The questionnaire contains thirty-five statements, in which the respondents have five possibilities to answer each of them: strongly agree, agree undecided, disagree and strongly disagree. The questions are designed according to the needs of this study, based on the research objectives.

1.5.2 Interviews

Dornyei (2001) points out that "quantitative methods are generally less sensitive to uncovering the motivational dynamics involved than qualitative techniques". Therefore, to solve this problem, it was important to include the qualitative data. Interviews would produce the qualitative data, which would reinforce the findings of the quantitative data. This would also increase the validity of the data collected and provide greater confidence in the

generalization of the results. According to Patton (2002), an interview consists of: ***Open-ended questions and probes yield in-depth responses about people's experiences, perceptions, opinions, feelings, and knowledge. Data consists of verbatim quotations and sufficient content to be interpretable.***

The two main interview styles are structured and unstructured.

Structured interviews**:** rely on the researcher having a structured schedule or crib sheet to follow, with closed questions (Arksey & Knight, 1999). This does not allow for much improvisation and the interviewer is often testing a theory. If further clarification is required on a certain answer given by a respondent, a further set of interview questions could be produced and a follow-up interview conducted. It is possible to investigate whether the opinions of the interviewee alter with time by carrying out a longitudinal series of interviews, with a means of categorising and potentially statically analysing any results through means of coding (Von Eye & Niedermeier, 1999).

Unstructured interviews: may begin with defined questions but then can change and evolve to respond to the interviewee's experience. Thus, there is more opportunity for the interviewer to probe around the interviewee's responses.

According to Kvale (1996), the quality of an interview relies on some criteria. For that reason, an interview is seen to be a good one if the interview questions are shorter and the answers of the interviewees are longer. A face-to-face interview also allows the interviewer to verify his or her interpretations of the subject's answers in the course of the interview; in other words, the ideal interview is to a large extent interpreted throughout the interview. A good interview is the one, which does not require extra descriptions and explanations; it is 'self-communicating'.

Based on these facts, a set of 10 interview questions are designed based on the research objectives to find out if the information provided by the respondents' in the questionnaire corresponds with information provided in the interview. Not all the participants could be included in the interview because the availability of teachers; only 15 of them were chosen, randomly, to be interviewed.

The interviews questions (see appendix F) are meant to provide further information about whether teachers view ICT as helpful tool in teaching English, bringing a positive atmosphere to learners and teacher themselves. A question is designed to seek which attitude the teachers have while presenting a lesson that requires the use of ICT. Moreover, another question is designed to seek their level of anxiety when using different ICT tools in their teaching while another one is intended to see the importance of computer training and how can other factors such as age, gender and teaching experience influence their preference to use technology in their teaching. Furthermore, a question is aimed to seek teachers' preference about the current methods or traditional ones and the difficulties faced by teachers while using these innovative tools.

The interviews were conducted in English and each one took around 10 to 15 minutes with each interviewee. The interviewees were given a brief explanation on the benefits of the study, and were allowed to give further information if they had any and freely comment about the study at hands. The interviewer gave them the opportunity to comment freely on the case study.

1.6 Data Collection Procedure

Action research, like all research activities, follows rules and procedures; furthermore, it takes the form of a continuous cycle of inquiring, exploring, identifying, and solving a problem that has occurred in the classroom (Tomal, 2003). Different procedures are involved in the data collection. Firstly, a pilot study is conducted before the actual collection of data to field test the instruments and its appropriateness for the Algerian context. Secondly, the current study collects both quantitative and qualitative data simultaneously by using the questionnaire to explore the use of ICT among EFL teachers at the department of English of Djilali Liabes University Sidi Bel Abbes, Faculty of Letters, Languages and Arts. Furthermore, the analysis of qualitative data from a series of open-ended questions would further elaborate the findings from quantitative data. In the present study, however, the literature review is conducted not only at the beginning of the study but also throughout the entire process of the study in order to build clear knowledge of theories related to the topic.

Regarding the research instruments, the questionnaire for the survey of teachers' background in ICT is designed first in order to let the interviewee have some insights about the background, aims and research questions of the study. Then, individual interview comes next while the amount of data gathered from both instruments would be used to be interpreted in the results and findings.

1.6.1 Administration of Questionnaire

The questionnaire was distributed for the participants in different times. After a brief explanation about the nature of the study and its major implication in the educational system in particular and on the teaching of English as foreign language. They were agreed to have enough time to give back the answers to the researcher himself.

For a matter of reliability, the researcher had conducted a pilot study before the actual data collected started to examine the instruments and its clarity for the participants. The questionnaire was first examined by the supervisor and then tried on two teachers to test the clarity of the questions. They were requested to complete the questionnaire and report any difficulty to understand the statements. After submitting the questionnaire to a qualified expert in the domain and the two samples of the population that were also included in the inquiry, the questionnaire was readapted specifically for the aim of the study. The researcher modified, removed and added some items to make the questionnaire adequate to the populations and the aimed objectives.

Participants were permitted to give any further critics either on the completion of the questionnaire or the choice of the study itself, regarding to the anonymous responses. They were frequently reminded to answer each single question. After the respondents completed the questionnaires, they returned them to the researcher for analysis.

1.6.2 Administration of Interview

Following the semi-structured format, the interviews with 15 participants were conducted in an informal manner (English, French or Algerian Arabic). The interview began by explaining the confidentiality of the data collection process. All the points emerging from

the interviews were confirmed with the interviewee by reading the important points taken by the researcher before the interviews ended.

At the end of each interview, the interviewee was asked if there were any important issues related to the topic of the interview that he/she wanted to add or discuss. In addition, the participants were invited to read the interview transcripts. However, none of them wished to do so.

1.7 Data Analysis

The research used content analysis in order to examine the data collected from the questionnaire and interview. They are categorized in themes and sub-themes, which make the researcher able to compare (Moore and McCabe, 2005). According to Krippendorff & Bock (2008), one of the advantages of content analysis is the ability to reduce the collected data and simplified it in order to produce results. Another advantage is that the researcher is able to organize the data in a way that can help in the fulfilment of the research objectives. Yet, Krippendorff & Bock (2008) suggest that human error can be involved in content analysis, due to the risk of any misinterpretation of that collected data. Hence, leading to either misrepresent or generate unreliable conclusions

Having said that, the data obtained from the questionnaires and interviews were categorised according to age, gender, years of teaching experience and ICT training concerning in terms of computer competence level and access, attitude to ICT, views about ICT in education and culture and computer anxiety level. This was done to enable a systematic way of analysis. The data were processed manually in the form of frequency tabulation and percentages. Similarly, the data obtained from the interview were also analysed manually and included in the discussion to answer the research questions.

1.7.1 Questionnaire Analysis

Correlation analysis is taken into account on the independent variables such as gender, age, years of teaching experience and ICT training. In addition, the analyses of individual questionnaire could not be linked to individual interviewee because of the anonymity of questionnaire responses.

For the sake of analysing the results, there is no need of any software to calculate the frequency tabulations and percentages, the analysis relied on a simple mathematical equation in which the participants represented 100% (32 participants). The result was done manually by multiplying the number of the possible answers (strongly agree, agree, undecided, disagree, strongly disagree) on 100% then divided on the number of participants.

1.7.2 Interview Analysis

Data analysis in a qualitative study is a dynamic, intuitive and creative process of thinking and theorizing (Basit, 2003). Qualitative content presents itself in the form of utterances or sentences as part of the interview transcripts. Unlike quantitative research, where the findings are summarised in terms of representative numbers, qualitative research in the form of interviews reports the findings by way of quotations from those participants in individual interviews. For this study, then, the findings were reported by using illustrative quotes from individual interviews.

1.8 Research Ethics and Trustworthiness of the Study

It is a researcher's responsibility to protect the interests of its participants and to avoid unintended negative effects toward the participants both during and following the actual study. The researcher adhered to ethical guidelines and ensured that the interests of the participants of this study are not harmed because of participating in this study. These guidelines included maintaining confidentiality of the participants, and sharing results with the interested participants.

Trustworthiness or validity of research is an important consideration for a qualitative study. Guba as cited in Shenton (2004) proposes four criteria that should be considered by qualitative researchers in ensuring the trustworthiness of a qualitative study. These criteria are transferability, confirmability, credibility and dependability.

Transferability of a study can be assured by describing the data extensively and compiling them in an orderly way to give other researchers the ability to transfer the findings of the study to other settings or cases (Bradley, 1993). According to Shenton (2004), a researcher should provide a sufficiently thick description of the study to allow readers "to

compare the instances of the phenomenon described in the research report with those that they have seen emerge in their situation".

As for Confirmability for the study, it can be maintained by keeping records of all information and data from the study, so that reviewers can confirm that the results arise from the data (Bowen, 2005). For the credibility of the study, Bradley (1993) states that one of the ways to assure it, is by employing member checking, where the researcher checks the results with the participants of a study. For this reason, member checking is conducted continuously by taking notes from the interviews to the participants at the end of each one.

Finally Lincoln and Guba, (as cited in Bowen, 2005) said that to demonstrate the dependability of a study an audit trail, where others can examine the researcher's documentation of data and methods, can be used. For this sake, an audit trail is achieved through seeking the help of my supervisor by sending him some parts of English translated transcriptions to show how I conducted the categorising and analysing the transcriptions of individual interviews .

1.9 Validity and Reliability

Brown (1996) states that validity refers to the extent to which an instrument measures what it is designed to measure. Seliger and Shohamy (1989) state that reliability refers to the consistency and accuracy of the measurement. Moreover, Gay and Airasian (2000) state that "Reliability is the degree to which a test consistently measures whatever it is measuring" (p.169). Wyckoff (1998) emphasises "..***a valid instrument measures what the researcher claims to measure; a reliable instrument measures the data in a consistent and accurate manner rather than randomly."***

Validity encompasses the entire experimental concept and establishes whether the results obtained meet all of the requirements of the scientific research method. There are two types of validity; internal validity dictates how an experimental design is structured and encompasses all of the steps of the scientific research method while external validity is the process of examining the results and questioning whether there are any other possible causal relationships.

On the other hand, the idea behind reliability is that any significant results must be more than a one-off finding and be inherently repeatable. Many experiments are more difficult to repeat and are inherently less reliable hence; reliability is a necessary ingredient for determining the overall validity of a scientific experiment and enhancing the strength of the results. In other words, other researchers must be able to perform exactly the same experiment, under the same conditions and generate the same results. This would reinforce the findings and ensure that the wider scientific community would accept the hypothesis.

There is always the chance that another unknown factor contributed to the results and findings. This extraneous causal relationship may become more apparent, as techniques are refined and perfected.[4]

1.10 Limitations

There are limitations and challenges inherited in any research method. Realising and explaining limitations of a study is one way of showing the trustworthiness of the study to its readers (Glesne, & Peshkin, 1992). Specifically there are a number of limitations in this study that must be discussed.

Careful consideration is given to the languages used in the data gathering process. However, a limitation in interpreting some of the data may have arisen because translating the interviews from French to English is a great challenge for a non-native speaker of English despite the academic level and lack of translating skills. The choice of the participants to use sometimes French during the data collection is due to their educational background however; any language barrier would not obstruct the participants.

Even though the participants were aware of the confidentiality of their identity, it is possible that the participants did not present objective views and opinions that could show negative sides of the participants themselves. This factor is particularly relevant to teachers who were interviewed.

[4] http://explorable.com/validity-and-reliability.html

One of the limitations that can be dealt with in any mixed method studies is the complexity to plan and conduct it. Creswell (2003) states that they entail cautious preparation to designate all features of research, including the study sample for qualitative and quantitative portions (identical, embedded, or parallel); timing (the sequence of qualitative and quantitative portions); and the plan for integrating data. Integrating qualitative and quantitative data during analysis is often a challenging phase for many researchers.

Another limitation is the availability of teachers considering their time schedule and circumstances, which vary from one teacher to another. The researcher insisted several times to get back the questionnaire filled on time. However, since some teachers failed to complete the questionnaire, the number of participants were reduced to 32. This leads to the limitation of small size of the sample (32 participants) because a bigger sample would enhance the reliability of the research.

The findings of the study do not generalise or may not truly represent the entire population of university teachers in Algeria or other educational and cultural contexts, but the results are credible when multiple data sources suggest similar results and trends. However, there was a limited time to gather the data (November 2015- June 2016), and some additional pressure because participants had other obligations since they had to prepare lectures and exams, work on their own dissertations at the same time and personal matters.

The results of the study are limited to a particular point in time, since the use of ICT in education is frequently promoting however, they may be used as a model or a baseline for future studies about the effects of ICT on EFL teachers in particular and ICT in education in the Algerian universities in general.

1.11 Conclusion

This chapter outlines the objectives of the study, the research design, the participants, the instruments used (questionnaire and interview) and the data collection procedure, the data analysis. It has also described the research ethics and trustworthiness of the study in addition to the validity and the reliability and finally limitations of the study.

This study uses an appropriate methodology to explore and understand how the participants perceived the effects of using technology in an EFL classroom and how it can be successfully integrated in their language classrooms based on the related theories, which can be seen in the next chapter.

Chapter Two:

Literature Review related to ICT and Teachers

Chapter Two: Literature Review Related to ICT and Teachers

2.1 Introduction

This chapter focuses on the theories related to teachers' attitude and anxiety when using technology in teaching. It also focuses on the concepts of attitude and anxiety in the broader field in general and in the second/foreign language teaching area in particular. The chapter is organised into three main parts: the importance of ICT in education, attitude of teachers and the factors influencing teachers' attitude towards technology and teachers' anxiety and factors influencing their anxiety towards the use of ICT.

2.2 The Definition of ICT

No one can deny the impact of ICT in our daily lives. The definition of ICT is not limited only to computers and it is somehow larger than that. Kennewell (2004) states that ICT covers all aspects of computers, networks (including the Internet) and certain other devices with information storage and processing capacity such as calculators, mobile phones and automatic control devices. The common factors here are that the devices process, store or communicate information, and that they are digital that is, they handle information by representing it in terms of discrete symbols. This gives them massive information handling power in relation to their size and energy consumed, compared with older analogue technologies such as radio and TV, audio and video recording, and traditional telephones. The term ICT has also been used to cover these older media, and the distinction between computing and other resources is becoming blurred as digital technology increasingly pervades our lives (Kennewell, 2004)

It is commonly known that ICT is an acronym that stands for Information Communications Technology. However, apart from explaining a contraction, there is no universal definition of ICT because of the constant evolving of on daily basis on the concepts, methods and applications. It is difficult to keep up with the changes since they happen so fast.

The nature of information (the "I" in ICT) covers topics such as the meaning and value of information, how information is controlled, the limitations of ICT and legal considerations (Kennewell, 2004). Management of information covers how data is captured, verified and stored for effective use; the manipulation, processing and distribution of information; keeping information secure and designing networks to share information. Information systems strategy considers how ICT can be used within a business or organisation as part of achieving goals and objectives. The "C" part of ICT refers to the communication of data by electronic means,

usually over some distance. This is often achieved via networks of sending and receiving equipment, wires and satellite links. The "T" part refers to technology that involved in communication, which tends to be complex. However, there are aspects of digital communications that are needed to be aware of.

Kennewell (2004) points out that ICT relate mainly to the types of network and the ways of connecting to the Internet:

- Internal networks: Usually referred to as a local area network (LAN). This involves linking a number of hardware items (input and output devices plus computer processing) together within an office or building. The aim of a LAN is to be able to share hardware facilities such as printers or scanners, software applications and data. This type of network is invaluable in the office environment where colleagues need to have access to common data or programs.

- External networks: Often needed to communicate with someone outside the user internal network. In this case, it is required for the user to be part of a Wide Area Network (WAN). The Internet is the ultimate WAN; it is a vast network of networks.

Kennewell (2004) argues that a good way to think about ICT is to consider all the uses of digital technology that already exist to help individuals businesses and organizations, use information. ICT covers any product that will store, retrieve, manipulate, transmits or receives information electronically in a digital form. For example, personal computers, digital television, email, robots.

According to Kennewell (2004), ICT resources are broadly classified as follow:

• **Hardware:** The equipment, such as a PC or interactive whiteboard;

• **Software:** The stored instructions, which enable the hardware to operate automatically, together with the information that it stores and processes, such as a word processing program and the documents produced using it

• **Media:** The materials that carry data and programs, such as floppy or hard disks.

• **Services:** Combinations of hardware, software and human resources that enable users to achieve more than they could with hardware and software alone, such as the Internet.

Application	Use
Standard Office Applications - Main Examples	
Word processing	E.g. Microsoft Word: Write letters, reports etc
Spreadsheets	E.g. Microsoft Excel; Analyze financial information; calculations; create forecasting models etc.
Database software	E.g. Oracle, Microsoft SQL Server, Access; Managing data in many forms, from basic lists (e.g. customer contacts through to complex material (e.g. catalogue)
Presentation software	E.g. Microsoft PowerPoint; make presentations, either directly using a computer screen or data projector. Publish in digital format via email or over the Internet
Desktop publishing	E.g., Adobe In design, Quark Express, Microsoft Publisher; produce newsletters, magazines and other complex documents.
Graphics software	E.g. Adobe Photoshop and Illustrator; Macromedia Freehand and Fireworks; create and edit images such as logos, drawings or pictures for use in DTP, web sites or other publications.
Specialist Applications	
Accounting package	E.g. Sage, Oracle; Manage an organisation's accounts including revenues/sales, purchases, bank accounts etc. A wide range of systems is available ranging from basic packages suitable for small businesses through to sophisticated ones aimed at multinational companies.
Computer Aided Design	Computer Aided Design (CAD) is the use of computers to assist the design process. Specialised CAD programs exist for many types of design: architectural, engineering, electronics, roadways
Customer Relations Management(CRM)	Software that allows businesses to understand better their customers by collecting and analysing data on them such as their product preferences, buying habits etc. Often linked to software applications that run call centres and loyalty cards for example.

Table 2.1 Traditional Computer Based Technologies (Adapted from Kennewell (2004).

Kennewell (2004) states that in the field of education, ICT is often categorised into two broad types of product. The first one is the traditional computer-based technologies (things that can typically done on a personal computer or using computers at home or at work). While the second one is, the more recent and fast growing range of digital communication technologies, which permit people and organizations to communicate and share information digitally. (Kennewell, 2004).

2.3 The Use of ICT in Education

ICT has become a very important tool in modern world needs and education is one of the fields where ICT is greatly used (Stevenson, 1997). According to the Stevenson (1997) report, it is essential for education to incorporate ICT into aspects of activity, even though it had not been established that use of ICT produced improvements in attainment.

The evidence of a general impact of ICT on learning has been growing. There is much evidence that well thought out applications of ICT in teaching and learning can bring about a variety of benefits for learners (NCET, 1994). Bransford (1999) identifies five particular ways of using ICT that research suggests are likely to be fruitful:

• bringing exciting curricula based on real-world problems into the classroom;

• providing scaffolds and tools to enhance learning;

• giving students and teachers more opportunities for feedback, reflection and revision;

• building local and global communities that include teachers, administrators, students, parents, practicing scientists, and other interested people;

• expanding opportunities for teacher learning.

Kennewell (2000) states that there are special features of digital media that make new approaches to traditional activities possible and offer opportunities for new ways of teaching and learning. He adds that children who are using ICT from the earliest possible age, and that knowing with ICT as well as knowing about ICT is not only essential but also relatively easy for pupils .

According to Kennewell, Parkinson and Tanner (2003), ICT can help learners access to a wide range of up-to-date information sources from within and beyond the school. Moreover, it can process information and develop high quality reports, produce dynamic images to represent relationships and engage in activities similar to those carried out by professionals and academics in the subject. Similarly, ICT can also help teachers to access a wide range of up-to-date information sources from within and beyond the school. Yet, it can prepare high quality material for pupils to see as a class and to interact with individually, organize a variety of resources in advance of a lesson that can be accessed easily and rapidly for class use. In addition, ICT can be used to collaborate with colleagues in other schools and at times of their choice.

A study conducted by Telecommunications Technology Association (TTA) in 1998 revealed that ICT that can help with teaching and learning in many aspects such as:

a) Speed and automatic functions : the feature of ICT which enables routine tasks to be completed and repeated quickly, enabling teachers to demonstrate, explore or explain aspects of their subject, and allowing pupils to concentrate on thinking and on tasks such as analysing and looking for patterns within data, asking questions and looking for answers, and explaining and presenting results.

b) Capacity and range: the ability of ICT to access and to handle large amounts of information; change timescales, or remove barriers of distance; give teachers and pupils access to historical, recent and immediate information and control over situations which would normally be outside their everyday experience.

c) Provisionally: the feature of ICT, which allows information to be changed easily and enables alternatives to be explored readily.

d) Interactivity: the function of ICT that enables rapid and dynamic feedback and response. (TTA, 1998: p 4 and p14–15).

ICT can also improve learners' autonomy as Little (1991) defines it as ***"a capacity for detachment, critical reflection, decision making and independent action."*** Dwan (2005) states that learners have prospects to control the structure of their learning, time, pace, path to the goal and measurement of success. Dwan (2005) adds that learners should not work in isolation and have total autonomy because consultation and feedback from an expert or the instructor are required.

2.3.1 The Use of ICT in English Language Teaching and Learning

ICT has an important effect on the nature of text, and consequently is affecting the content of the English curriculum as well as the way it is taught. TTA (1999a) suggests that there are number of ways in which ICT can make a positive contribution to teaching and learning.

ICT has the potential to make a significant contribution to the teaching of English by enhancing and developing students' reading and writing, supporting and enhancing the study of literary texts enabling students to engage with texts in ways, which would not always be possible through a paper-based activity, and enabling students to focus on the content of their writing. It also aims to emphasize the link between the writer and the audience, to promote the integration of reading, writing, speaking and listening (TTA, 1999a)

TTA (1999a) adds that enabling literacy skills to be extended beyond the reading and writing of chronological and linear text is also one of its objectives in addition to provide a flexible and time-saving resource, to enable the teacher to make formative assessments and finally allows the teacher to focus directly on texts at different levels, using different strategies.

Katoka (2000) states that the use of computers can offer more opportunities for authentic examples of English language in use of opportunities for realistic communication, both of which can facilitate language learning. For example, learners can have access to a much wider range of English documents for practical purposes, such as advertisements or newspapers articles. Moreover, learners of English language can feel it easier to write an e-mail message and revise it on a computer than to write with paper and pencil. Hence, learners often feel more motivated to practise the language when they use a computer.

Other scholars such as Bickel and Truscello (1996) state that using the computer can address the different learning styles of their students. Tools such as Multimedia with pictures, sounds, movies, and text can offer several different ways to deal with the same materials. They conclude that this variety will help to address the needs of students with different learning

styles. It is more natural for the learners to communicate and to interact using sound and pictures.

American Council on the Teaching of Foreign Languages (1999) suggests that access to a variety of technologies ranging from computer-assisted instruction to interactive video, CD-ROM, the internet, electronic mail, and the world wide web, would help students strengthen their linguistic skills and learn about contemporary culture and everyday life in the target country.

Researchers such as Crook (1996) and Herring (1996) argue that computers offer immediate access to the way native speakers use their language in real everyday life, which can provide the possibility of developing the socio cultural competence of language learners more readily than the pages of a textbook or the four walls of a classroom. They stress on the fact that computers seem to realise the dream of every teacher to bring the language and culture as close and as authentically as possible to students in the classroom.

2. 4 The Different ICT Tools Used In EFL Classroom

There are many ICT tools, which are used in teaching and learning English. The language lab is among the first technologies incorporated in universities.

2.4.1 The language laboratory

The language lab is one of the most useful ICT installations that gained popularity worldwide, which led many administrators to include this new teaching technology. Eventually, the lab did not spread only in language institutes but also in high schools and universities due to the increasing interest in learning other languages (Rivers, 1970). For many decades, the language laboratory remained one of the most important audio materials ever built. Rivers (1970) states that since its invention, the language lab has suffered a series of modifications in order for students and language instructors to seize all its capability such as the opportunity to record the material that is used during the lab sessions.

Rivers (1970) listed in her book "**Teaching Foreign-Language Skills**" three important statements related to use of the language laboratory that are as follow:

(a) The language laboratory is not a method.

(b) The language laboratory is not a teacher.

(c) The laboratory work must be an integral part of the language program". It is important to understand these three different ideas in order to comprehend some complaints that have been linked to the use of the language laboratory work.

The language lab has many features that was popular before the computer era. Rivers (1970) describes it as an audio source, which composed of a loudspeaker powered by a compact disk or magnetic tape player. She states that there was a problem with the different loudness for students who sat in different places in the classroom and the possibility of students' hearing problem, which was solved by individual headphones. In order to distribute the audio signal over an electronic network of student's headphones, there is an opportunity for individualizing instruction but it brings an immediate problem of communication with the teacher. Rivers (1970) states that sophisticated language lab gives individual audio and, then, video feeds to all students. Microphones are provided for student's feedback and recording, which the teacher can control and check. Rivers (1970) mentions series of language lab advantages that are as follow:

a) For the first time in the history of foreign-language teaching, each student may have the opportunity to hear native speech clearly and distinctly.

b) The students may hear this authentic native speech as frequently as he and his teacher desire.
c) The taped lesson provides an unchanging and unwearyingly model of native speech for the student to imitate.
d) In the language laboratory, the student may listen to a great variety of foreign voices, both male and female.
e) Each student may hear and use the foreign language throughout the laboratory session, instead of wasting time waiting for his turn in a large group, as he does in the usual classroom situation.
f) The laboratory frees the teacher from certain problems of class directions and classroom management, enabling him to concentrate on the problems of individual students.

Moreover, Rivers (1970) states that language teachers and students can also meet other benefits while using language lab such as:

a) In language lab sessions, students can listen to different speakers recorded in high quality tapes;

b) In the language laboratory, each student can participate and practice as much as possible while repeating sentences aloud. If a listen-response-compare laboratory is available, the learner can record the lesson. Then he or she can listen and compare his or her own responses with those of the tape.

c) The language laboratory makes oral-aural assessment easier since teachers may separately evaluate students; thus, learners will not have access to other people's answers. During an oral exam the teacher can focus on the oral production of the student he or she is interviewing. Afterwards, he or she can listen to the tape, take notes, and make corrections. A feedback form with mistakes can be given to students as well.

Other scholars have shifted their focus on language acquisition that can be affected by the language laboratory. Among those scholars, Gass, Mackey and Ross-Feldman (2005) who have conducted a study that is meant to analyse the quality of conversational interactions in classrooms and laboratories between students who study Spanish as a foreign language. The study shows minor differences between the two teaching settings. Celce-Murcia, Brinton and Goodwin (1996) point out another advantage in using a language lab to teach pronunciation. Brinton et al, (1996) state that controlled practice in the teaching of pronunciation can be conducted in a listen-respond-compare language laboratory.

Brinton et al, (1996) state:

> ***"Another controlled practice technique that works well if a language laboratory is available is that of mirroring or shadowing. To begin, learners read over the written text of a speech sample be it a conversation or monologue several times making sure that they understand it well. Then, learners listen to the tape several times while reading along silently until their eyes follow the text in coordination with the speaker. Using a two-track tape system, learners record their voice while reading along with the speaker trying to maintain the same speed, rhythm, stress, and intonation. Finally, learners can play back the two simultaneous recordings and compare them."***

This kind of activity can improve students' pronunciation, which can lead to the idea that the language lab is a helpful teaching tool that can be used to teach oral skills to students of different levels. Antich (1988) states that teaching students by using the language lab is very helpful. Antich (1988) adds that there is varied methods that can enable students to keep in contact with additional material for the courses containing different styles and speakers. Antich (1988) explains that advanced students are able to recognise their own difficulties, which help them to correct their own mistakes concerning pronunciation of some phonemes and allophones or intonation.

According to Rivers (1970), the language laboratory can be used in order to apply a method that belongs to a combination of different methods. Yet, she stresses on the fact that even though its usage is not essential in teaching the oral skills and the sub-skill of pronunciation, it would help a lot to improve students' listening comprehension, speaking, pronunciation as well as grammar in communicative contexts. Rivers (1970) also states that the available materials needs to be studied carefully and critically to see that they are based on sound grammatical and pedagogical principles and are interesting to the students. Her arguments indicates that if teachers do not pay attention to the type of materials brought to the language lab session, the use of the language lab and its effectiveness in helping students acquire the target language would fail.

According to Lado (1964), during the first years of the use of the language laboratory, many language teachers felt somehow released from implementing innovative and creative material for the lab session. He describes this misconception as "*the lab-as-the-centre attitude*" in which language teachers consider the material brought to the lab session as the centre of the teaching process. Underwood (1984) adds that due to the boring and mechanical material used in the language lab sessions, many students started to feel the pointless use of this tool, began to dislike being uncomfortable to wear earphones, and started taking the booths apart.

However, Rivers (1970) argues that one of the most important advantages linked to the language lab is the fact that for the first time students were able to actively participate as much as possible repeating utterances aloud instead of waiting for their turn. She stresses on the fact that in a class of thirty and more students, it has not been possible during classroom sessions to give each student all the practice he needed, and there has been no effective way of controlling the amount and accuracy of his learning practice out of schools hours. Therefore, with the establishment of a laboratory, much of this individual practice takes place in a situation where

an accurate model and immediate correction of mistakes are available. In addition, each student is provided with carefully graded and sequenced learning practice, and a way of verifying how he is progressing. Rivers (1970) emphasises on the effectiveness of the learning is dependent on the thought and care in which the teacher has put into the programming of the practice tapes. In other words, the work of the students in the laboratory will be only as good as the program with which they are asked to perform.

Rivers (1970) states that the language lab session is a counterpart to the time spent in the classroom. In other words, ***"The work in any one laboratory must consist of practicing what has been taught in a previous class lesson or work for which the student has been prepared in some way by the teacher."***

Rivers (1970) argues that even though teachers might include lab sessions in their courses, it does not mean that all the techniques are linked to audio-lingual principles since different methods or approaches can be combined. However, this argument has encountered a disagreement among scholars like Howatt and Widdowson (2004) who argue that the language laboratory offered two positive aspects in the classroom. They point out that the lab could do two things, which the teacher either found difficult or could not do at all. First, it allows learners to hear themselves speak. This was a novel experience in the 1960s, and quite entertaining for a time. Secondly, it was an excellent resource for developing listening comprehension. It could offer a range of different voices that went far beyond the teacher's own resources. However, this required a certain amount of sophistication from learners, particularly if they were working on their own.

Information technology has become a universal trend nowadays. This can put a massive burden on teachers to acquire a set of computer skills (Nunan, 2005). Yet, Nunan (2005) states that numerous teachers are uncertain about what technology is.

2.4.2 Power Point Presentation

Rich (2002) defines PowerPoint presentation as typically synchronous, group, and semiprivate a powerful form of reading and one well suited to the hierarchical, group-oriented, and highly social nature of most corporations. While Radanov (2008) defines PowerPoint as a type of presentation software that allows one to show coloured text and images with simple animation and sound. It can be shown on a computer screen or using a projector with a large screen for the whole class who can view the same presentation at the same time.

Rich (2002) states that it is often assumed that PowerPoint slides simply help the reader and the listener to follow the speaker's argument. However, he proposes that their actual function, as in most vocally glossed reading, is somewhat different. Rich (2002) emphasises ***"The slides externalize the truth and allow the audience to analyze it separately, but simultaneously, from what the speaker is saying about the same truth."*** Therefore, according to Rich (2002), the slides are somehow more than opinions yet, they are ***"... a written artifact on a wall owned in common by all in the room-even if, as is usually the case, the speaker wrote the words in the first place".*** Moreover, Rich (2002) adds, ***"It is for this reason that it is considered a faux pas for the speaker to simply read the slides. For a speaker to read the slides is to attempt to make private what is now perceived as public."*** Rich (2002) states that the speaker should not read directly from notes while clicking on the slides since it is considered "***a faux pas".*** Furthermore, Rich (2002) adds that ***"…for a speaker to read from notes is to say that the speaker is not commenting about the commonly held written artifact, but is rather reporting on some previous, private musings."***

PowerPoint has many features that qualify it to be a useful classroom tool. It can save teachers time because the materials that are produced for PowerPoint can be reused many times. PowerPoint also allows teachers to vary their teaching methods and break the routine (Ahmed, 2005). In contrast, Rich (2002) describes PowerPoint as a time consuming tool. He adds that Power Point slides are actually quite time-consuming and difficult to produce. Rich (2002) explains that the information (to use that compromised word) contained in a forty-five-minute PowerPoint presentation can usually be contained in a short memo.

Rich (2002) states that there are three primary formal elements to a PowerPoint presentation: the slides, the presenter, and the audience. The *slides* are usually projected onto a wall or screen behind the presenter, which creates sometimes one of the few problems in the Power Point ritual. In other words, the presenter must decide how to deal with imagery *behind* and how to point to specific elements on the slides, without either blocking the audience's view or losing eye contact with it. Moreover, there is another place where the slides and the presenter run across a rough edge. The presenter must *change the slides,* either by placing new overheads on the projector, by pressing a hand-controller, by using the key on the laptop, or by calling out "next" to an unseen compatriot. Rich (2002) adds, "***This extra textual activity can on occasion disrupt the flow of the gloss".***

Rich (2002) describes slide as a combination of words and images, though either can attenuate to zero on any given slide. Although there is great variation in word and image, there are certain defining formalisms, deeply embedded within the construction parts of the PowerPoint program, that make a PowerPoint slide instantly recognisable. On the word side, there is the title, usually in boldface and placed across the top; there are numbered or ding batted lists, usually in a terse form of PowerPoint English; there are asides or quotes or miscellaneous short blocks of text set apart for their emphasis; and there are ownership and numbering texts placed across the bottom (Rich,2002) .

Rich (2002) states that both in slide construction and in slide consumption (except for anomalies such as cartoons with speech bubbles) the graphics are distinct from the text. The graphics are either "clip art", which are drawn with scalable vectors and fill, or pictures, which are bitmaps. According to Rich (2002), the relationship between graphics and text can be highly varied and serve many purposes. Graphics can emphasise a certain piece of text; they can illustrate a point; they can be the object of the textual references; or they can be an aside (humorous or serious). In a well-formed talk, the slides have a common background image; a floating landscape providing tone and cohesion, with a small number of fonts used in a consistent manner and an overall graphical style. (Rich, 2002).

Regarding the learners, PowerPoint is a fun and motivational tool, which presents knowledge in an interactive way. Additionally, the different multi-media applications PowerPoint offers can appeal to various learning styles (e.g. visual, auditory learners). Moreover, Steele & Johnson (n.d) note that using PowerPoint's big screen allows all learners (at the front and back of the class) to see what is being introduced. They argue that, when used appropriately, it can enhance the teacher's instruction and learners' motivation. Of course, teachers must also be aware of potential disadvantages of using PowerPoint.

The use of presentation software in a friendly, non-threatening classroom atmosphere encourages use of all four skills. Fisher (2003) explains that PowerPoint "can be used for initial teaching, for practice and drilling, for games, for reviews, and for tests." However, Towndrow and Vallance (2004) suggest that ***"the design of language learning tasks is not context-free, stand-alone exercise".*** It is important that there is proper lesson outline that specifies clear and achievable language learning objectives.

2.5 ICT in Algerian Education

Algeria is encouraging and fostering the use of ICT to enhance the development process in general and the development of the educational system in particular, paving the road for an ICT policy framework along with an implementation strategy. The government has placed weight on the development of ICT-related human resources. In light of the globally emerging knowledge and information society, Algeria has formed a committee in charge of defining the elements of an Algerian national information society strategy. It is anticipated that the committee will work on creating synergies among the different sectors in the area of infrastructure, training, and research as well as information systems and ICTs. The committee will identify a national ICT working group, which will be charged with formulating short, medium, and long-term action plans for ICT (Hamdy, 2007).

According to Hamdy (2007), the government is committed to set forth a policy for the integration of ICT within the educational system. The reform of the educational process and inclusion of ICT with a set structure was formally included in the country's formal ICT policy in June 2002 with an allocation of three billions dinars.

The Ministry of Education is working on building the infrastructure for enabling the ICT environment. In Algeria, all education institutions deliver the same ICT curriculum as designed by the Ministry of Education. However, the plan is to integrate ICT within the different subject matters to enhance learning and education. It therefore becomes a process of learning through the use of ICT rather than learning about the technology.

Some universities have computer labs and Internet access for faculty, students, and administration in addition to the availability of digital libraries. Each university has its own ICT policy to accelerate the educational process and offer better learning opportunities in virtual universities and with distance and open learning.

Within the framework of enhancing the level of ICT penetration and usage in education, the government has signed a number of agreements with international organisations (Hamdy, 2007). For example, UNESCO is undertaking a number of initiatives for the proper integration of ICT in the Algerian education system, and the Japanese government has provided funding for teacher training programmes totalling to USD$750,000 (Hamdy,2007).

According to a survey conducted by Hamdy (2007), there are a number of initiatives that have been adopted in an attempt to improve the quality of teaching and learning. The related strategies, under the heading of e-learning, were set forth to:

• Promote the development of e-learning resources

• Facilitate public-private partnerships to mobilise resources in order to support e-learning initiatives

• Promote the development of integrated e-learning curriculum to support ICT in education

• Promote distance education and virtual institutions, particularly in higher education and training.

• Promote the establishment of a national ICT centre of excellence

• Provide affordable infrastructure to facilitate dissemination of knowledge and skill through e-learning platforms

• Promote the development of content to address the educational needs of primary, secondary, and tertiary institutions

• Create awareness of the opportunities offered by ICT as an educational tool to the education sector

• Facilitate sharing of e-learning resources between institutions

• Integrate e-learning resources with other existing resources.

2.6 Attitude

Thomas (1971) has simply expressed that attitude is a complex of feelings, desires, fears, convictions, prejudices or other tendencies that have given a set of readiness to act because of varied experience. Attitude refers to ***"a psychological tendency that is expressed by evaluating a particular entity with some degree of favour or disfavour"*** (Eagly & Chaiken, 1993, p. 1).

The concept of attitude is related to social psychology and is necessary to the psychology of personality (Rokeach, 1973). Furthermore, the concept of attitude has become increasingly significant in almost every behavioural science (Fishbein, 1967). Numerous definitions in the literature exist for the concept of attitude. Triandis (1971) states that attitude was conceptualized as consisting of three components: a cognitive, affective and behavioural component. However, other scholars argued attitude is differentiated from the affective or evaluative domain (Fishbein and Ajzen, 1975). Likewise, Fishbein and Ajzen (1975) point out to the common acceptance that the most essential aspect of the concept of attitude is affect while the majority of instruments developed to measure attitude can come in the form of a single number aimed to catalogue this general evaluation or feeling of approval or disapproval towards the object in question. Those scholars have also explained that attitude is derived from behaviour, which makes it difficult to observe directly.

Hogg & Vaughan (2005) define attitude as a relatively enduring organization of beliefs, feelings, and behavioural tendencies towards socially significant objects, groups, events or symbols. In the educational environment, attitudes play an important role in the achievement of educational objectives (Hogg & Vaughan, 2005). With respect to the use of new technologies in the classroom, there is a need for traditional teaching methods to accommodate what are sometimes insufficient information.

Moreover, Allport (1935) as cited in Albarracin et al., (2005) indicates that attitude is a mental or neural state of readiness, organized through experience, exerting a directive or dynamic influence upon the individual's response to all objects and situations with which it is related. Allport (1935) states that despite the fact that attitude is complex, emphasises two essential aspects that contribute a lot in understanding the concept of attitude. In their definition, Fishbein and Ajzen (1975), emphasise the learned nature of attitudes ***"an attitude is a learned predisposition to respond in a consistently favourable or unfavourable manner with respect to a given object"***

During the early 1970s, Ajzen and Fishbein developed a theory called the Theory of Reasoned Action. By 1980, they used this theory to conduct a study about human behaviour and to develop appropriate interventions. The theory offered a framework to learn the relationship between attitudes and behaviour. This theory indicates that behavioural intent the most important determinant of a person's behaviour. The intention of individual to perform a behaviour is a mixture of the person's attitude toward performing the behaviour and subjective

norms. Ajzen and Fishbein (1980) presume that any person is usually rational and reasonable and has a system of using available information on their advantage. To put it more explicitly, people assess the outcomes of their actions before they decide to engage or not engage in a certain behaviour.

According to Ajzen and Fishbein (1980), Attitude is defined as a positive or a negative feeling associated with performing a specific behaviour. Ajzen and Fishbein (1980) state that an individual would have a favorable attitude if the person believes that the performance of the behaviour would lead to mostly positive outcome and the other way around (Ajzen and Fishbein, 1980). In other words, an attitude of a person toward a behaviour composes of two phases: a belief of a good outcome resulting from a particular behaviour and after that proceeded with an evaluation of the outcome of that behaviour. Moreover, Ajzen and Fishbein (1980) add that subjective norms are referred to the perception of a person to what others believe that the individual should do. Eagly and Chaiken (1993) state a subjective norm is a type of peer pressure. Eagly and Chaiken (1993) add that people around a person can influence a person's participation or the intent to participate in any behaviour. Furthermore, Eagly and Chaiken (1993) emphasise an evaluative definition of attitude, which is "***a psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor***".

Ajzen and Fishbein (1980) point out that attitude composes of three elements: affect, cognition, and behaviour. First, the affective element refers to the feeling or emotions of an individual towards a person or an object. Second, the cognitive element refers to the knowledge of a person about a person or an object. Finally, the behavioural element refers to the simple and plain behaviour of a person towards a person or an object. Ajzen and Fishbein (1980) states that these previous elements are required to get a fully description of attitude and should be assessed by attaining procedures of all these elements.

Moreover, it is noted by many scholars that L.L. Thurstone was accredited with transforming the notion of measuring attitude when he described a procedure for attitude measurement in 1928 (Dawes, 1972). Despite the fact that there is no common agreement on the definition of attitude, Dawes (1972) explains that there is no need for common agreement among social psychologists on the definition of attitude to measure attitude. Dawes (1972) argues that the procedure of measurement used, for example, measuring a precise property is not affected by disagreements about whether the property being measured should or should not be included in the definition. Both Fishbein and Ajzen (1975) disagreed with this perspective

as they suggested that a clear definition is essential because it helps in the formation of effective processes of measurement.

There are many theorists such as Smith (1947), Smith Bruner and White (1956), Katz and Stotland (1959), and Katz (1960) who point out the functions of attitudes in personality. Their theory suggests that attitude supports an individual understanding of a complex world, guard their self-worth.it can also help people regulate, and allow them to communicate their needed values.

Triandis (1971) states that individuals learn an attitude. Furthermore, Allport (1954) states that most of the developed attitude of individual are obtained from interacting with family and friends. Triandis (1971) adds that people also acquire an attitude through experience with the attitude object. However, he claims that only a small portion of an individual's attitude is developed in this manner.

According to Triandis (1971), attitude could be changed in a number of ways. He explains that the possible change of the cognitive component by the acquisition of new information. The affective component can be transformed by unkind practises involving the attitude object and finally, changes in norms or laws that force a behavioural change can alter the behavioural component.

Many scholars disagree on the theoretical framework to explain the relationship between attitude and behaviour. In general, scholars consider attitude with other aspects can expect the behaviour of a person with a great precision. Triandis (1971) is one of those scholars who argues that behaviour could be foreseen based on four mechanisms: attitude, norms, habits, and expectation. He adds that there is a strong connection between attitude and behaviour when the four components are constant. Nevertheless, the link between attitude and behaviour is weak when the four factors are unpredictable. Yet, Rokeach (1972) suggests that behaviour is a function of an attitude towards an object and attitude towards a situation. Rokeach (1972) considers that an individual cannot behave contrary to his or her attitude. For example, if the consequences of a research appear to support an individual who behaved opposing to an exact attitude, it shows that the individual would act in a manner consistent with a second or third attitude that overtook in significance the attitude that would be measured. In addition, Rokeach (1972) explains that if the connection between attitude and behaviour is negative, there is a possibility that attitude is consistent with behaviour

In contrast, Fishbein and Ajzen (1975) argue that behavioural intentions could predict behaviour. Behavioural intentions are a function of two aspects, which are attitude and subjective norms. In this concept, attitude is regarded as one of the major factors of behavioural intentions (Fishbein and Ajzen, 1975). Jung (1971) defines attitude: ***"readiness of the psyche to act or react in a certain way".***

Jung (1971) claims there are two core aspects that describe attitude. The first aspect, which is readiness for response, is considered central one. An attitude is not behaviour, not something that a person does. Yet, it is a preparation for behaviour, a tendency to react in a specific way to the attitude object. The term attitude consists of things, people, places, ideas, actions, or situations, either singular or plural. The second aspect, which is the "motivating" or driving force of attitudes. Attitude is not just reflexive outcome of experiences. Instead, Allport (1935) claims that there have two active actions: exerting a directive or dynamic influence. Dynamic action indicates that it urges or drives behaviour while directive action guides the form and manner of behaviour into specific channels, encouraging some actions and deterring others.

Other scholars such as Olson and Maio (2003) define attitudes as tendencies to assess objects positively or negatively. According to Olson and Maio (2003), attitude is characterised by other necessary aspects like their relatively "enduring nature". Yet, this is not generally acceptable because an attitude can be stable while other can be instable. Olson and Maio (2003) explain that the evaluation feature of attitude is the nature to respond in a positive or negative behaviour to given objects. Similarly, Bem (1972) as cited in Oskamps and Schultz (2005) defines attitude, as "***Attitudes are likes and dislikes***".

2.6.1 The Attitude of Teachers towards the Use of ICT

Scholars indicate that there are many factors contributing in the achievement of a meaningful use of technology in education. Teachers' attitude towards the use of technology in teaching is one of these factors. Rogers (1995) states that attitude is the factor that makes a person ready to try a new innovation or not. The achievement of technology use in the educational settings depends mostly on teachers attitudes toward technology use (Albirini, 2005). Other scholars such as Woodrow (1992) who also points out that teachers' positive attitude toward technology is a required condition for the effective use of computers in the classroom. Others like Kluever, Lam, Hoffman, Green and Swearinges (1994) also stress on

the importance of having a positive attitude by teachers can lead to a successful use of technologies in the classroom.

Albirini (2005) states that teachers' attitude is seen as a helpful indicator of the outcomes of using innovations in the educational field. Hence, teachers' attitude towards ICT can play a major role in accepting to use computers. According to Chin and Hortin (1994), teachers are obliged to perform a very crucial role of the "change agent" in the connection between technology and the learner. Moreover, many previous studies in this respect show the critical role that teachers play in the success of student learning by using ICT.

Many studies were conducted to determine teachers' attitudes toward computer use. For example, the research of Harrison and Rainer in (1992), which reveals that less computer skilled participants had negative attitude towards computer compared to those with positive attitude who displayed readiness to accept and adapt to technology. While investigating the attitude of EFL teachers in Syrian high schools towards technology in 2004, the results of this study, which is made by Albirini, indicate a positive attitude from teachers toward technology use in education.

2.6.2 Factors Influencing Teachers' Attitude towards the Use of ICT

There are many variables that influence teachers' attitude towards ICT. Blankenship (1998) states that age is a factor. North and Noyes (2002) assert that gender is another factor. Mukti (2000) states that knowledge about computers is a factor while Yildirim (2000) claims computer anxiety and liking as a determining factor. Moreover, Tsitouridou and Vryzas (2003) state that training is a factor whereas Kumar and Kumar (2003) mention computer experience. In general, combining those factors together can show the massive impact on teachers' attitude towards computers.

According to Woodrow (1992), age is not an important factor in correlation to teachers' attitude towards technology. Other scholars like Handler (1993) and Massoud (1991) share the same point of view. On the contrary, Blankenship's conclusions in his study (1998) suggest that age is a crucial factor in correlation with teachers' attitude towards the use of ICT. Moreover, Chio (1992) states in his study that despite the fact that young teachers are more knowledgeable and skilful when it comes to computers, senior teachers had positive attitude towards computer.

However, in the study of Kendel (1995), the results reveal that young teachers have more positive attitude towards ICT than senior teachers do.

Another study conducted by Spiegel (2001) to seek the attitude of secondary school teachers towards ICT at four public schools in Netherlands shows that age is not strongly related to attitude towards ICT.

Woodrow (1992) states that gender has no significant influence on teachers' attitude towards computers. Other researchers such as Kendel (1995) concludes that gender does not play a major role in influencing teachers' attitude towards ICT. However, the results of a study conducted by North and Noyes (2002) indicate that computing is considered a "***masculine activity".*** The results of the study also reveal a correlation between gender and technophobia and "***technological gender gap"*** (North and Noyes, 2002).

Gobbo and Girardi (2001) state that the relationship between teachers' attitude and computer technology training is positive. Gobbo and Girardi (2001) stress on the fact that training has a considerable influence on the ways in which a teacher fosters technology tools in the classroom. Moreover, Gobbo and Girardi (2001) emphasise on the integration of technology and teaching styles. The results of their study show that the teachers' competency level with technology play an important role in implementing technology in their classrooms (Gobbo & Girardi, 2001).

However, Veen (1993) has a research on observing four teachers in the middle of employing ICT in their classrooms in Holland and describing their regular pedagogical practices. The results of this research indicate that teachers' attitude towards ICT concerning what should be taught and the way it should be taught is an effective factor (Veen, 1993). Veen (1993) adds that teachers' competency in handling tasks and providing lessons is more important than computer related technical skills.

McAlister, Dunn and Quinn (2005) state that teachers must be given the chance to be familiar with latest technologies. According to a study of Mcalister et al., (2005) about the use of computers to teach mathematics, teachers have a positive attitude towards using computers despite the fact that many of them had a limited experience with technology.

Mcalister et al., (2005) conclude that ICT training is important for teachers. Moreover, other researchers like Gulbahar (2008) also points out to the importance of in-service training that ICT training which can be a factor in influencing teachers' attitude towards ICT.

Many studies focus on ICT training and its effect on changing teachers' attitude towards ICT. A study conducted by Egbert, Paulis, and Nakamichi (2002) about the use of technology to teach English as a second language, show that the constraints of time, support and resources had limited the use of ICT in English classrooms. Moreover, Ridgway and Passey (1991) point out to that teachers should be provided with computer training that can cover all computer skills unlike the use of word processor in the classroom. In the same context, Jones (2002) states that there is a need for teachers to be informed users of technology and this can be done through technology training offered for them.

Cox (1999) states that teachers who integrate technology in classrooms are also ready to change their teaching approaches. According to Sepehr ad Harris (1995), teachers who are willing to use ICT when it is available have a positive attitude towards ICT. Ducate and Arnold (2006) state that interactive venues and discussion boards can be helpful for teachers in order to learn with technology instead of using only the technology to teach. Moreover, Becker, Ravitz and Wong (1999) report that teachers with a strong commitment to teach are those who are ready to integrate ICT tools more willingly.

Albion (1999) states that negative attitude towards technology prevents the integration of teaching and learning while teachers' positive attitude can facilitate it. However, Albion (1999) claims that not only teachers with positive attitude should be included in technology training and encouraged but also those with negative attitude must be appreciated and considered to alter their attitude. According to Ross, Hogaboam-Gray and Hannay (1999), the need for additional input as technology comes from the point of view of teachers on their students' need for activities that help them enhance their language skills.

According to Guskey (1989) and Saye (1998), teachers play an important role in classroom and their acceptance for a change comes only when this change can make their work easier. Woodrow (1987) states that the integration of technology into education has the ability to shape completely the practices in education but to make this change a reality, teachers must have a positive attitude towards this change.

Moreover, he adds that teachers' resistance to the change can prevent the success of technology integration.in the same context, Saye (1998) states that teachers with positive attitude can facilitate the acquisition of new technologies into education.

Allan and Will (2001) investigated the Chinese teachers' attitude towards the use of computers in education. As conclusion in their study, Allan and Will (2001) state that attitude of teachers is a key role in a successful implementation of technology in teaching. Bullock (2004) claims that teachers' attitude can be either an enabling factor or a disabling one in the integration of technology. Teachers with positive attitude are more comfortable when using technology in teaching and any successful change in education practices depends mostly on teachers' attitude towards this change (Kersaint, Horton, Stohl, and Garofalo, 2003)

Watson (1998) states that teachers' positive attitude is a key role in improving computer implementation and at the same time making teachers less resilient towards computers .Watson (1998) warns from the idea that compensating teachers with technology and that ***"….the teacher is an empty vessel into which this externally defined innovation must be poured."***

According to Dupagne and Krendl (1992), computer experience can help in attaining a positive attitude towards computers. However, teachers with no computer experience often have a low confidence when they start using technology in teaching. Dupagne and Krendl (1992) state that this low confidence can be related to high anxiety towards computers, which can come from negative attitude and ultimately affect the learning process negatively.

Woodrow (1992) states that computer experience is related to positive attitude. Moreover, Chou (1997) emphasises on computer experience influencing teacher attitudes toward computers. In addition, Ropp (1999) states that there is a connection between computer usage weekly and its impact on computer attitudes. This link between computer experience and attitude towards technology is reported also by Gaudron and Vignoli (2002).

Isleem (2003) states that in educational settings, teachers' attitude towards the use of ICT is an indicator of the use of new technologies. Teachers' attitude towards computers can influence their own experiences and at the same time their students' experiences (Christensen, 1998).

Moreover, Blankenship (1998) also stresses the fact that teachers' attitude towards computers influence their desire to acquire a computer training and at the same time their enthusiasm to use of technology in the classroom. Christensen (1998) states that developing a positive attitude can encourage those teachers with no experience in technology to have the right training to learn computer skills which they need to implement in the classroom

Effective use of technology can ease and regulate the instructional strategies of teachers to develop students' learning (Teo, Lee and Chai, 2008). Moreover, Kagan (1992) states that the attitude of teachers towards technology plays a major role in teachers' readiness to foster technology in classrooms. Rohaan, Taconis and Jochems (2010) stress on the importance of understanding teachers' awareness and readiness to change their teaching style to make it compatible with technology in their classrooms. Albion and Ertmer (2002) suggest that changing teaching style is associated with teachers' attitude towards technology.

Berner (2003) suggests that there is a link between teachers' competency in technology and its effect on their attitude. In the same respect, Francis-Pelton and Pelton (1996) have a research about the relationship between teachers' attitude and willingness to use technology. The results of their study indicate that teachers consider computers an important tool that can be a part of students' education. However, their limited knowledge and training influence teachers negatively, which can shake their confidence that lead also to the rejection of technology (Francis-Pelton and Pelton, 1996). In addition, results of the study conducted by Al-Oteawi (2002) reveal how negative attitude of teachers towards the use of ICT in education comes mostly from their lack of knowledge and the appropriate computer skills.

Zammit (1992) states that teachers' confidence and their computer skills can determine the successful implementation of ICT in education. In their study, Erdemir, Bakirci and Eyduran (2009) state that pre-service teachers show inadequacy for internet and computer use for the teaching that led to a negative attitude by teacher. However, they prepare basic materials for teaching with simple educational tools.

2.7 Anxiety

Anxiety is a human psychological phenomenon. Oxford advanced learner dictionary defines it as ***"the state of feeling nervous or worry that something bad is going to happen"*** [1] while Merriam Webster dictionary defines it as : ***"An abnormal and overwhelming sense of apprehension and fear often marked by physiological signs (as sweating, tension, and increased pulse), by doubt concerning the reality and nature of the threat, and by self-doubt about one's capacity to cope with it."*** [2]

Fletcher and Langley (2009) state that every human being can experience anxiety, which is a natural feeling that can occur during an unusual situation or different changes in life like starting a new work. Anxiety can help to either perform better or lead to the feeling of fear that can cause failure to achieve the task (Fletcher and Langley, 2009).

According to Dilmac, Hamarta and Arslan (2009), anxiety is seen as "***a condition of being stimulated that manifests itself with physical emotional and mental alteration the individual experience against a non-objective danger."***

Other researchers such as Yoon (2012), states that anxiety is "***a normal feeling to human beings which can be brought about by any internal or external changes, uncertain situations, or feeling of uncertainty. That is, when people face a particular situation that is not familiar with, it is natural most of them have the same feeling, that is, nervousness, and tense, which can be also considered as anxiety***". There are numerous examples of anxiety such as foreign language teachers or learners, an oral interview or presentation or speaking in public.

Strawderman (1985) defines anxiety ***"a complex reaction that is a transitory condition of the organism that varies in intensity and fluctuates over time"***. Hewitt (2011) defines it "***an abnormal and overwhelming sense of apprehension and fear often marked by physiological signs (as sweating, tension, and increased pulse), by doubt concerning the reality and nature of the threat, and by self-doubt about one's capacity to cope with it".***

[1] http://www.oxfordlearnersdictionaries.com/definition/english/anxiety
[2] https://www.merriam-webster.com/dictionary/anxiety

From the point of view of psychologists, Spielberger (1983) views anxiety as "***the subjective feeling of tension, apprehension, nervousness, and worry associated with an arousal of the automatic nervous system".*** While Scovel (1978) describes it as ***"a state of apprehension, a vague fear that is only indirectly associated with an object"***

Cambridge (2012) defines Anxiety as ***"the state of feeling nervous or worried that something bad is going to happen"*** [3]**.**This suggests that an impulsive feeling a person is going to experience, which can have in impact on him in the future (Cambridge,2012). While B.B. Wolman (1989), a behaviour scientist regards anxiety as ***"a feeling of one's own weakness and inability to cope with real or imaginary threats."***

In this respect, anxiety can be seen as a psychological symptom, which happens when any human being can feel nervous in unfamiliar situations (Yoon, 2012). Yoon (2012) states that this cannot be expressed statistically due to the deep association with feelings and emotions of human beings such as nervousness, tension, frustration, and uneasiness. In the same line of thoughts, Spielberger (1983) states that anxiety is an inevitable feeling, which is related to stimulation of the automatic nervous system.

According to Schwarzer, Van der Ploeg, and Spielberger (1982), any particular situation that a person faces such as threatening and can lead to generate an unpleasant emotional reaction is considered as anxiety. Moreover, Berksun (2003) states that anxiety is a response to a source of stress to survive while this response controls appliances, which are remotely trigged when a person is threatened. Zeidner (1998) states that the number of life threatening situations has diminished despite the useful of these mechanisms. Yet, losing a position in a society can be a cause of threat to a person, which can lead him/her be anxious (Morgan, 2006).

Zeidner (1998) states that there are many sources of anxiety which have changed by 21st century in a sociological way. Thus, the human body has also adjusted to these changes in relation to the social status and threats in order to face as anxiety. Therefore, any fear to lose a social position or failure to keep it can lead to anxiety that can also effect the person negatively (Botton, 2004),

[3] http://dictionary.cambridge.org/dictionary/british/anxiety_1?q=anxiety

The impact of anxiety can be either on a short term or on a long term. Hatloy (2012) states that the short-term of anxiety can have positive effects on a person. For example, when a person is nervous before starting an interview, it is a good sign since s/he may feel more attentive. Health (2012) adds that after a while the person may feel relaxed after the level of anxiety has diminished[4].

Hatloy (2012) states that a person's performance can improve when s/he faces a short-term effect of anxiety. However, if a person has an overwhelming feeling, which can lead negatively to lack of attention, s/he is facing a long-term effect of anxiety (Hatloy, 2012). Butler (2010) states that a persons' daily life can be effected negatively when they lose control of managing their level of anxiety. In the same respect, Bupa (2010) makes an example of a person who feels always nervous that his future plans can go wrong[5]. This indicates that a person is having a long-term effects of anxiety such as panic attacks and some phobias.

2.7.1 Types of Anxiety

Psychologists such as MacIntyre & Gardner (1989) relate anxiety to the individual's psychological state, which can manifest in different forms. Hence, they classify anxiety into three categories: trait, state and situation specific anxiety.

Spielberger (1983) views state anxiety as "***an apprehension expected at a particular moment in time as a response to a definite situation."*** Other scholars such Baily and Nunan (1996) state that any momentary event or specific situation that can occur to a person's life causing a temporary anxiety. Moreover, state anxiety can manifest in normal daily situations, which can be seen on people who are under usual amount of errands in their daily life (Spielberger, 1983). State anxiety can be also regarded as a problem to the emotional balance of a person (Spielberger, 1983). For example, hearing bad news about a closed relative may put the person's emotional balance into question given his state of mind and anxiety level (Spielberger, 1983).

Another form of anxiety, which is trait anxiety is regarded as a stable tendency; people with high levels of trait anxiety are usually anxious people in varied sorts of settings (Huang, 2010). Brown (2000) states that trait anxiety has a relationship with people who feel anxious

[4] http://health.indiamart.com/ayurveda/home-remedies/anxiety-remedies.html
[5] http://www.bupa.co.uk/individuals/health-information/directory/a/hi-anxiety

most of the time. Baily and Nunan (1996) describe trait anxiety as a characteristic imprinted permanently into the individual's personality, varies from one to another and has different effects on each person. Trait anxiety is considered as a common feature of an individual's personality (Spielberger, 1972). Any person who experiences a high anxiety-trait is more inclined to respond to many provocations. He can be capable to be less concerned to dangerous and difficult situations (Spielberger, 1972).

MacIntyre and Gardner (1991) state that situation-specific anxiety ***"can be seen as trait anxiety limited to a given context".*** Toth (2008) views it as a type of anxiety developed by an individual in specific situations as during exams, public speaking, and participation in classroom or speaking in different language. While Huang (2012) claims that situational anxiety can be stable over time yet unpredictable in different circumstances

In general, trait and situation-specific anxiety are considered stable and permanent forms of anxiety (Spielberger, 1983). On the other hand, state anxiety is an impermanent anxiety that comes in a particular period of time and perishes as times goes (Spielberger, 1983).

2.7.2 Teacher's anxiety

Many scholars point out to the challenges faced by teachers. Whether a novice or experienced teacher, anxiety can surface in different levels. Language teachers also can have uncomfortable moments and feel anxious in their target language classroom (Horwitz, 1996). According to Tum (2012), Horwitz is among the first researchers who states that teachers who teach a language rather than their first language are expected to experience foreign language anxiety. Horwitz (1996) states that teachers are expected to have a great command on the target language. However, mastering a language is a continuous work and this reason can put non-native language teachers into unpleasant situations while speaking the target language. Horwitz (1996) adds that language teachers were once language learners, which leads to the point that non-native language teachers can still have anxiety; however, it differs from one to another.

Horwitz and Cope (1986) define foreign language anxiety as "***a phenomenon related to but distinguishable from other specific anxieties".*** Those who learn a second language can face nervousness, fear, physical insecurities and inability to participate in situational learning environment (Abu-Rabia, 2004). Moreover, in their definition of foreign language anxiety, MacIntyre and Gardner (1989) emphasise on the feeling of people in some situations and view

foreign language anxiety as a state of intensity and apprehension when learning a second language mainly while engaging in the use of a second language like speaking.

Having said that, it is important to state that the term of teaching anxiety is broader than foreign language anxiety. According to the Psychiatric American Society (2000), teaching anxiety is not considered a disorder[6]. Scholars such as Thomas (2006), views teaching anxiety as every feelings, beliefs, or behaviours that can obstruct the process of teaching during the phase of preparation or during the teaching phase. While Williams (1991) regards teaching anxiety as temporary situational trait of teaching and an unstable emotional condition that can reduce or disappear with growing experience.

According to Buitink and Kemme (1986) as cited in Williams (1991), teaching anxiety is ***"..a momentary situational characteristic of teaching. It is an emotional constitution that may change in intensity and may disappear with increasing experience (…) connected with everything that is related to the activities as a teacher, in the classroom as well as in other activities in the school."***

Another definition of teaching anxiety has been given by Gardner and Leak (1994) who view teaching anxiety as uneasiness experience faced by teachers while preparing a lecture or during the lecture. Krohne and Laux (1982) relate teaching anxiety to apparent feelings like stress, or fear of failure to achieve the teaching objectives. Pekrun (2006) states that teaching anxiety comes from a personal fear of controlling the situation while Lazarus and Folkman (1984) state that teaching anxiety is generated due to lack of resources and competencies with the challenging tasks.

Randall and Thornton (2001) state that at the beginning of a new class, many teachers feel anxious. Moskowitz (1978) views teaching anxiety as a fear that teachers can have of doing any accidental damage to students. Kongchan and Singhasiri (2008) relate teaching anxiety to the expectations that cannot be met. For example, teachers expect to teach high-level students of English however, reality is different when they encounter students of English with low level. This leads teachers to be worried about using English and whether students do not comprehend what is said in English. This evidence from the study of Kongchan and Singhasiri in (2008) shows that the level of anxiety in this situation is controlled.

[6] http://dsm.psychiatryonline.org/action/doSearch?AllField=teaching+anxiety

It is said that anxiety can provide a helpful push for teachers if the level of anxiety is controlled (Randall and Thornton, 2001). On the other hand, Keavney and Sinclair (1978) state that teaching anxiety is related to teaching task which suggests that the efficiency of an anxious teacher is affected. Parsons (1973) states that anxiety can obstruct the teachers' performance and efficiency in classroom and it can happen even to those who are talented and well experienced. According to Bodie (2010), lack of efficiency in classroom leads to teaching anxiety, which can result problems in the classroom such incapability to think clearly, interacting with students negatively, having either "too soft" or "too harsh" relationships with students and showing doubtful ideas that can come from the thought that students may look to the teacher as stupid.

Moreover, teaching anxiety can become an issue when it affects the learners and this can be seen in a language learning setting (McCroskey and Richmond, 1991). Cooper and Simonds (2007) add that language teachers whose anxiety is noticed in classroom can have a massive effect on their learners because those learners might adapt their teachers' behaviour either intentionally or unintentionally. Horwitz (1996) points out some of the effects of foreign language teachers' anxiety and states that teachers with foreign language anxiety may have an inclination to using English less and lacking thorough language tasks in the classroom. Since students learn language mainly from teachers and the activities provided, those learners with teachers experiencing anxiety may not be well exposed to target language. Moreover, students may acquire a fear of language since their teachers have shown signs of fear. Horwitz (1996) adds that teaching anxiety can lead to a job dissatisfaction due to the pressure of using language when teaching and providing tasks in the target language.

In his study, Shrestha (2009) also points out the negative effects of teachers' anxiety in language classroom. Anxious teachers express themselves in unnatural way even if it is casual conversation. However, this issue varies from one teacher to another according to the structure and the flow. Shrestha (2009) adds that anxious teachers forget what they are about to say which can cause problems for students to follow up and understand what they have to do next.

Studies have shown that anxiety can occur at any level of teaching. Researchers such Gardner and Leak (1994) report in their study that a great deal of psychology professors have shown anxiety while teaching. On the other hand, Oral (2012) indicates that teaching anxiety can occur at any stage whether at the beginning of the new teaching career, pre-service teachers or in-service teachers. Alasheev and Bykov (2002) report that those teachers have shown high

level of anxiety compared with experienced teachers. Sammephet and Wanpet (2013) state that level of anxiety can be higher at the beginning of the new teaching career and it starts to decrease with time, yet it differs from one teacher to another. This leads to identify the sources of teachers' anxiety.

2.7.3 Sources of Teachers' Anxiety

Generally, there are many sources of teacher's anxiety yet the focus here is onto language teachers' anxiety. Previous studies have shown that teachers' anxiety in classroom can generate from lack of confidence (Berry, 2004), personal insecurities (Wilson, 1986) while Randall and Thornton (2001) state that teachers get anxious from evaluation from supervisors. Ipek (2007) points out to fear of failure as a source of teachers' anxiety and Chang (2009) states that teaching a particular language area, level or class size can make teachers anxious. Other researchers such as Banchakarn and Phalangchok (2012) put together a list of causes of anxiety as shown in the table below:

Scholars	Topics of the Study	Categories of Causes of Anxiety
Berry (2004)	Tensions of teacher educators in learning about their own practice and tasks in school contexts	1. Telling and growth *(giving a chance to self- reflect and accepting student teachers' concerns to develop ability)* 2. Confidence and uncertainty 3. Working with and against 4. Discomfort and challenge 5. Acknowledging and building upon experience 6. Planning and being responsive
Wilson (1986)	Anxiety of pre-service teachers in teaching practicum contexts	1. Personal Insecurities 2. Concerning regarding the field instructor 3. Client concerns 4. Anxiety regarding the agency or the system
Randall and Thornton (2001)	Factors affecting anxiety of teachers in teaching supervision contexts	1. Evaluation *(getting feedback and a grade from an advisor)* 2. Novelty *(facing with a new situation*) 3. Ambiguity *(having an ambiguous situation)* 4. Conspicuousness *(being a more noticeable teacher)* 5. Prior history *(confronting with the same anxious situation)*

Table 2.2 Category of Causes of Anxiety (Adapted from Banchakarn and Phalangchok (2012)

Banchakarn and Phalangchok (2012) form this table, which demonstrates the different causes of teachers' anxiety based from previous studies. Those causes of teachers' anxiety have a relationship with teaching. Berry (2004) states that teachers' anxiety arise in classroom when teachers are practicing their vocation. According to Berry (2004), teachers' anxiety generates mostly from lack of confidence, uncertainty, and feeling uncomfortable during classroom.

While Wilson (1986) focuses on the causes of teachers' anxiety in teaching settings. According to Wilson (1986), teachers' anxiety can occur due to personal lack of self-confidence, having concerns in regards to the filed instructor or client concerns and also the agency or the system itself can cause teachers' anxiety.

Moreover, Randall and Thornton (2001) conduct a study of causes of teachers' anxiety in the teaching settings. The results of this study provide a various category of different causes of teachers' anxiety based from different perspectives of teaching and learning. According to Randall and Thornton (2001), evaluation from an advisor such as headmaster or an inspector and the process of getting feedback and a grade can generate teachers' anxiety. Moreover, being new to the field of teaching can also be a cause of teachers' anxiety. Facing an ambiguous situation that can take time to solve can lead teachers to be anxious. Randall and Thornton (2001) state that the personality of the teacher is important in confronting anxious situations. In other words, teachers who usually cope with anxiety in life in normal way are those who are not much affected with anxiety in classroom.

2.7.4 Sources of Foreign Language Teachers' Anxiety

In the field of foreign language teaching, researchers such as Merc (2004) and Horwitz, Tallon & Luo (2009) state that the lack of experience among non-native teachers of English can be a cause of teachers' anxiety. Similarly, Takahashi (2014) adds that using English as medium of instruction is a cause of teachers' anxiety and the level of anxiety can increase according to the teacher language abilities. Moreover, according to the study Klanrit and Sroinam (2012), non-native teachers of English experience anxiety when teaching English in classroom.

Other researchers such Kim and Kim (2004) state that foreign language teachers' anxiety occurs in different circumstances such as when teachers have to teach English through English or when students ask unexpected questions that they do not know how to answer at the time being. Moreover, when teachers are not able to control students and when they are observed by a supervisor. Kim and Kim (2004) add that other situations can generate foreign language anxiety such as when they have students who lived in English speaking countries, when they have to teach speaking or listening and when they teach English culture.

The sources of foreign language teaching anxiety given by Kim and Kim (2004) can be seen in this table:

Scholars	Topics of the Study	Categories of Causes of Anxiety
Kim, S. Y., & Kim, J. H. (2004).	When the learner becomes a teacher: Foreign language teaching anxiety as an occupational hazard.	-Limited English proficiency - Lack of confidence, -Lack of knowledge about linguistics and education, - Insufficient class preparation -Being compared to native teachers. - Fear of negative evaluation. - Lack of teaching experience.

Table 2.3 Causes of foreign language teaching Anxiety (Kim and Kim (2004)

The investigation of Numrich (1996) about problems of non-native English language teachers states that teachers' anxiety is inevitable. The results of his study indicate that teachers were feelings anxious when feeling unsatisfied for effective grammar teaching, time management in class and giving instruction for classroom activities

These studies indicate that classroom management is a major factor for causing teachers to be anxious. Goyette, Dore and Dion (2000) and Ingersoll and Smith (2003) state that a major cause of teachers' anxiety is classroom management.

According to Brown (2001), classroom management falls into five elements such as physical environment of the classroom, which refers to visual and audial appearance of the classroom such as the sight, sound and comfort. Secondly, the voice and body languages of teachers, which cover clear verbal and nonverbal communication. Thirdly, unpredicted circumstances in the classroom such as students' behaviour, the questions of students that are

difficult to answer or managing time of lesson plan and actual time left. Moreover, the seating arrangement and placement of students with various levels of English proficiency in the same class. Finally, the use of the board or the various tools needed in the class such as the use of different ICT tools in language classroom. Ingersoll and Smith (2003) state that those elements can lead to teachers' anxiety if they are not considered carefully.

2.7.5 Computer anxiety

As it was previously mentioned, classroom management is a major and general factor in causing teachers' anxiety. Brown (2001) states that the neglecting or misusing of equipment needed in classroom lead teachers to be anxious. Among these tools, computers which are integrated in language classroom nowadays. It is predictable that lack of knowledge about computers can lead to a psychological fear, which can be an obstacle to the success of integrating ICT in classroom. This psychological fear is referred to as computer anxiety (Beckers & Schmidt, 2001).

Ursava and Karal (2009) state that the number of teachers who use ICT in classroom has increased nowadays; however, there are teachers who do not feel comfortable using this tool. The level of computer anxiety of teachers are important factor in the success of integrating ICT into language classroom. Russel and Bradley (1995) indicate that the concern of computer anxiety has been part of the human life due to the suspiciousness of humans towards new inventions. Hakkinen (1994) suggests that interaction between humans and computers may intrigue different emotional responses such as anxiety.

Orr (2001) defines computer anxiety as a mutual emotional response to computers described as fear or physical reactions such as heart palpitations, sweaty palms and in some situations high blood pressure. While Chua, Chen and Wong (1999) regard computer anxiety as fear that can be observed during the use of or when a person is about to use computers. Maurer (1994) describes also computer anxiety as an uneasiness sensed by an individual before using computers or while doing so. Similarly, Leso and Peck (1992) explain computer anxiety **"*as a feeling of being fearful or apprehensive when using or considering the use of a computer.*"**

Igbaria and Parasuraman (1989) state that anxiety is the result of a belief that an individual has. For example, a teacher who believes that he is going to face problems with his power point presentation. This belief leads to fear and worries. In other words, he becomes anxious. Igbaria and Parasuraman (1989) define computer anxiety ***"as the tendency of individuals to be uneasy, apprehensive, or fearful about current or future use of computers".***

Oetting (1983) views computer anxiety as a concept-specific anxiety since it is a feeling that generates from a contact between an individual and computers. Furthermore, Howard and Smith (1986) define computer anxiety ***"as the tendency of a person to experience a level of uneasiness over his or her impending use of a computer."***

Other scholars such as Marcoulides (1988), views computer anxiety as a prejudice or fear that arises when an individual uses computer technology or when they contemplate about the possible outcomes of computer usage. Raub (1981) views computer anxiety as the multifaceted emotional responses that an individual feel due to the belief of computers as a threat. Moreover, Rahner and Simonson (1981) as cited in Ropp (1999) define computer anxiety as a combination of feelings such as fear or worry when a person plans to interact with a computer or while interacting with it.

Chang (2005) regards computer anxiety as a mixture of teachers' feelings such as discomfort, apprehension and fear of using ICT tools or nervousness from the unpredicted consequences of using computers. In other words, computer anxiety among teachers can hinder the process of integrating ICT in classroom or even thinking about using computers (Chang, 2005).

2.7.6 Factors Influencing Teachers' anxiety towards the Use of ICT

Researchers have conceptualized computer anxiety as a multidimensional concept. Torkzadeh and Angulo (1992) state that there are three major dimensions of computer anxiety as psychological, operational, and sociological.

Goldstein, Dudley, Erickson and Richer (2002) state that psychological dimension involves attitudes toward computers, self-efficacy, personality types, avoidance, and self-perceptions. While Beckers, Wicherts and Schmidt (2007) state that operational dimension is usually resulting from computer courses, teachers, nature of computers, the degree of experiences with the computer, and possessing a personal computer. Finally, Sociological

dimension is associated with features such as age, gender, ethnic group, socio-economic rank, and the field of study (Baloglu and Cevik, 2008).

Namlu and Ceyhan (2002) state that there is a connection between age and computer anxiety. Even though it is hard to profile a computer anxious person, Appelbaum (1990) states that the majority of people with computer anxiety are over 30 due to the early introduction of computers that youngsters have had in school. Other researchers such as Gardner, Render, Ruth, and Ross (1985) suggest a profile for a computer anxious person. This profile suggests a 50 years old, female, well ordered, unskilled in math and competent enough to work without a computer.

According to a study of Dyck and Smither (1994), senior citizens have more positive attitude towards computer with a low level of anxiety despite the fact of their lack of experience compared to younger adults. Based from these results, Dyck and Smithers (1994) suggest that older people have little experience with computers yet, they enjoy the idea of what computer could do.

Another similar study conduted by Dyck and Smither (1996) on a group of highly educated adults within average age of 68.7 years and an average of 16.61 years of education but with a little computer experience. This study reveal that younger adults interacted better than older adults did. Nevertheless, young adults did not display a computer traits compared to older adults. Younger adults took less time to complete assignments, trained shorter and did not make many errors compared to older adults. Dyck and Smither (1996) state that cognitive skills is the determine factor in this comparison since cognitive skills change with aging. In other words, older adults have more cognitive insufficiencies when performing difficult tasks such as operating with new computer software.

According to the results of study by Igbaria (1993), age has a major impact on computer anxiety. Ibgaria (1993) concludes that older individuals did not have neither enough knowledge about computers nor past use of it. Hence, they were resistant to change.

On the contrary, Rosen and Maguire (1990) conclude on their study that age has not an important connection with computer anxiety. Yet, age can be a factor in evading the use of computer owing to lack of knowledge about computers, training or computer use.

Reinen and Plomp (1996) state that introducing ICT in education has led to a new differentiation between male and females hence gender inequalities. Anderson (n.d) states that males view computer as an exclusive tool and assume that they are able to use computers innately. Anderson (n.d) adds that this idea exists in some schools especially in developing countries where females do not have access to technology and do not have role models from the same gender to look up to when using ICT.

On the contrary, Dyck and Smither (1996) conclude in their study that gender is not a major factor in computer anxiety. Yet, there is a slight difference between females' higher anxiety, less liking, less confidence and less positive attitude towards computers compare to males' ones. Moreover, the results of a study conducted by Gilroy and Desai (1985) indicate that there is a difference between females and males' computer anxiety. The study reveal that females displayed higher anxiety compared to males. Other researchers share the same view such as Rosen and Maguire (1990) who conclude that computer anxiety is not affected by gender yet, the results of their study indicate that women displayed higher computer anxiety than men because of women' less interest in computers.

Other researchers like Howard (1986), Igbaria and Parasurraman (1989) conclude that gender does not influence computer anxiety and there is no relationship between gender and computer anxiety. Oetting (1983) also concludes that the levels of computer anxiety between females and males were not different. The results of a study conducted by Kotrlik and Smith (1988) also support the results of Oetting (1983) that female teachers and male ones' anxiety level was not different. Howard and Smith (1986) link the lack of knowledge about computers and lack of training with computer anxiety. The results of their study indicate that training and learning about computers can decrease computer anxiety.

Computer training can provide a better understanding about computers. Computer training can help to reduce computer anxiety and this can be done by implementing a course about computers (Bloom, 1985). Bloom (1985) states that computer anxiety can be reduced by knowledge, techniques of building computer skills and more practice. Bloom (1985) explains that training should also help to understand why and how an individual develops anxiety and

how to control it. The training is important in decreasing computer anxiety by providing an awareness that computer anxiety is a normal feeling (Bloom, 1985).

Furthermore, Bloom (1985) states that computer training should provide solutions to control computer anxiety such as physical relaxation techniques, which can be in the forms of deep breathing or repetition of positive thoughts. Bloom (1985) focuses on practice because it permits the trainee to acquire a positive computer experience and to gain confidence. Galagan (1983) states that an efficient computer-training program can help to acquire better knowledge about computers and encourage computer use which lead to decrease the level of computer anxiety.

There are not many studies concerning computer anxiety with years of teaching experience. Yet, some studies such as the study of the National Center for Educational Statistics USA (2000) points out to a relationship between lacks of using ICT with years of teaching experience. On the contrary, results of study conducted by Niederhauser and Stoddart (2001) indicate that experienced and less experienced teachers' computer anxiety level is not different. However, Ursavas and Karal (2009) state that experienced teachers display low level of computer anxiety and at the same time, they exhibit positive attitudes towards computers.

According to the results of study conducted by Pamuk and Peker (2009), young teachers are more tolerant towards the use of computers while older teachers are technophobic. The unfamiliarity and lack of computer experience and use of experienced teachers are the reasons of why experienced teachers are more technophobic than less experienced ones (Combs, 2005).

There is another factor, which links teachers' attitude to computer anxiety. The results of a study conducted by Farina, Arc, Sobral, and Carames (1991) reveal that those who displayed positive attitude towards computers are those who felt that computers made their work a lot easier while those who displayed negative attitude towards computers are those who felt computers as a threatening tool. This negative attitude is probably due to an unsuccessful experience with computers at a previous time and the negative feeling, which can be seen as computer anxiety (Farina et al. 1991).

The International Society for Technology and Education (2001) reports that only 20% of teachers are opened to the idea of integrating ICT into classroom. Many teachers are doubtful about the point of using computers despite of the availability of such tools in the classroom[7]. According to researchers, such Berson (1996) and Saye (1998), teachers who have negative attitude about using computers are uncertain or afraid from technology. In other words, they are technophobic. Those teachers are either resisting to its use or using it rarely. Chin and Hortin (1993) state that there are teachers who display positive attitude towards ICT despite the lack of training that can lead to anxiety.

Nickerson (1981) states that the negative attitude towards ICT derives from a personal apprehension of facing problems with computers or resistance to change. Nickerson (1981) adds that this negative attitude can derive from the feeling of stupidity and usefulness of the computer.

2.8 Conclusion

This chapter contains a review of literature on attitude and anxiety of teachers towards the use of ICT in classroom. The literature review suggests that age, gender, use of computers and computer training are variables that can be related to teachers' attitude towards computers and their computer anxiety. However, there are different views whether those features have a direct link with teachers' attitude and anxiety towards ICT or not

Therefore, the next chapter, which focuses on the data analysis and its interpretation of the results of the questionnaire and the interview addressed to English teachers, would reveal whether those theories are in correlation with the Algerian educational setting especially at the department of English at Djilali Liabes Univeristy.

[7] ISTE (2001) : http://wwwiste.org/standards/nets-for-teachers.

Chapter Three:

Data Analysis and Discussion

Chapter Three: Data Analysis and Discussion

3.1 Introduction

This chapter discusses the analysis of data and findings collected from the questionnaires and interviews. The data are analysed and organized systematically in tables and graphs for discussion purposes. This chapter is divided into two main parts: The first part presents the findings and discussion of the questionnaire addressed to 32 EFL teachers at the department of Faculty of Letters, Languages and Arts at Djilali Liabes University Sidi Bel Abbes. The second part presents the findings of the interview and discussion based on the results of this research tool.

These two research tools are aimed to answer the research questions of the current study. The results would reveal first, the attitude of EFL teachers at the department of Faculty of Letters, Languages and Arts at Djilali Liabes University Sidi Bel Abbes towards the use of ICT in classrooms. Second, whether there is a relationship between teachers' attitude and teachers' characteristics such as age, gender, teaching experience and computer training or not. Moreover, the results would reveal the teachers' points of view about ICT in terms of educational and cultural perceptions, their Computer competency and computer access. On the other hand, other research questions would be answered concerning the level of the participants' anxiety and whether gender, age, teaching experience and computer training affecting their anxiety level.

3.2 Results of the Questionnaire

The questionnaire used in this study is distributed to 32 EFL teachers at the department of Faculty of Letters, Languages and Arts at Djilali Liabes University Sidi Bel Abbes. In this study, the numbers of males and females are as follows: 14 males and 18 female respondents as shown in the following table:

	Female	Male
Number	18	14
Total : 32	56.25%	43.75%

Table 3.1 Gender of the Participants.

In terms of age, 12.5% of the participants are within the 20-29 age range while 28.12% of them are within 30-39 age range, another 28.12% of them are within 40-49 age range and finally, 12.5% of them are 60 years old or over as shown in the following table

Age	20-29	30-39	40-49	50-59	Over 60
Total : 32 participants	4	9	9	6	4
Percentage	12.5%	28.12%	28.12%	18.75%	12.5%

Table 3.2 Classification of The Participants' Age

In terms of years of teaching experience, there is a mixture between novice teachers and experienced teachers. As we can notice in the following table, 21.87% of the participants have one to five years of teaching experience, 12.5% of them have six to ten years of teaching experience. While 15.62% of them have eleven to fifteen years of teaching experience, 25% of them have sixteen to twenty years of teaching experience and finally, 25% of them have twenty years of teaching experience or more.

Years of teaching experience	1-5	6-10	11-15	16-20	Over 20
Total :32	7	4	5	8	8
Percentage	21.87%	12.5%	15.62%	25%	25%

Table 3.3 classification of participants' years of teaching experience

In terms of ICT training, there are three categories: those who are self-taught, which represented 50% of the participants while 40.62% who are trained about computers and the rest of the participants which are a very small participants (9.38%) , are neutral in their answers. The following table represents the percentages of this category

	Self-taught	training	Others
Total : 32	16	13	03
Percentage	50%	40.62%	9.38%

Table 3.4 Classification of the Participants According to Their Computer Training

To get a better understanding on what factors make EFL teachers use ICT in their classrooms or reject it, teachers' attitude and anxiety towards ICT and specifically towards computers are investigated in terms of gender, age, computer training and years of teaching experience.

3.2.1 ICT and the Gender of the Participants

As it is previously shown in table (3.1), among the 32 participants who completed the questionnaire, there are 18 female, which represented 56.25% of the total number and 14 male, which represented 43.75% of the total number of participants.

3.2.1.1 Computer Competency and Access Level According to Gender

This section of the questionnaire focuses on teachers' competency level and access in terms of gender. The answers given by the respondents are categorised according to the following scale: strongly agree, agree, undecided, disagree and strongly disagree, as shown in the following table:

	Statements	Strongly agree		agree		undecided		Disagree		Strongly disagree	
		male	Female	male	Female	Male	Female	Male	Female	Male	Female
Computer competence level and access	1. Install new software on a computer.	9	4	4	12	1	2				
	2. Operate a word processing program (e.g., Word).	7	6	6	9	1	2		1		
	3. Operate a presentation program (e.g., PowerPoint).	7	6	6	9	1	2		1		
	4. Use computers for grade keeping.	6	9	6	7	1	2	1			
	5. Use computer at home.	13	16			1	1		1		
	6. Use computers at school.	11	11			2	4		2	1	1

Table3.5 Participants' Competency Level and Access to Computers in Terms of Gender.

This table shows teachers' competency level and access to computers in terms of gender. The majority of the participants were in agreement with the statement, 'Install new software on a computer' divided between 13 respondents who strongly agreed and 16 respondents agreed while only 3 participants were undecided. This is a strong sign that university teachers have a good competency level in using computers because in response to the second statement 'Operate a word processing program (e.g., Word)', only one female respondent disagreed with the statement. Whereas the answers of the male population varied were in favour of this statement, yet one of them was neutral. On the other hand, the female population expressed the same opinion except a minority that were undecided.

Participants of the study despite of gender shared similar responses concerning their familiarity with the basic tools such as presentation program (e.g., PowerPoint)'. The majority of both participants' male and females agreed with the statement yet one male and two females were undecided and unable to decide whether they were considered competent in using computers or not.

The majority of the participants used computers for keeping grades: the male population expressed mostly agreement as 12 of them strongly agreed. Similarly, the majority of the female participants felt the same. However, three participants were undecided while one male disagreed with the statement. This shows that the majority felt that the use of computers of keeping grade is better than filling grades manually.

When it comes to using computers at home or school, participants of both genders showed a certain level of accessibility especially at home. 13 male participants and 16 among the female ones used computers at home while one female respondent expressed her disagreement; two respondents were undecided and unable to decide that they have computers at home or not. Moreover,

In their final response to the statement, 'use computers at school', the number of participants reduced compared to the home statement yet the majority of participants whether males or females still used it at school. However, three females and another male expressed disagreement while six participants were undecided probably due to the nature of the module they taught in their classrooms.

3.2.1.2 Teachers' Attitude towards ICT According to Gender

In Section C of the questionnaire, ten items are designed to investigate participants' attitude towards the use of ICT. Table 3.6 displays the scores used to determine positive and negative attitude of the respondents in terms of gender. Positive attitude is the total responses of "strongly agree" and "agree" while negative one is the total of "strongly disagree" and "disagree" responses of the participants.

In response to the first statement, 'computers do not scare me at all', the majority of the participants of both genders (29 respondents) strongly agreed with the statement while three participants were undecided. Likewise, the majority of the participants disagreed with the statement, 'computers make me feel uncomfortable'. Yet, one male and two females expressed agreement with the statement

	Statements	Strongly agree		agree		undecided		Disagree		Strongly disagree	
		male	Female	male	Female	Male	Female	Male	Female	Male	Female
Attitude to ICT	7. Computers do not scare me at all.	13	16			1	2				
	8. Computers make me feel uncomfortable.	1	2							13	16
	9. I am glad there are more computers these days.	13	16					1	2		
	10. I dislike using computers in teaching.	1	1		2	2	4			11	11
	11. Computers save time and effort.	13	16					1	2		
	12. I do not think I would ever need a computer in my classroom.					1	1	3	1	10	16
	13. Computers do more harm than good.			1		1	1			12	17
	14. I would rather do things by hand than with a computer.	1	2							13	16
	15. I would avoid computers as much as possible.		1			1	1			13	16
	16. I would like to learn more about computers.	13	16		1		1	1			

Table 3.6 Teachers' Attitude towards ICT in Terms of Gender

The majority of the participants showed mostly a positive attitude towards the availability of computers since the answers were in favour of this statement 'I am glad there are more computers these days' while one male and two females disagreed with the statement.

In response to the statement, 'I dislike using computers in teaching', almost all participants showed disagreement. Nevertheless, four participants among the female respondents were undecided in addition to two males, given the nature of the module they probably taught at their classrooms.

In terms of efficiency of computers, respondents acknowledged the advantages offered by computers and this can be noticed as both males and females participants agreed with the statement 'computers save time and effort' however, only a minority of participants answered differently as two females and one male disagreed with this statement. In response to the following statement 'I do not think I would ever need a computer in my classroom', the majority of the participants disagreed with the statement since twenty-six participants of different genders disapproved while two participants took a neutral stand. While answering the following statement 'computers do more harm than good'. Seventeen females and twelve males strongly disagreed while one participant agreed. Yet, two participants were undecided.

In response to the rejection of using computers, the majority of the participants (29 participants) responded in favour of using computers rather than using the manual method. Yet, three participants strongly agreed with the statement. Likewise, the majority of respondents, which represented thirteen males and sixteen females, were in strongly disagreement with the statement, 'I would avoid computers as much as possible'. While one female strongly agreed with the statement, two participants were undecided with it.

In response to the final statement, 'I would like to learn more about computers.' Participants of the study showed leniency towards this statement as both seventeen females and thirteen of the opposite gender agreed. However, two participants were undecided.

3.2.1.3 Teachers' views about ICT in Education and Culture in Terms of Gender

In this section of the questionnaire, nine items are designed to seek teachers' points of view and opinions about ICT in culture and in education. Table 3.7 displays the scores used to seek the opinions of the respondents in terms of gender. Positive points of view are the total

responses of "strongly agree" and "agree" while negative ones are the total of "strongly disagree" and "disagree" responses of the participants.

	Statements	Strongly agree		agree		undecided		Disagree		Strongly disagree	
		male	Female	male	Female	Male	Female	Male	Female	Male	Female
View about ICT in education and culture	17. Computers will improve education.	12	17			1		1	1		
	18. Computer technology cannot improve the quality of students' learning.			1	1		1	1	2	12	14
	19. Computers are not useful for language learning.				1	1	1	1	2	12	14
	20. Class time is too limited for computer use.	1		10	13	3	3				2
	21. Computer use is appropriate for many language-learning activities.	10	15	1		1	1	1	1	1	1
	22. Teaching with computers offers real advantages over traditional methods of instruction.	12	14	1	2	1	1				1
	23. There are other social issues that need to be addressed before implementing computers in education.	8	11	2	4	2	2			2	1
	24. Computers dehumanize society.	1	2			1	1	3	1	9	14
	25. Computers encourage unethical practices.	1	3				1	2	3	11	11

Table 3.7 Teachers' Points of View about ICT in Education and Culture according to Gender

Participants were questioned about the positive role of technology in education by stating where computers would improve education. It is fair to say that the majority of respondents despite of their gender concurred the statement. Yet, one male participants was undecided. Conversely, two participants disagreed with the statement. By giving them the negation of the previous statement, participants were generally in disagreement with the statement, 'Computer technology cannot improve the quality of students' learning'. Three of them disagreed. However, two participants agreed with the statement while only one female participant was undecided.

Similarly, in their responses to the statement,' Computers are not useful for language learning' the majority of participants disagreed with this statement. As it is shown in table (3.7), 26 participants of both different genders strongly disagreed while three participants disagreed with it. Two participants were undecided though one female agreed with the statement.

The replies of participants to the statement 'Class time is too limited for computer use' showed a mixture of statements as only one male participant strongly agreed with the statement, 23 participants agreed with it. However, six participants showed neutrality in their responses while two participants were in total disagreement with this statement.

A mixture of answers were given to the statement, 'Computer use is appropriate for many language-learning activities.' Twenty-six participants approved this statement: 15 females and 10 males strongly agreed and one male agreed. Yet, two participants took a neutral stand, as these two participants were undecided. While four participants were in a disagreement with the statement, two participants strongly disagreed and two respondents disagreed with the statement.

Given the advantages offered by technology in language classrooms, teachers' responses were in favour with the statement 'Teaching with computers offers real advantages over traditional methods of instruction' as 29 respondents were in total agreement with the statement as they strongly agreed while 3 of them agreed with it. Though only one participant strongly disagreed with the statement, two participants were undecided.

A mixture of points of view were noticed as participants were asked to give their opinion about the following statement, 'There are other social issues that need to be addressed before implementing computers in education.' nineteen participants strongly agreed with the statement while six of them agreed with it. However, four participants took a neutral stand in their responses while three participants strongly disagreed with the statement.

In their responses to the negative effects of the using of technology, 23 participants were in total disagreement with the statement 'computers dehumanize society' while four participants disagreed with it. Although two participants were undecided in their response, 3 participants felt that computers dehumanized society.

In their final responses to the statement ‘computers encourage unethical practices’, the majority of participants who were twenty-seven participants were in disagreement with it. Their responses are divided between 22 participants who strongly disagreed while 5 participants disagreed with it. However, four participants strongly agreed with this statement.

3.2.1.4 Computer Anxiety Level of Participants According to Gender

The final part of the questionnaire is designed to determine the anxiety level of participants towards the use of ICT in EFL classrooms. Ten items are designed concerning this regard and the table 3.8 shows the ratings used to determine high and low anxiety of the respondents.

In their responses to the first statement, ‘I generally think of computers as friendly tools.’ The majority of participants were in total agreement with this statement as 29 participants strongly agreed with the statement. However, three participants took a neutral stand as they chose to tick the undecided box.

The responses of the participants to the statement ‘teaching using computers makes me comfortable’ were in total agreement with it as 29 participants strongly agreed. While two participants were undecided, only one of them strongly disagreed with this statement.

A mixture of responses are given by participants to the statement ‘Writing a lesson plan using computers makes me comfortable’. As 23 participants of both genders strongly agreed with the statement, three participants agreed with it. However, two participants strongly disagreed while another two of them disagreed with this statement. Moreover, two participants took a neutral stand in their response to this statement.

When participants were asked ‘working on the keyboard makes me uncomfortable’, the majority of participants were in total disagreement with it as 29 participants of both genders strongly disagreed. While one female strongly agreed with it, two participants were undecided. (See table 3.8)

	Statements	Strongly agree		agree		undecided		Disagree		Strongly disagree	
		male	Female	male	Female	Male	Female	Male	Female	Male	Female
Computer Anxiety level	26. I generally think of computers as friendly tools.	12	17			2	1				
	27.teaching using computers makes me comfortable	13	16				2			1	
	28. Writing a lesson plan using computers makes me comfortable.	11	12	1	2	1	1	1	1		2
	29. working on the keyboard makes me uncomfortable		1			1	1			12	17
	30. when keyboard stops working , it makes me uncomfortable			2	4	3	1	4	6	5	7
	31. when a message appears on the screen instantly while presenting a lecture makes me uncomfortable	5	4	4	5	2	1			3	8
	32. Discussing computers with a group of people who know a lot about using them makes me uncomfortable			1	2	3	2	3	7	7	7
	33. I feel uncomfortable when my presentation does not work.			5	3	4	5	2	2	3	8
	34. The more opportunities I have to present , the less anxious I feel	12	11	2	4		3				
	35. After the training provided, I felt less anxious when I use ICT in teaching	6	7			8	11				

Table 3.8 Computers Anxiety Level of Participants According To Gender

In their responses to some technical difficulties that participants faced in their use of computers, a mixture of responses were given to the statement, 'when keyboard stops working, it makes me uncomfortable' as 12 participants strongly disagreed with it, 10 of them disagreed. However, four participants were undecided. Moreover, six participants showed agreement with the statement.

Another technical difficulty that participants faced while using computers, the sudden appearance of messages while presenting a lecture in front of students. In their responses, many participants were in total agreement with the statement 'when a message appears on the screen instantly while presenting a lecture makes me uncomfortable'. Nine participants strongly agreed while nine participants of both gender agreed with it. On the contrary, 11

participants strongly disagreed with the statement given their training in using computers. Yet, three participants of different gender were neutral in their responses

In their response to the statement, 'discussing computers with a group of people who know a lot about using them makes me uncomfortable', the majority of participants were in total disagreement with it as 14 participants strongly disagreed, 10 of them disagreed with it . Although five participants took a neutral stand in their response to the statement.

When participants were questioned if they felt uncomfortable when their presentation did not work, eight participants shared agreement with the statement. However, 15 participants were in total disagreement with the statement as they strongly disagreed, two males and two females disagreed with it. Yet, nine participants were undecided divided between four males and five females.

Participants were asked if having more opportunities in presenting lectures with the use of ICT were reducing their anxiety level, the majority of participants expressed agreement with it as 23 participants strongly agreed and another 6 of them agreed with it. However, three females were undecided.

In their responses to the final statement 'after the training provided, I felt less anxious when I use ICT in teaching', 13 participants were in total agreement with the statement. However, 19 participants from different gender took a neutral stand since they did not get any previous computer training.

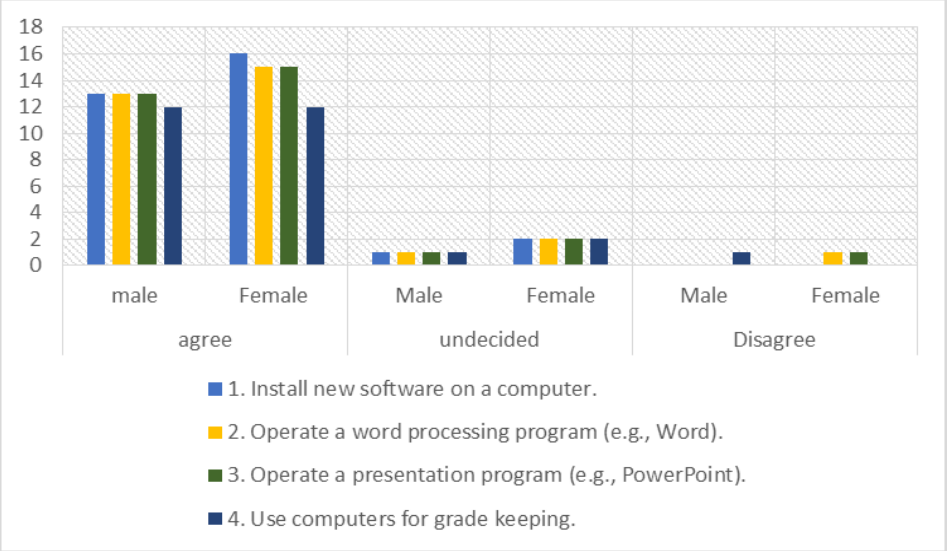
3.2.2 Discussion of ICT and the Gender of the Participants Findings

In general, responses of the participants of the current study showed an attitude in favour of ICT and its advantages despite of gender.

3.2.2.1 Computer Competency and Access In Terms Of Gender

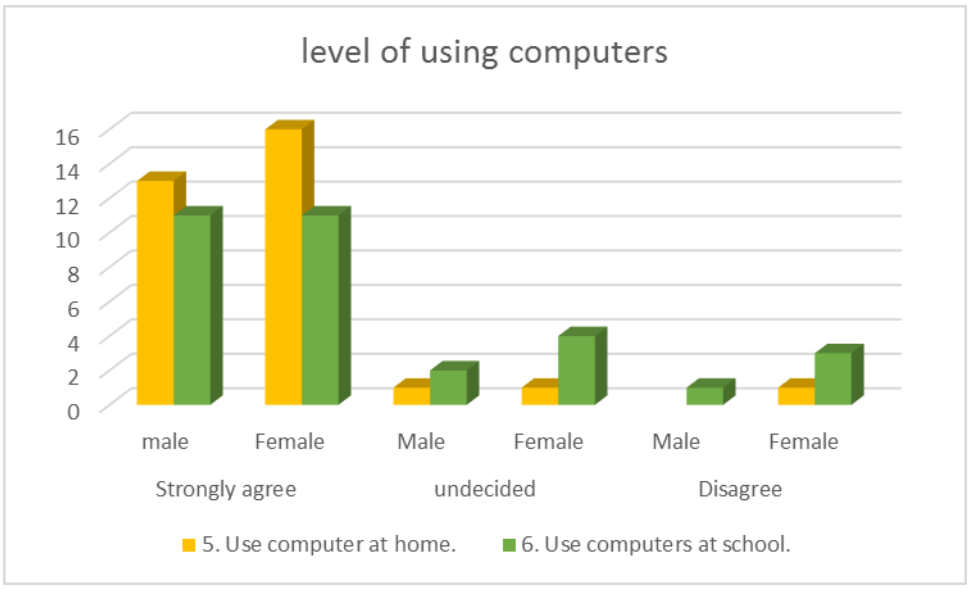
When it comes to using computers, the majority of population showed a certain level of computer competency despite of their gender. The male population responded that they knew how to install new software with 64.29% who strongly agreed in addition to 28.57% who agreed while the female population responded with 22.22% who strongly agreed and 66.67% who agreed. Similar responses were given among the target population: 92.86% of the male population and 83.33% of the female population knew how to operate on word

processing program and a presentation program. In addition, 85.72% of the male population and 88.89 % of the female ones responded that they used computers for grade keeping while few participants were either undecided or in disagreement



Graph 3.1 Computer Competency Level of Participants in Terms Of gender

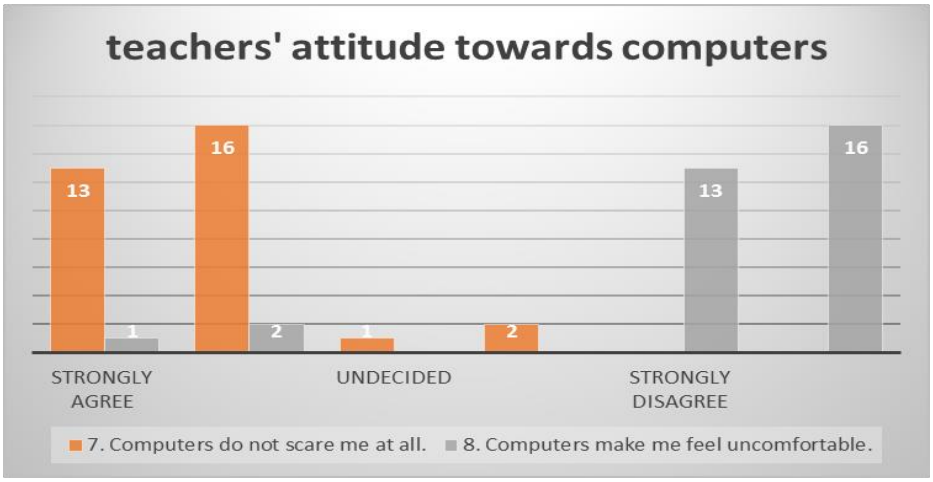
In terms of using computers either at school or at home, participants of different gender responded positively as 92.86% of the male population and 88.89 % of the female population used computers at home. While 78.57% of the male population and 61.11% of the female one used it at school though 14.29% of the male population and 22.22% of the female ones were undecided due to the nature of the modules they teach at university.



Graph 3.2 Level of Using Computers In Terms Of Gender

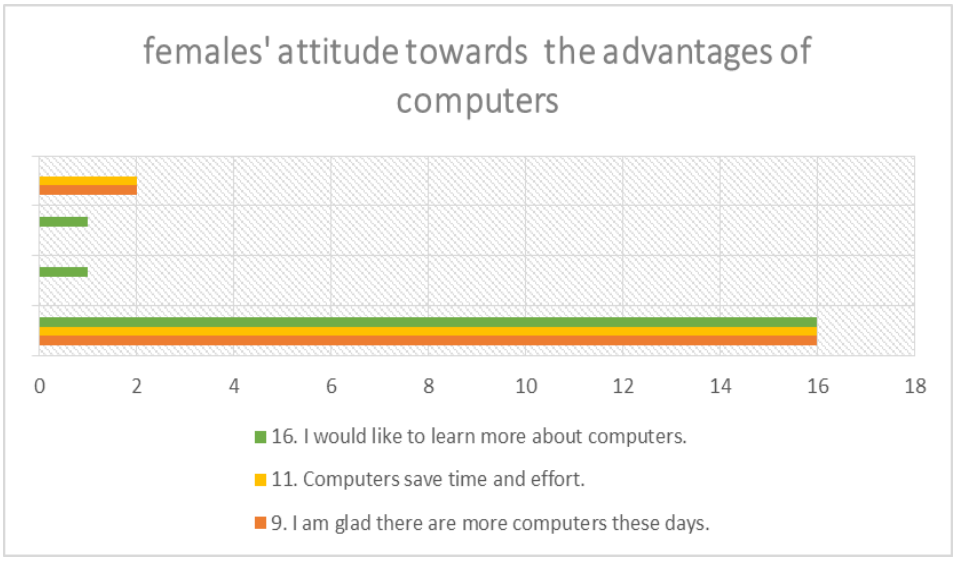
3.2.2.2 Teachers' attitude towards ICT in terms of gender

Participants of different gender showed mostly positive attitude towards the use of ICT. The majority of male population 92.86% and similarly the majority of female one 88.89% showed positive attitude towards computers while a very small group of participants were undecided.

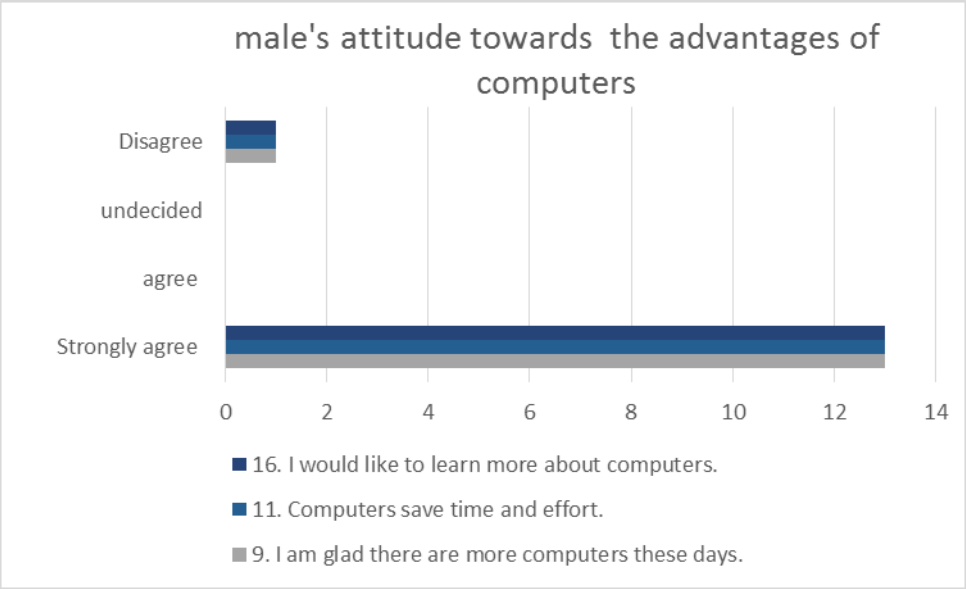


Graph 3.3 Teachers' Attitude towards ICT In Terms Of Gender

In responses to the advantages offered by ICT, a certain positive attitude are shown by the majority of participants: 92.86% male and 88.89% female population responded positively when they were asked if computers saved time and effort. While few participants disagreed with this statement.

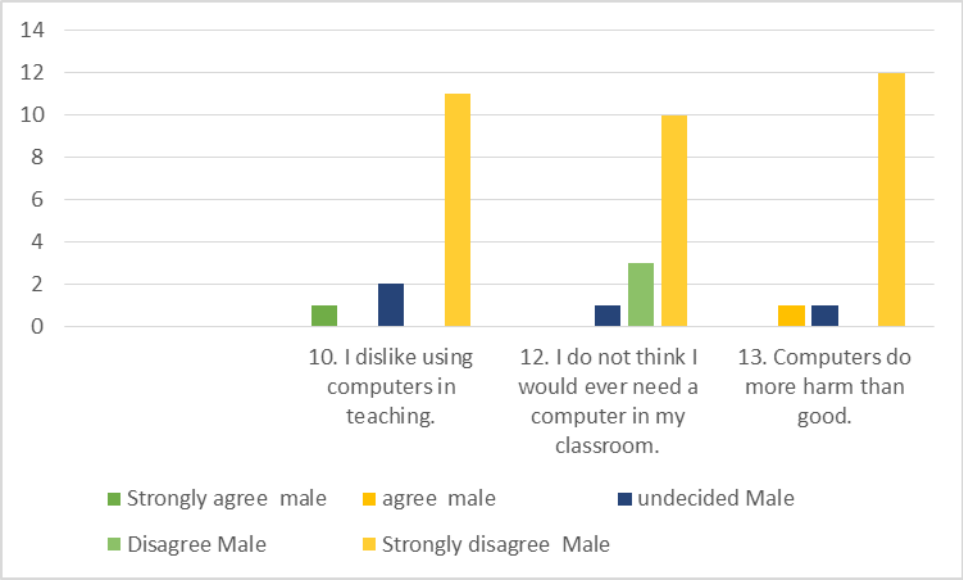


Graph 3.4 Females' Attitude towards the Advantages of Computers



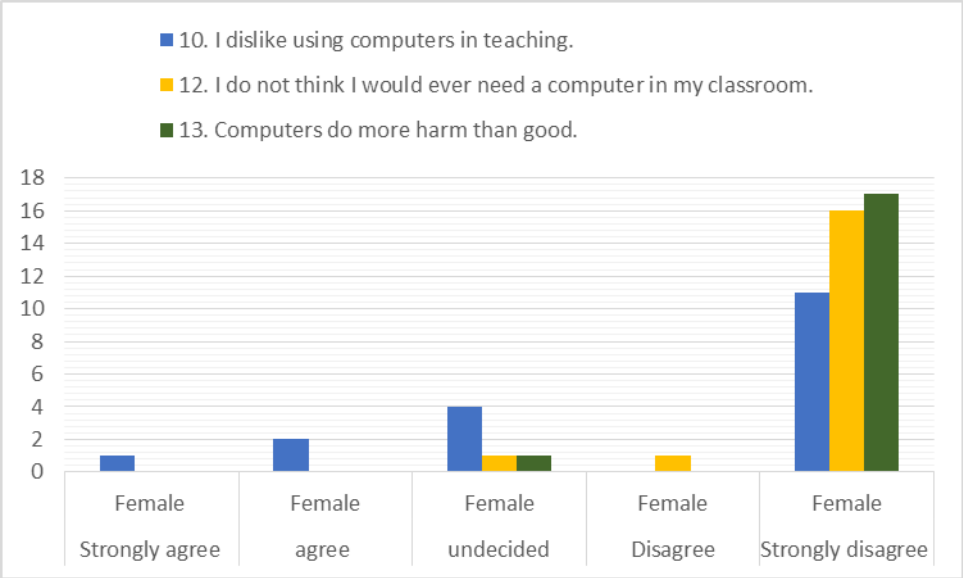
Graph 3.5 Males' Attitude towards the Advantages of Computers.

The majority of participants showed positive attitude in using computers in their language classroom as participants of both gender disagreed with the statement 'I dislike using computers in teaching'.



Graph 3.6 Males' Attitude towards the Use of ICT in Language Classroom

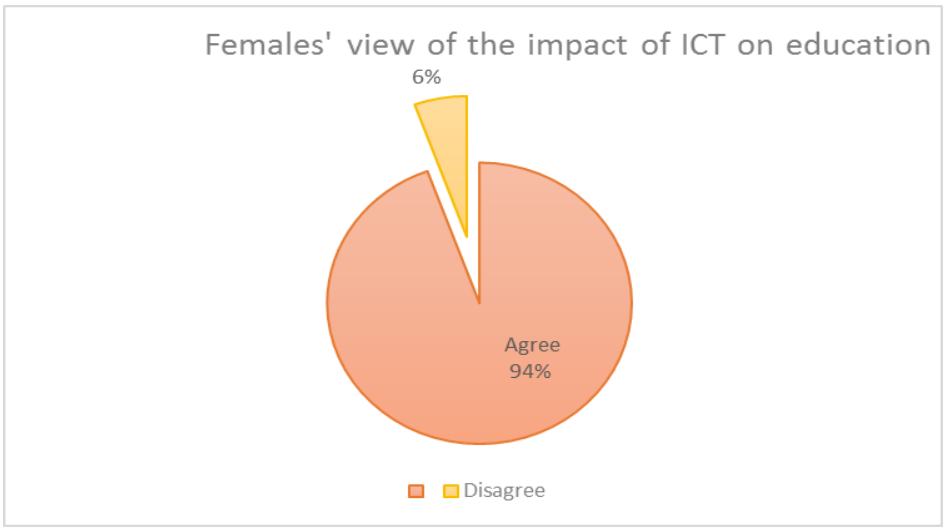
Though a very small group of participants whether male or female showed negative attitude as 7.14% of the male and 5.56% of female population agreed with this statement. However, 14.29 % of male and 22.22% of female population were undecided.



Graph 3.7 Females' Attitude towards the Use of ICT in Language Classroom

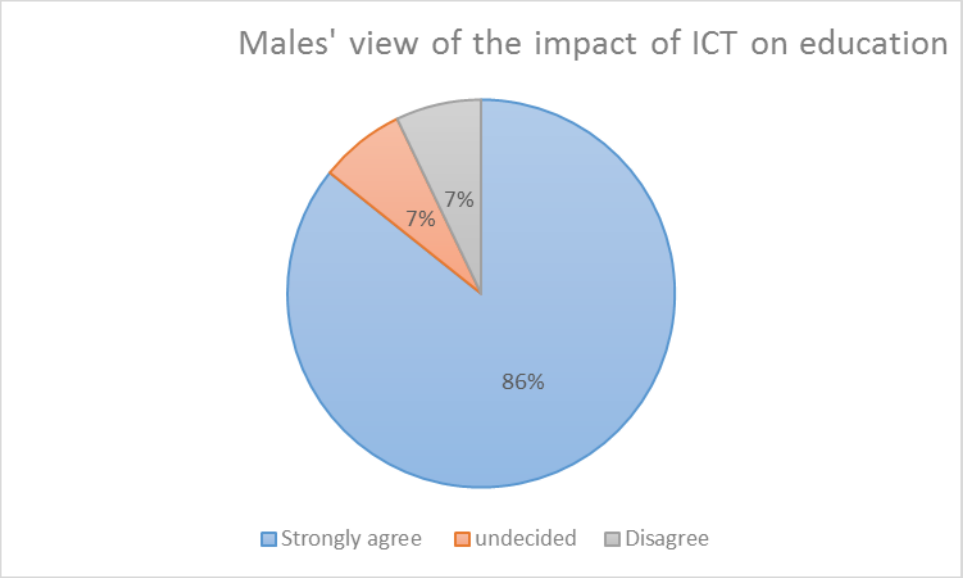
3.2.2.3 Teachers' Points Of View of ICT in Education and Culture in Terms of Gender

The majority of participants showed positive attitude towards the impact of ICT on education despite of their gender since 85.75% of male and 94.44% of female population were in agreement with the statement of 'computers will improve education'.



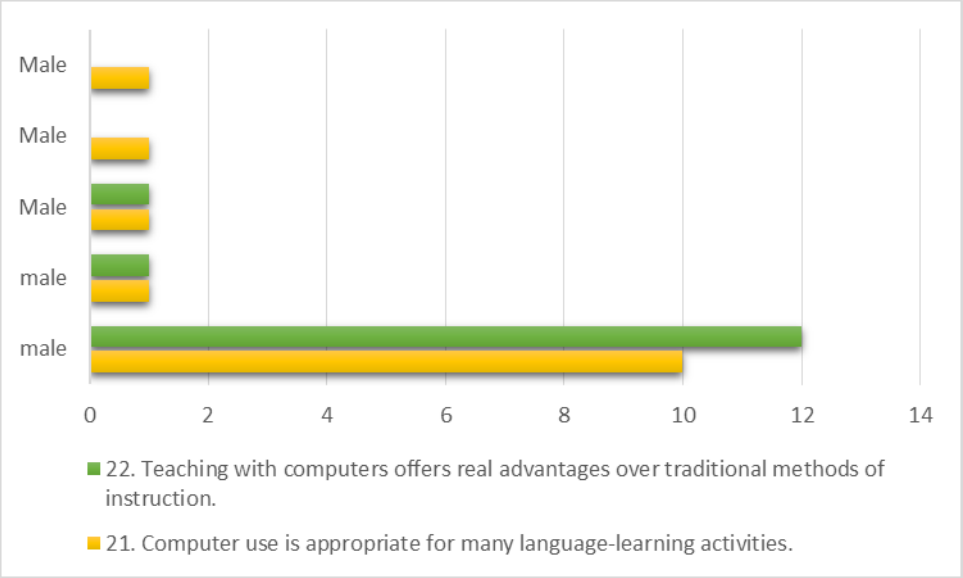
Graph 3.8 Females' Points Of View on the Impact of ICT on Education

However, 7.14% of the male population were undecided while another 7.14% showed negative attitude and similarly 6% of female ones had also the same negative attitude.



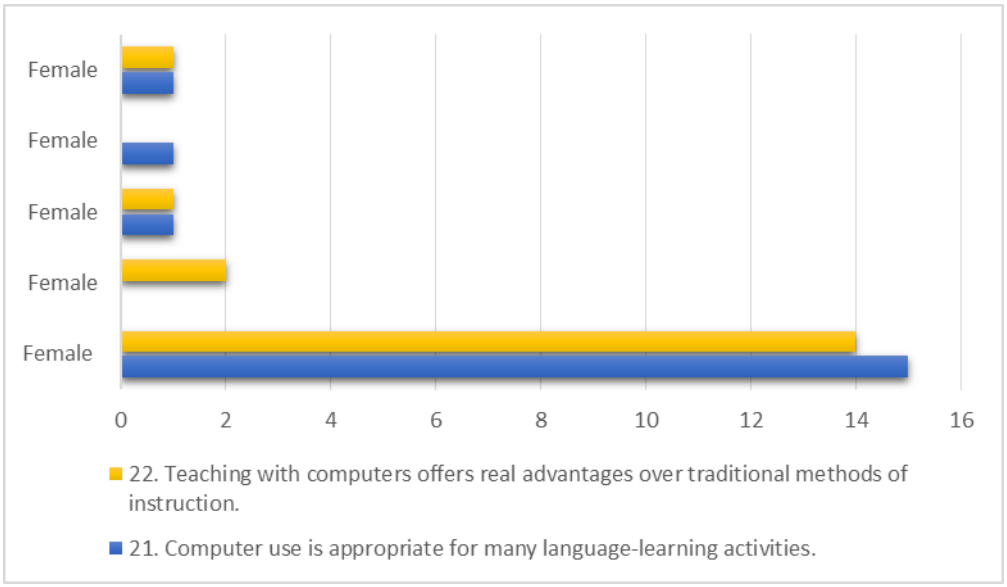
Graph 3.9 Males' View of the Impact of ICT On Education

In general, the majority of participants had a positive view towards the impact of ICT on language learning despite of their gender: 71.43% of the male population and 83.33% of the female ones.



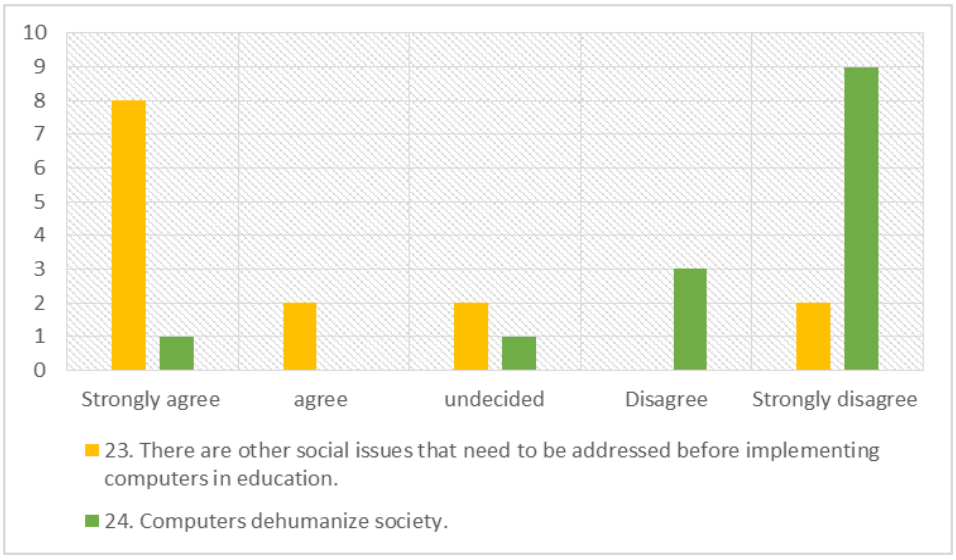
Graph 3.10 Males' View of the Impact of ICT on Language Classroom

However, few participants whether males (7.14%) or females (5.56%) were undecided about the impact of ICT on language classroom and few participants did not acknowledge the importance of ICT on education as only 7.14% male and 5.56% female participants disagreed with the statement.



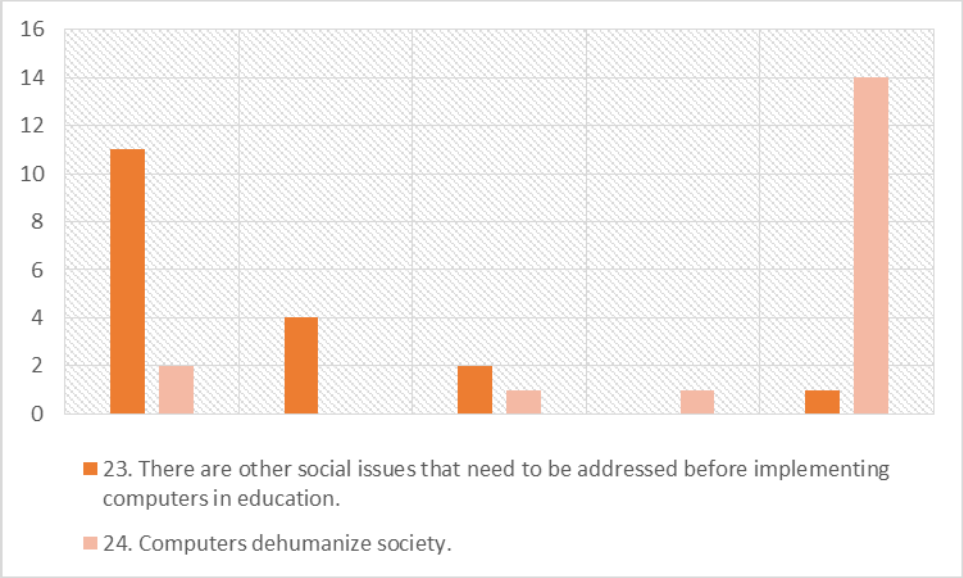
Graph 3.11 Females' View of the Impact of ICT on Language Classroom

When participants were asked if ICT had a positive impact on society, similar responses were given in favour of ICT by both male and female population. The majority of male participants (77.78%) and female ones (64.29%) did not agree with the statement that ICT dehumanized society.



Graph 3.12 Males' Points Of View Of The Impact Of ICT On Society.

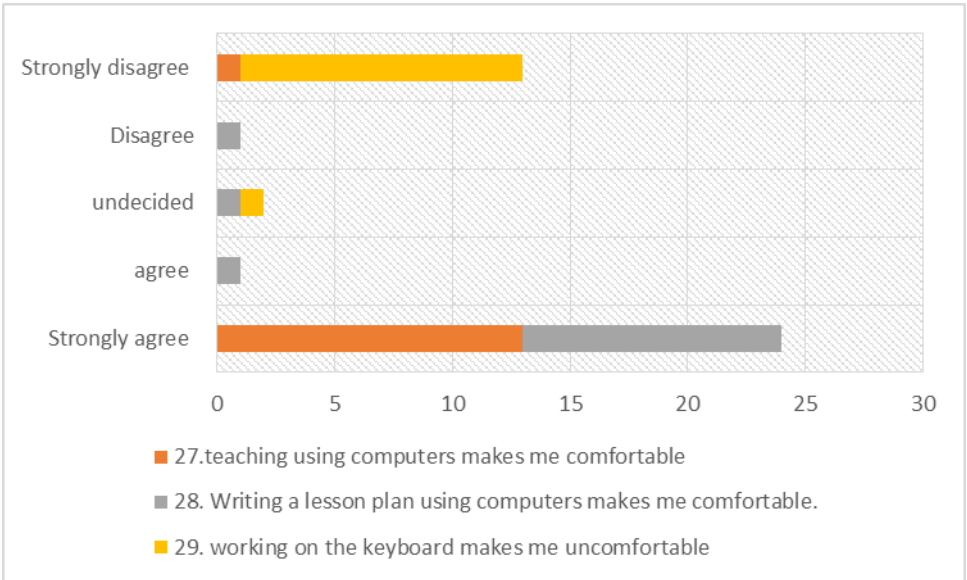
However, few participants thought of ICT as a negative influence on society as only 7.14% male and 11.11% female participants responded negatively.



Graph 3.13 Females' Points Of View of the Impact of ICT on Society

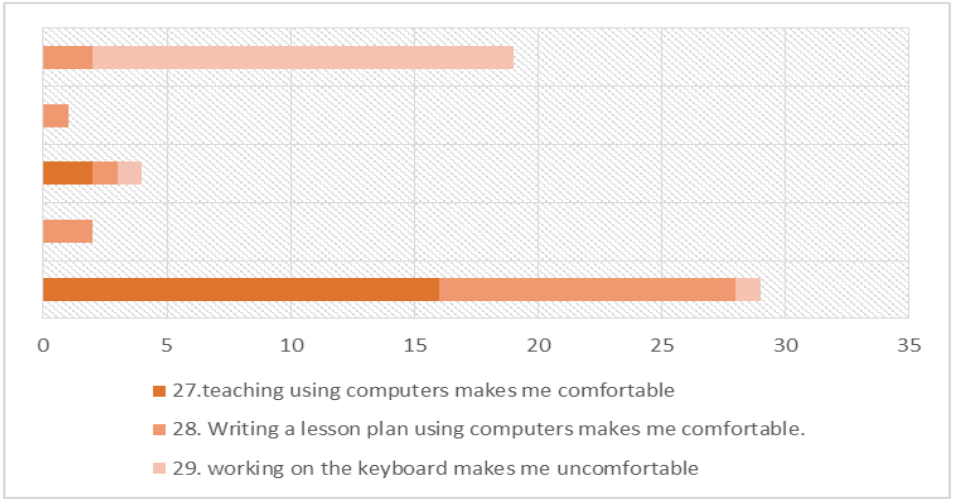
3.2.2.4 Computer Anxiety Level of Participants According To Gender

A low level of anxiety is noticed among participants' responses despite of their gender. The majority of participants stated that they felt comfortable while using computers as shown in the graphs (3.14 and 3.15)



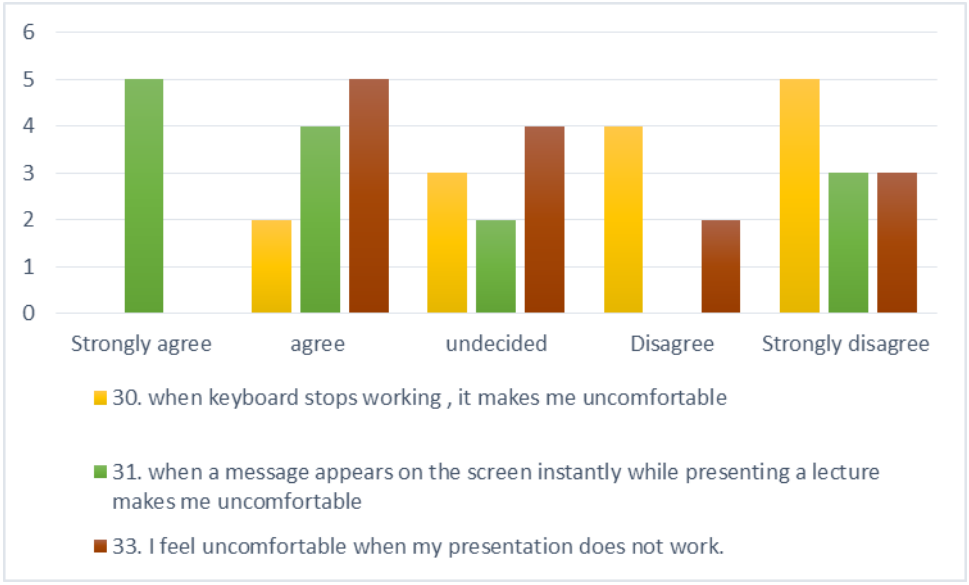
Graph 3.14 Males' Anxiety Level towards ICT.

However, small participants among males (7.14%) stated that they felt anxious while using computers while 11.11% of female participants were undecided, which is reasonable since anxiety, is inevitable.



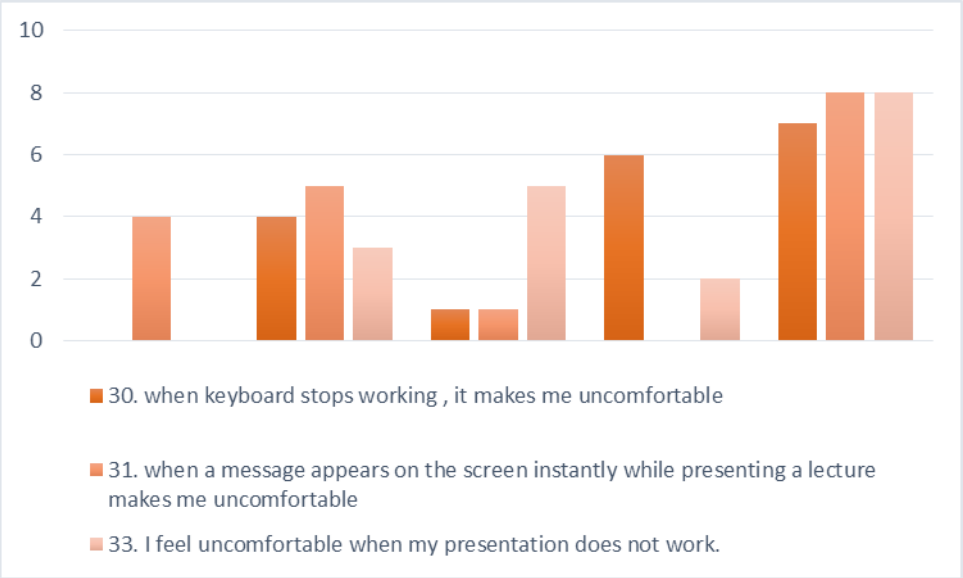
Graph 3.15 Females' Anxiety Level towards ICT.

When participants faced technical difficulties while using computers, level of anxiety was somehow higher in comparison to previous statement yet, it was noticeable among participants of both gender.



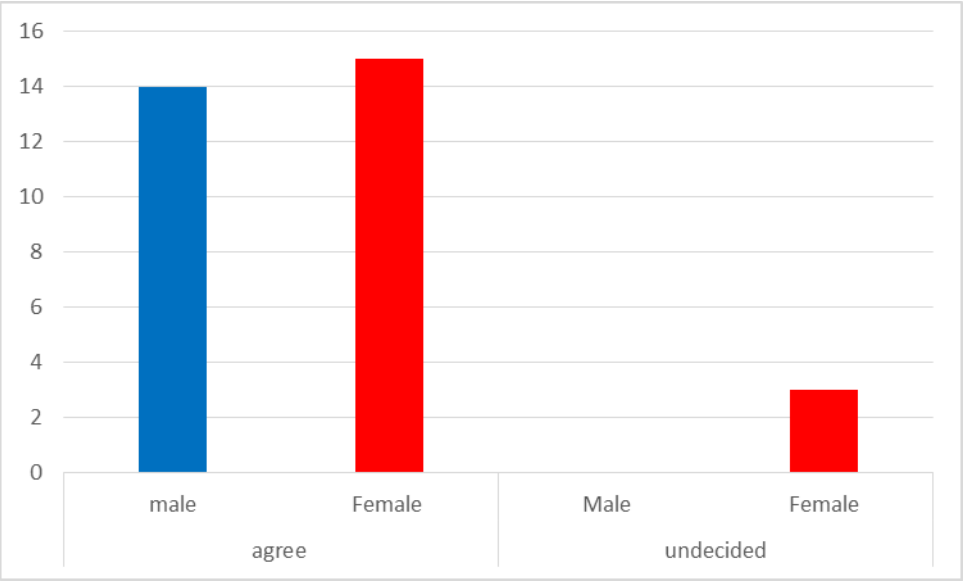
Graph 3.16 Males' Anxiety Level When Facing Technical Difficulties

For example, in responses to the statement ‘when keyboard stops working, it makes me uncomfortable’ 35.71% male and 22.22% of female population had higher anxiety level. While 14.29% male and 5.56% of female population took a neutral stand.



Graph 3.17 Females’ Anxiety Level When Facing Technical Difficulties.

Participants of different gender felt that having more opportunities was important in reducing the anxiety level when using computers as shown on graph 3.18. The majority of participants stated that practicing more on computers had a direct link with reducing anxiety level. Yet, a small population were undecided.



Graph 3.18 The Impact Of ICT Practices On Reducing Teachers’ Anxiety Level

3.2.3 ICT and the Age of the Participants

As it is shown in table 3.2, the classification of participants in terms of their age were as follow : 12.5% of the participants were within the 20-29 age range while 28.12% of them were within 30-39 age range, another 28.12% of them were within 40-49 age range and finally, 12.5% of them were 60 years old or over.

3.2.3.1 Computer Competency and Access Level According to age

This section of the questionnaire focuses on teachers' competency level and access in terms of age. The answers given by the respondents are categorised according to the following scale: strongly agree, agree, undecided, disagree and strongly disagree, as shown in the following table:

	age	20-29					30-39					40-49					50-59					Over 60				
	Statements	S.A	A	U	D	S.	S.	A	U	D	S.	S.	A	U	D	S.	S.	A	U	D	S.	S.	A	U	D	S.
Computer competence level and access	1. Install new software on a computer.	4					5	4				1	7	1			1	3	2			2	2			
	2. Operate a word processing program (e.g., Word).	4					5	4				1	6	2			1	4		1		2	1	1		
	3. Operate a presentation program (e.g., PowerPoint).	4					5	4				1	6	2			1	4		1		2	1	1		
	4. Use computers for grade keeping.	4					5	4				4	4	1			1	5				1		2	1	
	5. Use computer at home.	4					9					8		1			4		1	1		4				
	6. Use computers at school.	3	1				7	1		1		7		1		1	3	1	1		1	3				1

Table 3.9 Teachers' Competency Level and Access to Computers in Terms of Age

This table shows teachers' competency level and access to computers in terms of age. In response to the statement of 'install new software on a computer'. All participants within (20-29) age strongly agreed while all participants within the age of 30-39 agreed with this statement, yet five participants strongly agreed and four of them agreed with it. Moreover, the majority of participants of the 40-49 years range were in total agreement with the statement as one participants strongly agreed and seven among those participants agreed however, one

participants was undecided. Participants among 50-59 years were divided between one participants who strongly agreed, three of them agreed while two participants were undecided with the statement. Finally, all participants who have 60 years old or more were in total agreement with the statement though two of them strongly agreed and the other two agreed.

When participants were asked if they knew how to operate a word processing program such as word processing, all participants within the age of 20-29 strongly agreed with the statement while 5 participants of the 30-39 years range strongly agreed and four of them agreed. Moreover, the majority of participants between of 40-49 years old were in total agreement with the statement as one of them strongly agreed and six of them agreed. However, two participants among this range were undecided. Five participants within the age of 50-59 were in total agreement with the statement divided between one who strongly agreed and four of them agreed though one participant among this range disagreed with the statement. Finally, the majority of participants of 60 years old or more were in total agreement as two participants strongly agreed and one agreed however, one of them was undecided.

When participants were asked if they knew how to operate a presentation program such as Microsoft power point, all participants within the age of 20-29 were in total agreement with the statement while all participants between 30-39 years old were in total agreement with it as five participants strongly agreed and four of them agreed. Moreover, one participant who is among the 40-49 range strongly agreed with the statement while six participants among this category agreed however, two participants were undecided. The majority of participants who have 50-59 years old were in total agreement: one participants strongly agreed and four of them agreed though one participant among this range disagreed with the statement. Finally, the majority of participants within the age of 60 and more were in agreement with the statement divided between two participants who strongly agreed and one participant agreed however, one participant was undecided.

In their response to the statement, ‘use computers for grade keeping’, all participants within the age of 20-29 were in total agreement with it as well as participants within the age of 30-39 were also in agreement divided between five who strongly agreed and four of them agreed. Participants within the age of 40-49 were distributed between four participants who strongly agreed, four participants agreed and one of them was undecided. Moreover, all participants among the 50-59 years category were in agreement with the statement divided between one participant who strongly agreed and five of them agreed. Finally, only one

participant within the age of 60 and more was in total agreement with the statement while one disagreed and two of them were undecided.

When participants were asked if they used computers at home, all participants within the age of 20-29 and within the age of 30-39 strongly agreed with the statement. While eight participants within the age of 40-49 strongly agreed with the statement, one of them took a neutral stand. Moreover, four participants within the age of 50-59 strongly agreed with the statement whereas one disagreed and another one was undecided. Finally, all participants within the age of 60 and more were in total agreement with this statement.

A mixture of responses were given as participants were asked if they used computers at home. Three participants within the age of 20-29 strongly agreed and one participant among them agreed. Seven participants of the 30-39 years range strongly agreed and only one of them was undecided and another one strongly disagreed with the statement. Moreover, three participants among the 40-49 years category strongly agreed, one of them agreed; another one took a neutral stand while another one strongly disagreed with the statement. Finally, three participants who had 60 years or more strongly agreed and one participants strongly disagreed with the statement.

3.2.3.2 Teachers' Attitude towards ICT According to age

In Section C of the questionnaire, ten items are designed to investigate participants' attitude towards the use of ICT. Table 3.10 displays the scores used to determine positive and negative attitude of the respondents in terms of age. Positive attitude is the total responses of "strongly agree" and "agree" while negative one is the total of "strongly disagree" and "disagree" responses of the participants.

In response to the first statement 'computers do not scare me at all', all participants within the age of 20-29 and 30-39 strongly agreed with this statement whereas eight participants among the 40-49 years category strongly agreed though one participants among this range was undecided. Moreover, five participants between the ages of 50-59 strongly agreed and one participant was undecided. Finally, three participants within the age of 60 and more strongly agreed while one participant took a neutral stand.

When participants were asked if computers made them feel uncomfortable, all participants within the age of 20-29 and 30-39 were in total disagreement with the statement whereas one participant among the 40-49 years range strongly agreed and eight participants strongly disagreed which they represented the majority. Moreover, five participants between the ages of 50-59 were in total disagreement while one participant strongly agreed. Finally, three participants who had 60 years old or more strongly disagreed while only one participant agreed with this statement.

	age	20-29					30-39					40-49					50-59					Over 60				
	Statements	S.A	A	U	D	S.D	S.A	A	U	D	S.D	S.A	A	U	D	S.D	S.A	A	U	D	S.D	S.A	A	U	D	S.D
Attitude to ICT	7. Computers do not scare me at all.	4					9					8		1			5		1			3		1		
	8. Computers make me feel uncomfortable.					4					9	1				8	1				5	1				3
	9. I am glad there are more computers these days.	4					9					8			1		5			1		3			1	
	10. I dislike using computers in teaching.					4		1	2		6	1	1	2		5	1		2		3					4
	11. Computers save time and effort.	4					8			1		8			1		5			1		4				
	12. I do not think I would ever need a computer in my classroom.				1	3				1	8			1	1	7			1		5				1	3
	13. Computers do more harm than good.			1		3		1			8					9			1		5					4
	14. I would rather do things by hand than with a computer.					4	1				8	1				8	1				5					4
	15. I would avoid computers as much as possible.					4					9			1		8	1				5			1		3
	16. I would like to learn more about computers.	4					8	1				8			1		5	1				4				

Table 3.10 Teachers' Attitude towards ICT According To Age

In their responses to the statement ‘ I am glad there are more computers these days’, all participants within the age of 20-29 and 30-39 were in total agreement with this statement whereas eight participants among the 40-49 years range were also in total agreement while one participant among this category disagreed. Moreover, participants within the age of 50-59 were divided between five participants who strongly agreed and only participant who disagreed. Finally, three participants who had 60 years old or more strongly agreed while one participant disagreed.

When participants were asked if they disliked using computer in teaching, all participants within the age of 20-29 strongly disagreed with the statement, six participants from the 30-39 category strongly disagreed whereas one agreed and two participants among this range were undecided. On the other hand, five participants among the 40-49 range strongly disagreed, one of them strongly agreed, another one agreed and two participants were undecided. Moreover, three participants between the ages of 50-59 strongly disagreed and two of them were undecided. Finally, all participants within the age of 60 and more were in total disagreement with this statement.

In their responses to the advantages of computers as time and effort savers, all participants from the 20-29 years range strongly agreed with the statement. Eight participants within the age of 30-39 strongly agreed and one participant disagreed with this statement. Eight participants between the ages of 40-49 strongly agreed and only one participant from this range disagreed. In addition, five participants among 50-59 years old category were in total agreement while only one participant disagreed. Finally, all participants who had 60 years or more strongly agreed with this statement.

While answering the statement, ‘I do not think I would ever need a computer in my classroom’, all participants of the 20-29 years category were in total disagreement as 3 participants strongly disagreed and only one disagreed while the same feedback was given by participants within the age of 30-39 as eight participants strongly disagreed and only disagreed. Moreover, participants between the ages of 40-49 years old were also in disagreement as seven participants strongly disagreed, one disagreed and one participant took a neutral stand. Similarly, participants from the 50-59 years range also had the same attitude as five participants strongly disagreed and only one participant was undecided. Finally, participants with 60 years old or more were also in total disagreement as three participants strongly disagreed with the statement and another one disagreed.

When participants were asked if computers did more harm than good, their responses were similar as participants within the age of 20-29 strongly disagreed with the statement while only one participant took a neutral stand, eight participants among the 30-39 years range also strongly disagreed however, one participant agreed with it. Moreover, five participants from the 40-49 years category strongly disagreed while one of them was undecided. Finally, all participants who had 60 years or more were in total disagreement with the statement.

Participants were asked if they preferred doing things by hand rather than with a computer. The answers of participants within the age of 20-29 were against this statement since all of them strongly disagreed while eight participants from the 30-39 years range disagreed but one participant strongly agreed with it. Moreover, eight participants between the ages of 40-49 strongly disagreed and one participant strongly agreed. In addition, similar responses were given by participants who had 50-59 years old as five participants strongly disagreed though one participant strongly agreed with the statement. Finally, all participants within the age of 60 or more were in total disagreement with this statement.

In their responses to the final statement 'I would like to learn more about computers', all participants within the age of 20-29 and 30-39 were in agreement with this statement while similar feedback was given by participants within the age of 40-49 as eight participants strongly agreed and one of them agreed however, one participant disagreed. Moreover, all participants from the 50-59 years old category were in total agreement divided between five participants who strongly agreed and another one who agreed. Finally, all participants who had 60 years and above strongly agreed with this statement.

3.2.3.3 Teachers' points of view about ICT in Education and Culture in Terms of Age

In this section of the questionnaire, nine items are designed to seek teachers' points of view and opinions about ICT in culture and in education. Table 3.11 displays the scores used to seek the opinions of the respondents in terms of age. Positive points of view are the total responses of "strongly agree" and "agree" while negative ones are the total of "strongly disagree" and "disagree" responses of the participants.

As shown on the following table 3.11, the majority of participants from the 20-29 and 30-39 years category were in total agreement with the statement 'computers will improve education'. Seven participants within the age of 40-49 strongly agreed, one participant disagreed and another one took a neutral stand. Moreover, all participants among the 50-59 and 60 years and above ranges were in total agreement with this statement.

	age	20-29					30-39					40-49					50-59					Over 60				
	Statements	S.A	A	U	D	S.D	S.A	A	U	D	S.D	S.A	A	U	D	S.D	S.A	A	U	D	S.D	S.A	A	U	D	S.D
View about ICT in education and culture	17. Computers will improve education.	4					8			1		7		1	1		6					4				
	18. Computer technology cannot improve the quality of students' learning.					4				1	8				2	7		1	1		4		1			3
	19. Computers are not useful for language learning.					4				2	7				1	8		1	1		4			1		3
	20. Class time is too limited for computer use.		4				1	6	2				7	2				4	1		1		2	1		1
	21. Computer use is appropriate for many language-learning activities.	4					7	1	1			7		1		1	4			1	1	3			1	
	22. Teaching with computers offers real advantages over traditional methods of instruction.	4					7	2				6	1	1		1	5		1			4				
	23. There are other social issues that need to be addressed before implementing computers in education.	4					7		2			5	2			2	3	2			1		2	2		
	24. Computers dehumanize society.				2	2	1		1		7	1		1	1	6	1			1	4					4
	25. Computers encourage unethical practices.	1				3	1				8	1			1	7	1			2	3			1	2	1

Table 3.11 Teachers' Views about ICT in Education and Culture According To Age

When participants were asked if computer technology could not improve the quality of students' learning, all participants within the age of 20-29 strongly disagreed with the statement while similar responses were given by participants within the age of 30-39 as eight participants strongly disagreed and one disagreed. Participants the group age of 40-49 were also in total disagreement as seven participants strongly disagreed and two of them disagreed. Moreover, four participants between the ages of 50-59 strongly disagreed, one agreed with the statement and one participant took a neutral stand. Finally, three participants from the age category of 60 and above were in total disagreement however, one participant agreed with the statement.

Participants were asked if class time was too limited for computer use and their answers were in agreement with this statement. Similarly, in their responses to the statement 'computer use if appropriate for many language-learning activities', the majority of participants from the different age categories were in total agreement and few of them disagreed (see table 3.11)

When participants were asked if teaching with computers offered real advantages over traditional methods of instruction, all participants from the group age of 20-29 and 30-39 agreed with this statement. Similarly, the majority of participants within the age of 40-49 agreed while one of them strongly disagreed and another one was neutral. Moreover, five participants from the group age of 50-59 were in total agreement with the statement while one participant was undecided. Finally, all participants who had 60 years or more strongly agreed with the statement.

In their responses to the statement 'there are other social issues that need to be addressed before implementing computers in education', all participants between the ages of 20-29 strongly agreed with the statement and similarly, 7 participants within the age of 30-39 strongly agreed yet, two participants were neutral. Five participants from the group age of 40-49 strongly agreed, two agreed and two participants strongly disagreed with this statement. Moreover, three participants from the 50-59 years category strongly agreed, two agreed and one participant were in a disagreement. Finally, participants with 60 years old or more were divided equally between two participants who agreed and two participants who took a neutral stand.

A mixture of responses were given as participants were asked if computers dehumanized society. Participants within the age of 20-29 were in total disagreement as two participants strongly disagreed and another two of them disagreed. One participants from the group age of 30-39 strongly agreed, another one was undecided and seven participants strongly disagreed with this statement. Similarly, six participants between the ages of 40-49 strongly disagreed while another one disagreed and one participant was undecided. In addition, five participants among the 50-59 years category were in disagreement however, one participant strongly agreed. Finally, older participants with 60 years old or more were in total disagreement with this statement.

3.2.3.4 Computer Anxiety Level of Participants According to age

The final part of the questionnaire is designed to determine the anxiety level of participants towards the use of ICT in EFL classrooms. Ten items are designed concerning this regard and the table 3.12 shows the ratings used to determine high and low anxiety of the respondents in terms of age. When participants were asked if they thought of computers as friendly tools, all participants within the age of 20-29 and 30-39 strongly agreed. While eight participants from the group age of 40-49 strongly agreed, only one of them was undecided. Similarly, five participants between the ages of 50-59 strongly agreed and only one of them was undecided. Finally, participants who had 60 years or more were divided between three participants who strongly agreed and one participant who took a neutral stand.

In their responses to the statement 'teaching using computers make me feel comfortable', all participants between the ages of 20-29 and 30-39 were in total agreement while 8 participants who had 40-49 years old strongly agreed, one of them was undecided. Moreover, four participants from the group age 50-59 strongly agreed, one strongly disagreed and one of them was undecided. Finally, all participants within the age of 60 and above were in total agreement with this statement.

Participants were asked if writing a lesson plan using computers made them comfortable, the group ages of 20-29 and 30-39 were in total agreement with this statement while eight participants from the 40-49 age range strongly agreed and one of them was undecided. Moreover, four participants between the ages of 50-59 strongly agreed, one of them strongly disagreed and another one took a neutral stand. Finally, all participants from the group age of 60 and above agreed with this statement (see table 3.12)

	Age	20-29					30-39					40-49					50-59					Over 60				
	Statements	S.A	A	U	D	S.D	S.A	A	U	D	S.D	S.A	A	U	D	S.D	S.A	A	U	D	S.D	S.A	A	U	D	S.D
Computer Anxiety level	26. I generally think of computers as friendly tools.	4					9					8		1			5		1			3		1		
	27.teaching using computers makes me comfortable	4					9					8		1			4		1		1	4				
	28. Writing a lesson plan using computers makes me comfortable.	4					9					8		1			4		1		1	4				
	29. working on the keyboard makes me uncomfortable					4					9			1		8	1		1		4					4
	30. when keyboard stops working , it makes me uncomfortable		1	1		2		1	1	4	3		2		4	3		1	1	1	3		1	1	1	1
	31. when a message appears on the screen instantly while presenting a lecture makes me uncomfortable			1		3	3	3			3	3	3	1		2	2	2	1		1	1	1			2
	32. Discussing computers with a group of people who know a lot about using them makes me uncomfortable				2	2			2	4	3		1	1	2	5		2		2	2			2		2
	33. I feel uncomfortable when my presentation does not work.		1		1	2		2	2		5		2	2	1	4		2	3	1			1	2	1	
	34. The more opportunities I have to present, the less anxious I feel	4					6	3				5	3	1			5		1			3		1		
	35. After the training provided, I felt less anxious when I use ICT in teaching	3		1			5		4			2		7			2		4			1		3		

Table 3.12 Teachers' Computer Anxiety Level According to Age

A mixture of responses were given by participants to the statement 'when keyboard stops working, it makes me uncomfortable'. Two participants within the age of 20-29 strongly disagreed, one agreed and another one was undecided. Participants between the ages of 30-39 gave different answers as three participants who strongly disagreed, four disagreed, one agreed and another one was undecided. Moreover, three participants among the 40-49 years category strongly disagreed, four disagreed and two agreed. Likewise, three participants from the group age of 50-59 strongly disagreed, one disagreed, one agreed and another one was neutral. Finally, the answers of participants with 60 years old or more were distributed equally between one who strongly disagreed, one disagreed, one agreed and another one was undecided. Similarly, participants were asked if they felt uncomfortable when their presentation did not work. Their answers varied between those who agreed, those who disagreed while few participants took a neutral stand (see table 3.12).

When participants were asked if having more opportunities in using technology made them less anxious, the responses of participants from the group ages of 20-29 and 30-39 were in favour of this statement. Likewise, five participants between the ages of 40-49 strongly agreed, three of them agreed yet, one participant took a neutral stand. Similarly, five participants among the 50-59 years old category strongly agreed and only one of these participants was undecided. Finally, three participants within the group age of 60 or more strongly agreed and one participants who was neutral.

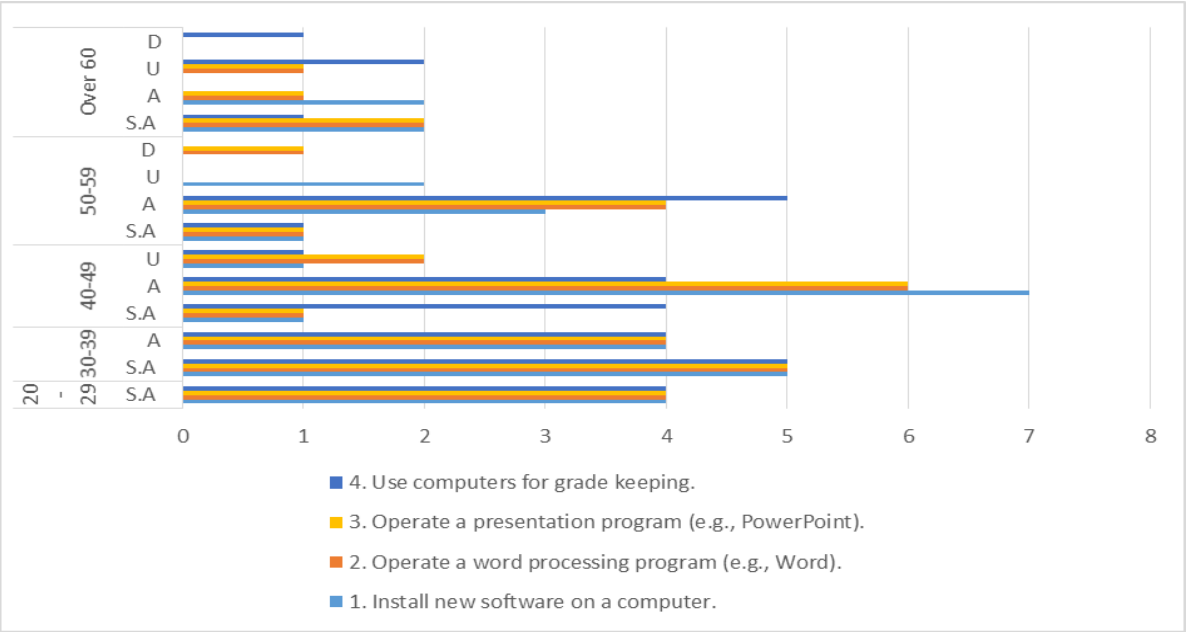
In their responses to the final statement, 'after the training provided, I felt less anxious when I use ICT in teaching', those who took formal computer shared agreement with this statement however, those who did not acquire the proper training took a neutral stand. (See table 3.12)

3.2.4 Discussion of ICT and the Age of the Participants Findings

The feedback of participants in terms of age were similar as they showed a good competency level in computers, positive attitude towards ICT and its advantages and low anxiety level.

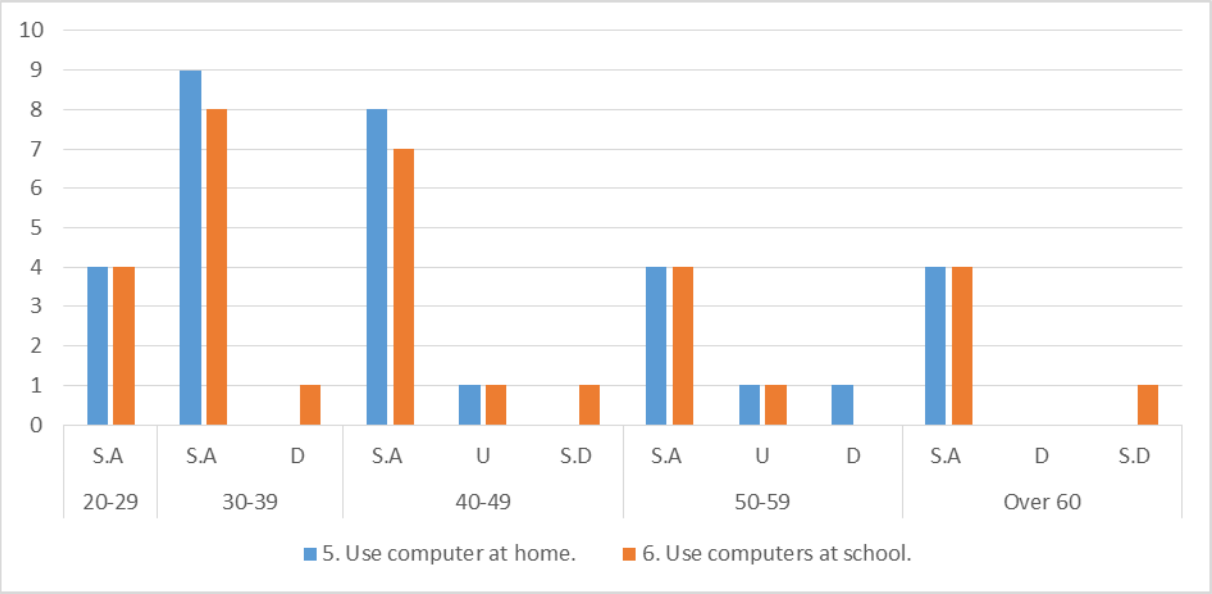
3.2.4.1 Computer Competency and Access Level According to age

When it comes to using computers and its tool, the majority of participants of different ages showed a certain level of computer competency. 100 % of participants in the 20-29, 30-39 and over years old range knew how to operate on the different tools of a computer while the majority of participants in the 40-49 range (88.78%) and 66.67% of the participants within the 50-59 range responded positively.



Graph 3.19 Computer Competency Level of Teachers According to Age

In terms of computer access whether at school or home, participants responded positively. 100% of participants within 20-29, 30-39, and over 60 years old range used computers at home while the majority of 40-49 range (88.89%) and 66.67% of the 50-59 range stated that they used computers at home.

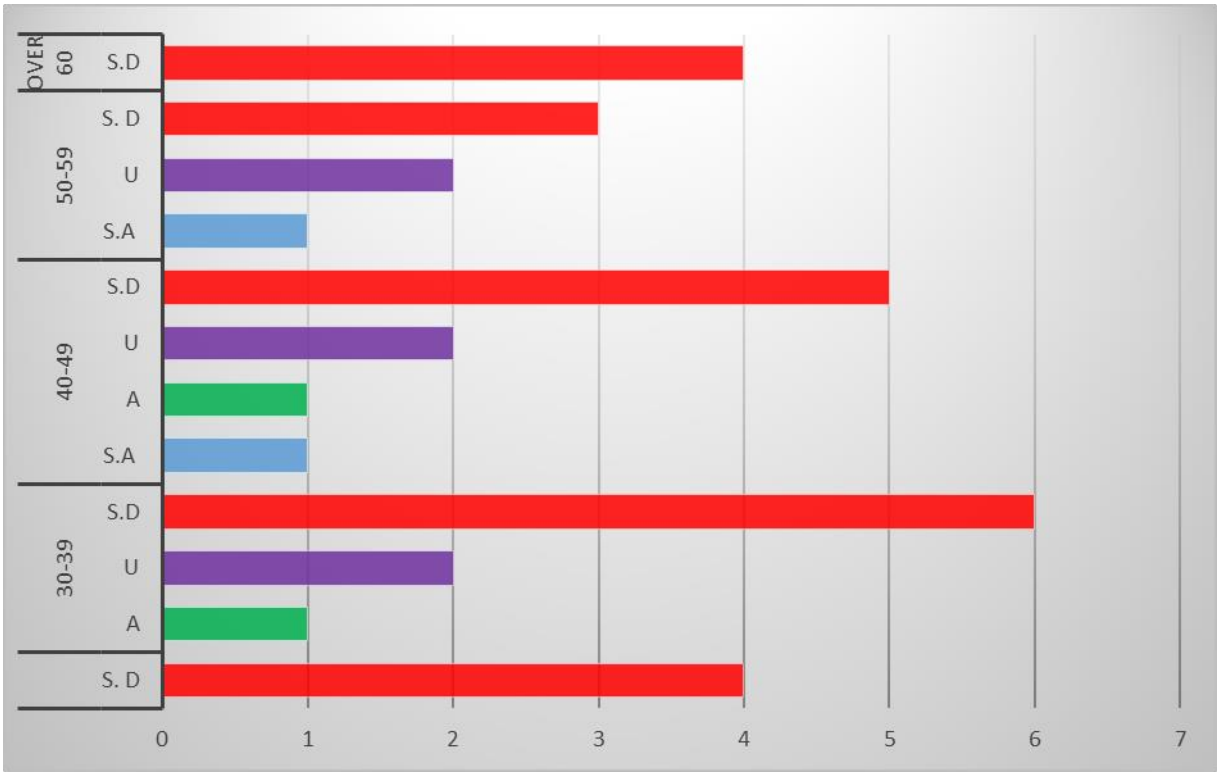


Graph 3.20 Accessibility of Computers To Participants In Terms Of Age.

The use of computers at school is satisfactory since only few participants did not use it school given the nature of the module they taught. Only 11.11% among the 30-39 and similarly to 40-49 range stated that they did not used it at school while 16.67% among the 40-49 range and 25% among the over 60 years old also stated the same.

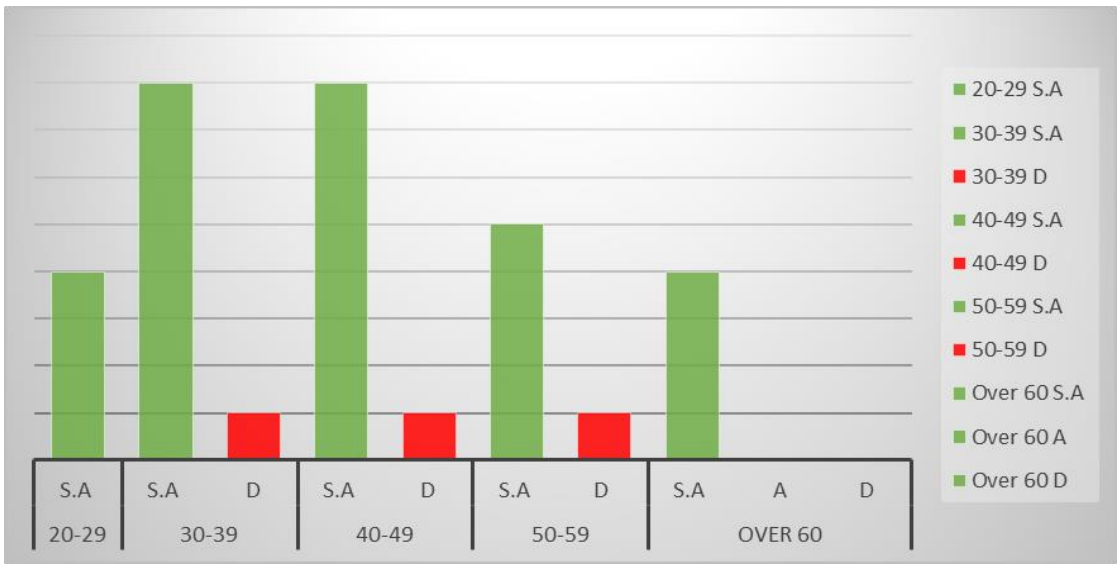
3.2.4.2 Teachers' attitude towards ICT in terms of age

Participants of different ages exhibited mostly positive attitude towards the use of ICT. This is clear given the answers of participants of participants that were in favour of using technology. The majority participants of all different ages preferred using ICT in teaching .100% within 20-29 range, 66.67% from the 30-39 category, 55.56% within the 40-49, 50% within the 50-59 range, and 100 % of participants with 60 years old or over disagreed with the statement 'I dislike using computers in teaching'.



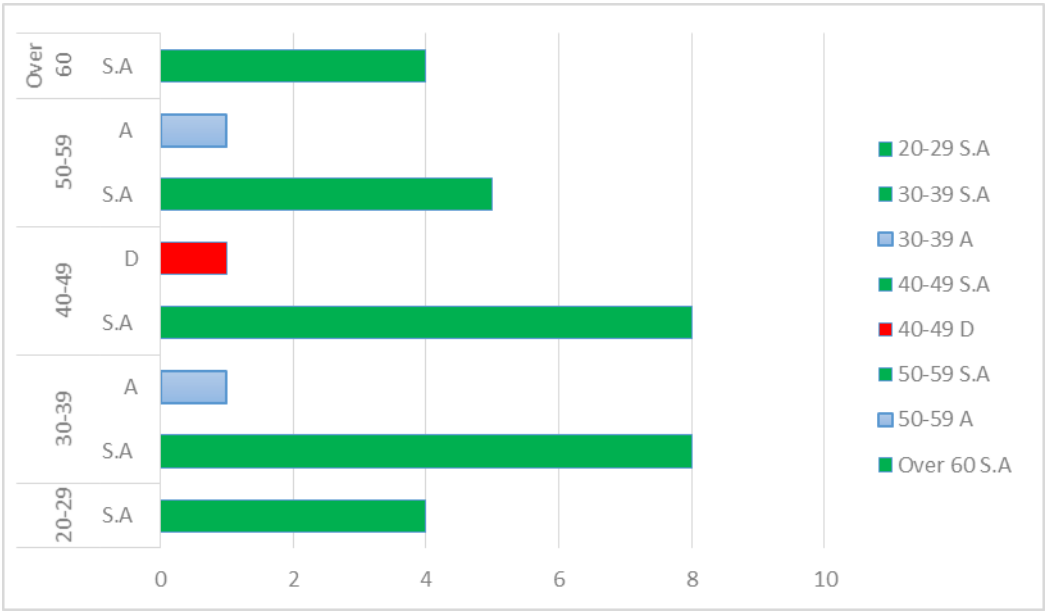
Graph 3.21 Teachers' Attitude towards The Use Of ICT In Teaching According To Age

Teachers from different group age showed generally positive attitude towards the variable tools offered by computers. The percentages of different group ages were similar as shown on graph 3.22 which indicate that the majority of participants had positive attitude towards the efficiency of computers in time and efforts.



Graph 3.22 Teachers' Attitude towards Computers Advantages According to Age

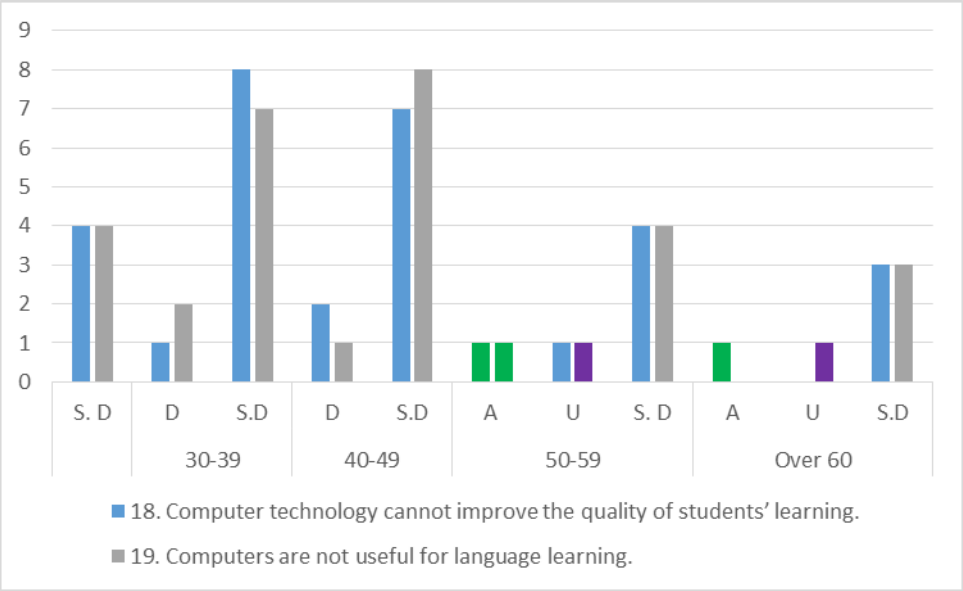
Participant of different ages revealed leniency towards learning more about computers due to their knowledge of the importance of ICT in all aspects of life. All participants within the 20-29, 30-39, 50-59, over 60 years old and the majority of the 40-49 age group (88.89%) wanted to learn more about computers. These answers reflect their positive attitude towards ICT.



Graph 3.23 Teachers' Attitude towards Learning More about Computers in Terms of Age

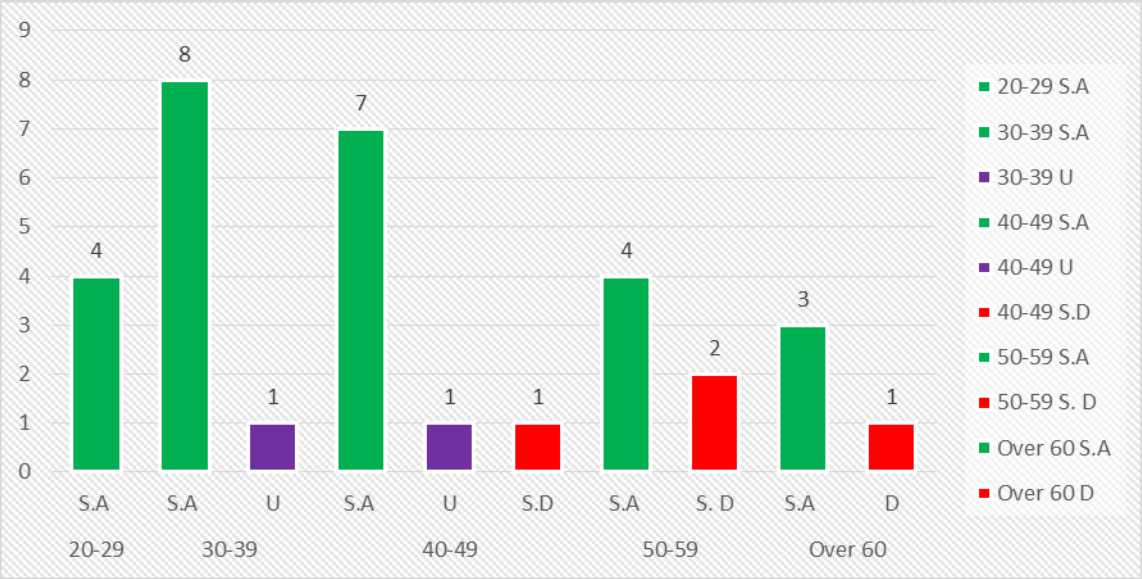
3.2.4.3 Teachers' points of view of ICT in Education and Culture in Terms of Age

In general, participants of different ages displayed positive attitude towards the impact of ICT on education and we can notice that in their disagreement with the statement that technology cannot improve the quality of students' learning. All participants within 20-29, 30-39 and 40-49 range were in total disagreement in addition to the majority of participants from the group age of 50-59 (66.67%) and 75% of participants from 60 years old and more category felt the same way. However, only 16.67% among the 50-59 age group and 25% among the 60 years old and over agreed with this statement.



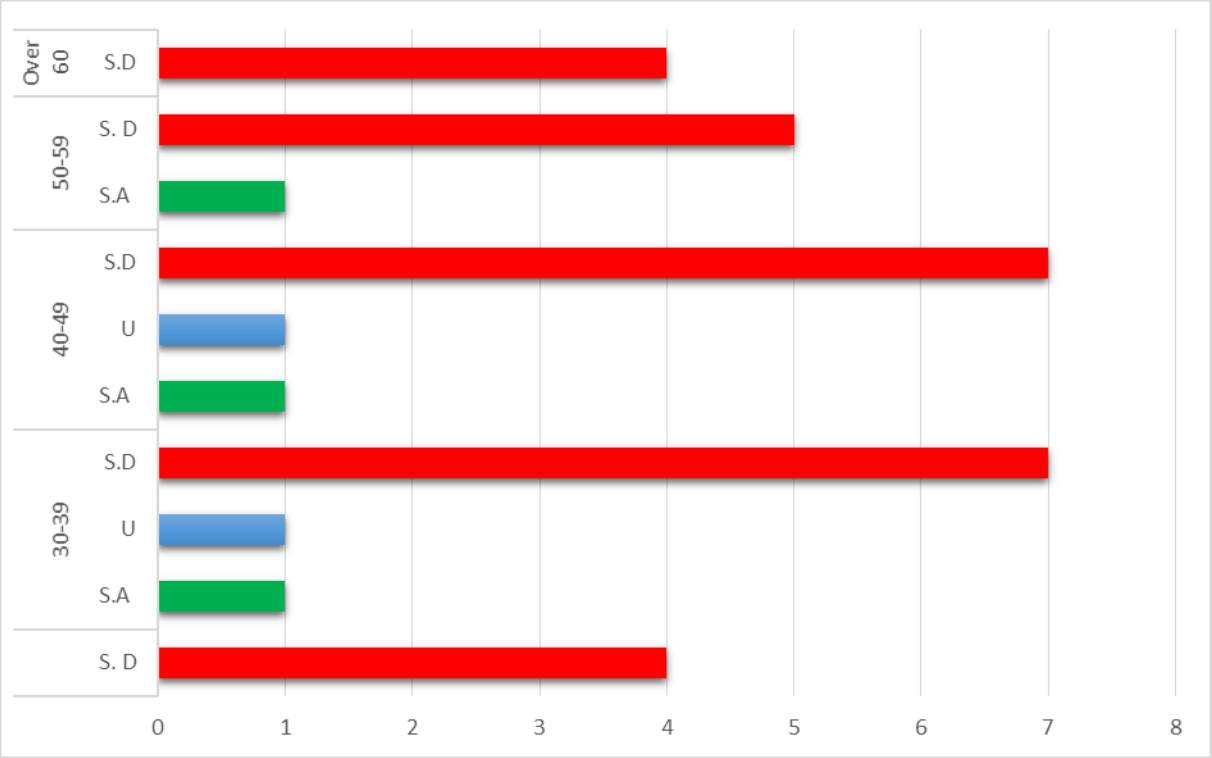
Graph 3.24 Teachers' Opinion about the Impact of ICT on Education in Terms of Age

In general, participants with all different ages recognised the importance of technology since the majority of participants acknowledged the positive role in using ICT in different language learning activities. (See graph 3.25)



Graph 3.25 Teachers' Opinion about the Usefulness of ICT

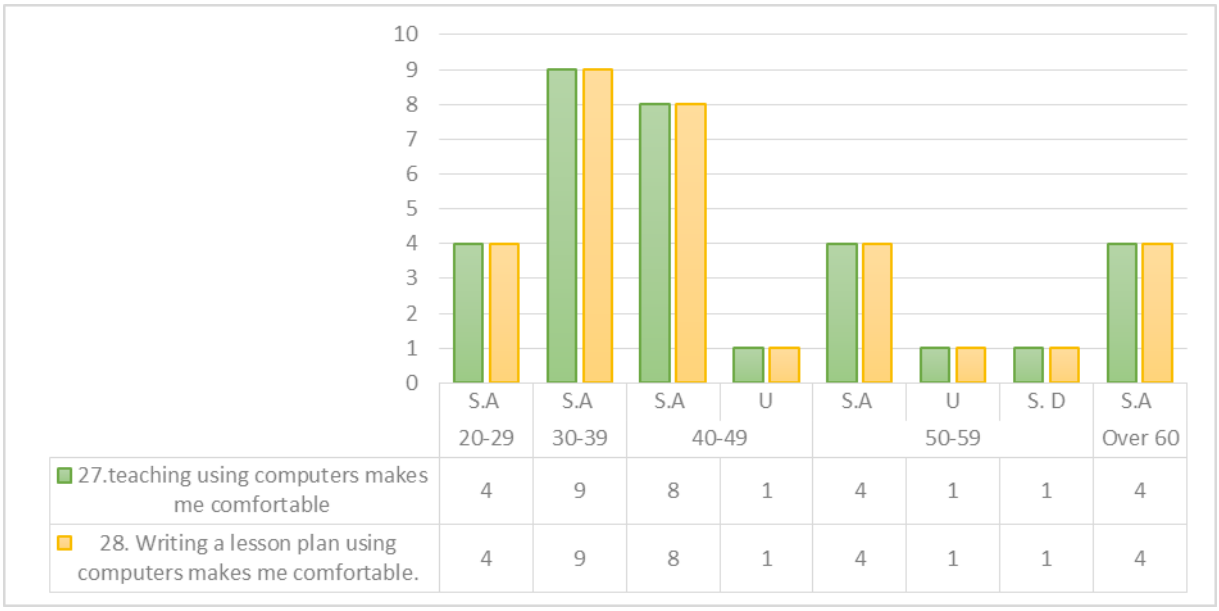
When participants were asked if ICT had a negative impact on society, participants with different ages had similar views about this statement. All participants among the 20-29 age group and 60 years old and above disagreed with this statement while the majority of the other age groups had the same view: 77.78%, 77.78% and 93.43 % of participants from 30-39, 40-49 and 50-59 age groups in order thought that ICT had a positive influence on society.



Graph 3.26 Teachers' View about the Impact of ICT on Society According to Age

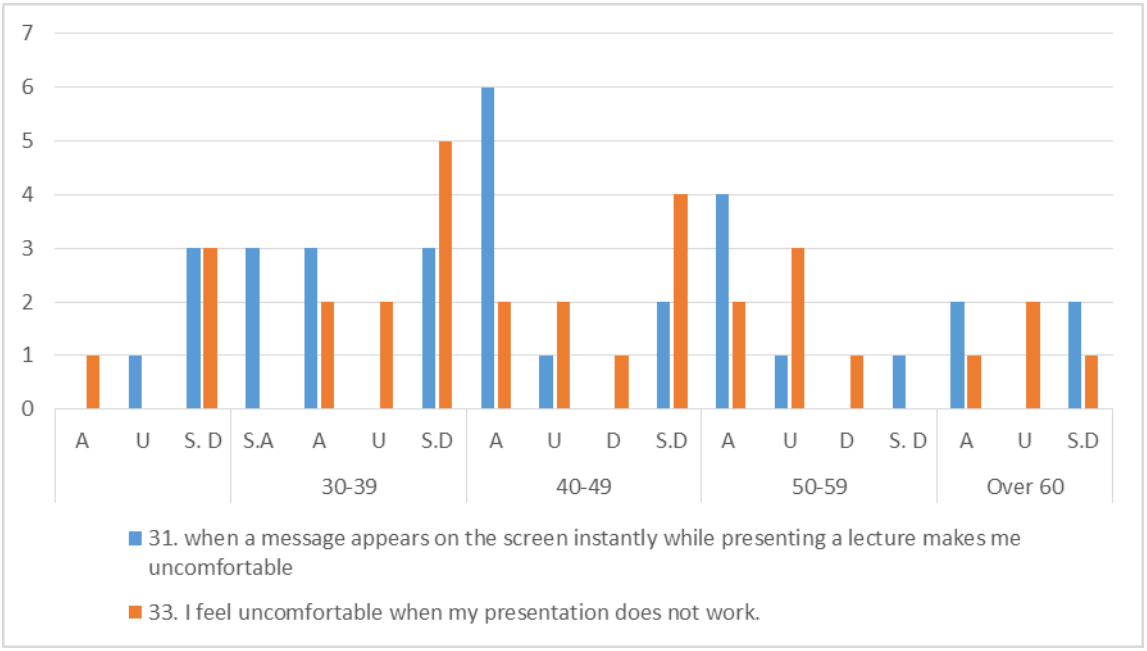
3.2.4.4 Computer Anxiety Level of Participants According To Age

A low level of anxiety was noticed among participants' responses despite of their age. Only 16.67% among the 50-59 age group showed a high level of anxiety when using ICT while the majority of participants within the rest age groups showed a low level of anxiety.



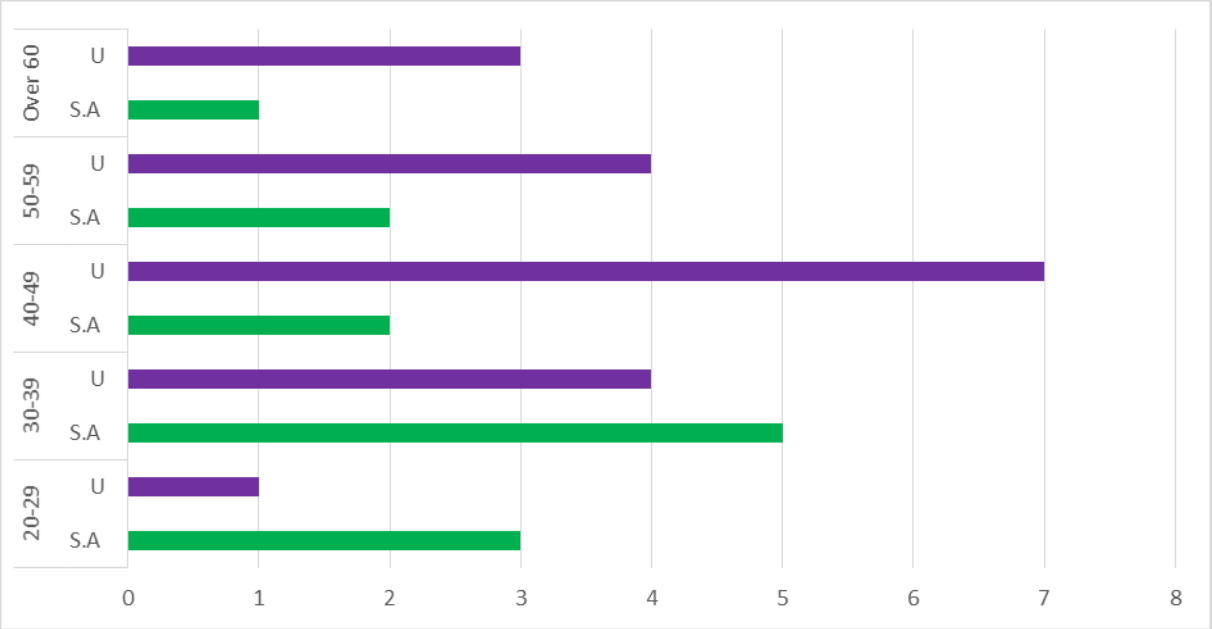
Graph 3.27 Teachers' Anxiety Level When Using Computers In Terms Of Age

When participants were asked about their level of anxiety when facing technical difficulty while using computers, the level of anxiety was noticeable. 25% of participants from the 20-29 age group, 22.22% of them between the ages of 30-39 and 40-49. Moreover, 33.33% among the 50-59 age group and 25% of participants with more than 60 years old stated that they felt anxious when they faced a technical problem.



Graph 3.28 Teachers' Anxiety Level When Facing a Technical Problem in Terms of Age

When participants were asked about the importance of training in reducing anxiety level, those who had a formal training acknowledged the role of computer training as 75%, 55.56 % from the 20-29 and 30-39 age group in order. 22.22% of the participants between the 40-49 years old , 33.33% within the 50-59 age group and 25% of participants with 60 years old and more replied positively to this statement.



Graph 3.29 The Impact of Computer Training on Reducing Anxiety Level according to Age.

3.2.5 The Use of ICT and Teachers' Experience

As it is shown in table 3.3, there is a mixture of novice teachers and experienced ones. 21,87% of the participants had one to five years of teaching experience, 12.5% of them had six to ten years of teaching experience. While 15.62% of them had eleven to fifteen years of teaching experience, 25% of them had sixteen to twenty years of teaching experience and finally, 25% of them had twenty years of teaching experience or more.

3.2.5.1 Computer Competency and Access Level According to teaching experience

This section of the questionnaire focuses on teachers' competency level and access in terms of their years of teaching experience. The answers given by the respondents are

categorised according to the following scale: strongly agree, agree, undecided, disagree and strongly disagree, as shown in the following table:

	years of teaching experience	1-5					6-10					11-15					16-20					Over 20				
	Statements	S.A	A	U	D	S.D	S.A	A	U	D	S.D	S.A	A	U	D	S.D	S.A	A	U	D	S.D	S.A	A	U	D	S.D
Computer competence level and access	1. Install new software on a computer.	4	3				2	2				3	1	1			2	5	1			2	5	1		
	2. Operate a word processing program (e.g., Word).	4	3				3	1				2	3					5	2	1		4	3	1		
	3. Operate a presentation program (e.g., PowerPoint).	4	3				3	1				2	3				2	5		1		2	3	3		
	4. Use computers for grade keeping.	3	4				3	1				2	2	1			3	4	1			4	2	1	1	
	5. Use computer at home.	7					4					5					6		1	1		7		1		
	6. Use computers at school.	6	1				4					4		1			4	1		1	2	5	1	1		1

Table 3.13 Participants' Competency Level and Access to Computers According to Teaching Experience

This table shows teachers' competency level and access to computers in terms of their years of teaching experience. In responses to the statement of 'install new software on a computer', participants among 1-5 years of teaching experience were in total agreement as four participants strongly agreed and three participants agreed. Two participants within the range of 6-10 years of teaching experience strongly agreed and another two who agreed. Three participants between 11-15 years of teaching experience strongly agreed while one participant agreed and another one was undecided. Two participants from the range of 16-20 years of teaching experience strongly agreed, five participants agreed and only one participant took a neutral stand. Finally, four participants with more than 20 years of teaching experience strongly agreed, three participants agreed and only one of them was undecided.

When participants were asked if they knew how to operate on the basic computer tools such as word processing program (e.g., Word), presentation program (e.g., PowerPoint) and

grade keeping (e.g., Excel), participants of different years of experience shared similar responses as shown on table 3.13.

On terms of using computers at home, all participants within 1-5, 6-10- and 11-15 years of teaching experience were in total agreement while participants within 16-20 range distributed between six participants who strongly agreed, one disagreed and another one was undecided. Finally, seven participants with more than 20 years of teaching experience strongly agreed yet one of them was undecided.

Participants gave similar responses on terms of using computers at school in favour of using the different ICT tools in classrooms while few participants stated the opposite given the nature of the module they taught (see table 3.13).

3.2.5.2 Teachers' Attitude towards ICT According to Teaching Experience

In Section C of the questionnaire, ten items are designed to investigate participants' attitude towards the use of ICT. Table 3.14 displays the scores used to determine positive and negative attitude of the respondents in terms of years of teaching experience. Positive attitude is the total responses of "strongly agree" and "agree" while negative one is the total of "strongly disagree" and "disagree" responses of the participants.

Participants with different years of experience (1-5, 6-10 and 11-15) were in total agreement with statement 'computers do not scare me at all'. Answers of participants from 16-20 range varied between six participants who strongly agreed and two of them were undecided. Likewise, participants with more than 20 years of teaching experience shared the same responses as seven participants strongly agreed while only one participant was undecided.

When participants were asked if computers made them feel uncomfortable, all participants from the 1-5 and 6-10 years of teaching experience groups strongly disagreed while the majority of teachers within 11-15 range strongly disagreed. Likewise, participants within the range of 16-20 were distributed between seven participants who strongly disagreed and one participant who agreed. Finally, seven participants with more than 20 years of teaching experience strongly disagreed and only one of them strongly agreed.

	years of teaching experience	1-5					6-10					11-15					16-20					Over 20				
	Statements	S. A	A	U	D	S. D	S. A	A	U	D	S. D	S. A	A	U	D	S. D	S. A	A	U	D	S. D	S. A	A	U	D	S. D
Attitude to ICT	7. Computers do not scare me at all.	7					4					5					6		2			7		1		
	8. Computers make me feel uncomfortable.					7					4	1				4	1				7	1				7
	9. I am glad there are more computers these days.	7					4					4			1		7			1		7			1	
	10. I dislike using computers in teaching.					7		1	2		1	1	1	2		1			2		5	1				7
	11. Computers save time and effort.	7					3			1		4			1		7			1		7				
	12. I do not think I would ever need a computer in my classroom.				1	6				1	3			1	1	3			1		7				1	7
	13. Computers do more harm than good.			1		6		1			3					5			1		7					8
	14. I would rather do things by hand than with a computer.					7	1				3	1				4	1				7					8
	15. I would avoid computers as much as possible.					7					4			1		4	1				7			1		7
	16. I would like to learn more about computers.	7					3	1				4			1		7	1				8				

Table 3.14 Participants' Attitude towards ICT In Terms Of Years of Teaching Experience

In their responses to the statement, 'I am glad there are more computers these days.' The majority of participants from all different groups of teaching experience shared the same responses in favour of the availability of computers (see table 3.14)

When participants were asked if they disliked using computers in teaching, all participants within 1-5 years of teaching experience were in total disagreement while one participant from the 6-10 range agreed, two were undecided and one strongly disagreed. Likewise, participants who had 11-15 years of teaching experience answered differently as

one of them strongly agreed, one agreed, two were undecided and one participant strongly disagreed. Moreover, participants' answers between the 16-20 years of teaching experience were mixed as two participants were undecided and five participants strongly disagreed. Finally, seven participants with more than 20 years of teaching experience were in total disagreement with this statement while one of them strongly disagreed.

When participants were questioned if computers saved time and effort, the majority of participants from different years of teaching shared the same responses acknowledging the advantages offered by computers (see table 3.14). In their responses to the statement, 'I do not think I would ever need a computer in my classroom.' Participants from the groups of 1-5 and 6-10 years of teaching experience were in total disagreement. Moreover, participants' answer among the group of 1-15 varied between three participants who strongly disagreed, one disagreed and another one was neutral. In addition, seven participants within the 16-20 range strongly disagreed and only one took a neutral stand. Finally, seven participants who had more than 20 years of teaching experience disagreed and one of them agreed.

Participants of different years of teaching gave a mixture of responses to the statement "computers do more harm than good". Participants' responses from the group of the 1-5 years of teaching experience were different as six participants strongly disagreed and only one of them was undecided. Three participants within the 6-10 group strongly disagreed while one of them agreed. All participants from the 11-15 range strongly disagreed while seven participants among the 16-20 range and one was undecided. Finally, all participants with more than 20 years of teaching experience were in total disagreement with this statement.

In their responses to the statement, 'I would rather do things by hand than with a computer.' All participants within 1-5 years of teaching experience were in total disagreement. Participants among the 6-10 range answered differently as three participants strongly disagreed and one strongly agreed. Likewise, participants from the 11-15 range were distributed between four participants who strongly disagreed and only one of them strongly agreed. Moreover, seven participants among the 16-20 range strongly disagreed while one of them strongly agreed. Finally, all participants who had 20 of teaching experience or more were in total disagreement with this statement.

When participants were asked if they would avoid computers as much as possible, all participants from the groups of 1-5 and 6-10 years of teaching experience were in total disagreement whereas participants within the 11-15 range were divided between four participants who strongly disagreed and one of them took a neutral stand. Likewise, seven participants from the 16-20 range strongly disagreed yet one participant strongly agreed. Finally, seven participants with more than 20 years of teaching experience strongly disagreed while one of them took a neutral stand.

The answers to the final statement 'I would like to learn more about computers' varied as all participants within 1-5 years of teaching experience were in total agreement while the majority participants from the 6-10 group strongly agreed. Moreover, only one participant from the 11-15 group disagreed whereas seven participants among the 16-20 range strongly agreed and one of them agreed. Finally, all participants with more than 20 years of teaching experience were in total agreement with this statement.

3.2.5.3 Teachers' points of view about ICT in Education and Culture in Terms of teaching experience

In this section of the questionnaire, nine items were designed to seek teachers' points of view and opinions about ICT in culture and in education. Table 3.15 displays the scores used to seek the opinions of the respondents in terms of teaching experience. Positive points of view are the total responses of "strongly agree" and "agree" while negative ones are the total of "strongly disagree" and "disagree" responses of the participants.

When participants were asked if computers would improve education, all participants within 1-5, 16-20 and more than 20 years of teaching experience were in total agreement with this statement while participants from the 6-10 range gave different answers as three participants strongly agreed and one of them disagreed. Likewise, participants from the 11-15 group were divided between three participants who strongly agreed, one disagreed and another one was undecided (see table 3.15).

	years of teaching experience	1-5					6-10					11-15					16-20					Over 20				
	Statements	S.A	A	U	D	S.D	S.A	A	U	D	S.D	S.A	A	U	D	S.D	S.A	A	U	D	S.D	S.A	A	U	D	S.D
View about ICT in education and culture	17. Computers will improve education.	7					3			1		3		1	1		8					8				
	18. Computer technology cannot improve the quality of students' learning.					7				1	3				2	3		1	1		6		1			7
	19. Computers are not useful for language learning.					7				2	2				1	4		1	1		6			1		7
	20. Class time is too limited for computer use.		7				1	2	2				3	2				6	1		1		6	1		1
	21. Computer use is appropriate for many language-learning activities.	7					2	1	1			3		1		1	6			1	1	7			1	
	22. Teaching with computers offers real advantages over traditional methods of instruction.	7					2	2				2	1	1		1	7		1			8				
	23. There are other social issues that need to be addressed before implementing computers in education.	7					2		2			1	2			2	5	2			1	4	2	2		
	24. Computers dehumanize society.				2	5	1		1		2	1		1	1	2	1			1	6					8
	25. Computers encourage unethical practices.	1				6	1				3	1			1	3	1			2	5			1	2	5

Table 3.15 Teachers' Points Of View about ICT in Education and Culture According To Teaching Experience

In their responses to the statement, 'Computer technology cannot improve the quality of students' learning.' All participants within 1-5 years of teaching experience were in total disagreement while three participants within the 6-10 range strongly disagreed and one disagreed. Similarly, three participants within the 11-15 range strongly disagreed and two of them disagreed. Moreover, participants' responses within the 16-20 range were different as six participants strongly disagreed, one agreed and another one was undecided. Finally, participants with more than 20 years of teaching experience answered inversely as seven participants strongly disagreed and only one of them agreed.

The answers of participants to the following statement 'Computers are not useful for language learning.' were various as all participants from the different groups 1-5, 6-10,11-15 years of teaching experience were in disagreement with this statement. Moreover, participants within the 16-20 group gave different responses as six participants strongly disagreed, one agreed and one of them was undecided. Finally, seven participants who had more than 20 years of teaching experience strongly disagreed while one of them was neutral. Similarly, when participants were questioned about the limitation of class time in order to use computers, participants of different years of teaching experience shared the same responses however, few participants disagreed (see table 3.15)

In their responses to the statement, 'There are other social issues that need to be addressed before implementing computers in education.' All participants from the 1-5 years of teaching experience were in total agreement while participant among the 6-10 range were distributed as two participants who strongly agreed and two of them who took a neutral stand. Two participants among the 11-15 range agreed and another two were in total disagreement. Moreover, participants within the 16-20 range answered differently as five participants strongly agreed, two of them agreed and only one of them strongly disagreed. Finally, the majority of participants who had 20 years of teaching experience or more agreed while two participants were undecided.

A mixture of responses were given by participants as they were asked if computers dehumanized society and encourage unethical practices. The majority of participants refuted this statement in a way that indicates that computers offered more advantages than the opposite. However, few participants despite of the years of teaching experience took a neutral stand (see table 3.15)

3.2.5.4 Computer Anxiety Level of Participants According to Teaching Experience

The final part of the questionnaire is designed to determine the anxiety level of participants towards the use of ICT in EFL classrooms. Ten items are designed concerning this regard and the table 3.16 shows the ratings used to determine high and low anxiety of the respondents in terms of their years of teaching experience.

When participants were asked if they thought of computers as friendly tools, the majority participants within 1-5, 6-10 and 11-15 years of teaching experience agreed. Likewise, only one participant from the 16-20 category was undecided while seven participants strongly agreed. Finally, seven participants with more than 20 years of teaching experience strongly agreed whereas one of them was neutral. In their responses to the statement 'teaching using computers makes me comfortable' all participants within 1-5, 6-10 and those with more than 20 years of experience were in total agreement while few participants among the 11-15 and 16-20 disagreed. (See table 3.16)

In their responses to the statement 'writing a lesson plan using computers makes me comfortable' all participants within 1-5, 6-10 and those with more than 20 years of teaching experience strongly agreed while participants' responses from the 11-15 group varied as four participants strongly agreed, one was undecided. Likewise, participants within the 16-20 range gave similar responses since six participants strongly agreed, one was neutral and one of them strongly disagreed.

	years of teaching experience	1-5					6-10					11-15					16-20					Over 20				
	Statements	S.A	A	U	D	S.D	S.A	A	U	D	S.D	S.A	A	U	D	S.D	S.A	A	U	D	S.D	S.A	A	U	D	S.D
Computer Anxiety level	26. I generally think of computers as friendly tools.	7					4					4		1			7		1			7		1		
	27.teaching using computers makes me comfortable	7					4					4		1			6		1		1	8				
	28. Writing a lesson plan using computers makes me comfortable.	7					4					4		1			6		1		1	8				
	29. working on the keyboard makes me uncomfortable					7					4			1		4	1		1		6					8
	30. when keyboard stops working , it makes me uncomfortable		1	1		5		1	1	2			2		2	1		1	1	2	4		1	1	4	2
	31. when a message appears on the screen instantly while presenting a lecture makes me uncomfortable	3		1		3		2			2		3			2	5		2		1	1	4			3
	32. Discussing computers with a group of people who know a lot about using them makes me uncomfortable				4	3			1		3				2	3		2	1	2	3		1	3	2	2
	33. I feel uncomfortable when my presentation does not work.		1		1	5		2	2				2	2	1			1	3	1	3		2	2	1	3
	34. The more opportunities I have to present, the less anxious I feel	7					1	3				1	3	1			7		1			7		1		
	35. After the training provided, I felt less anxious when I use ICT in teaching	4		3			2		2			2		3			2		6			3		5		

Table 3.16 Computers Anxiety Level of Participants According To Their Years of Teaching Experience

A mixture of responses were given as they faced some technical difficulties such as the sudden pause of the keyboard or the appearance of a screen. Many participants showed a certain level of anxiety despite of their teaching experience category. However, it was noticed that those participants did not receive a formal computer training. Similar responses were given to other discomforting situations such as discussing computers with a group of people who knew a lot about using them or when the presentation did not work and stopped. Despite of the years of teaching experience, many participants' level of anxiety were a bit higher (see table 3.16)

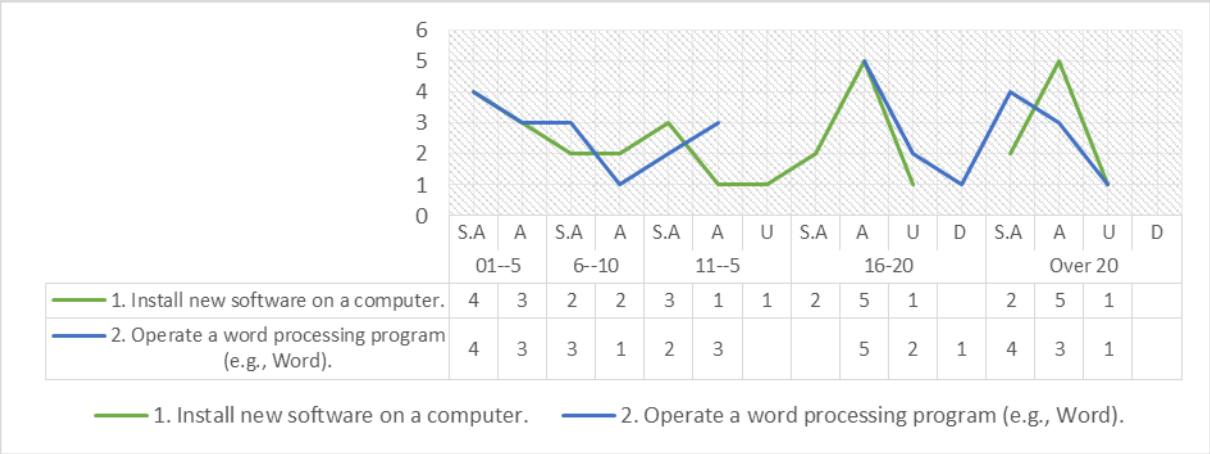
Following these statements, participants of different teaching experience showed agreement with the ideas that the more opportunities given to use computer tools and computer training could help to reduce the level of anxiety and to control it. Yet, some participants took a neutral stand. (See table 3.16)

3.2.6 Discussion of ICT and Participants' Teaching Experience Findings

The participants of this study are a mixture of novice teachers and experienced ones. The feedback of participants in terms of their years of teaching experience were similar as they showed a good competency level in computers, positive attitude towards ICT and its advantages and low anxiety level.

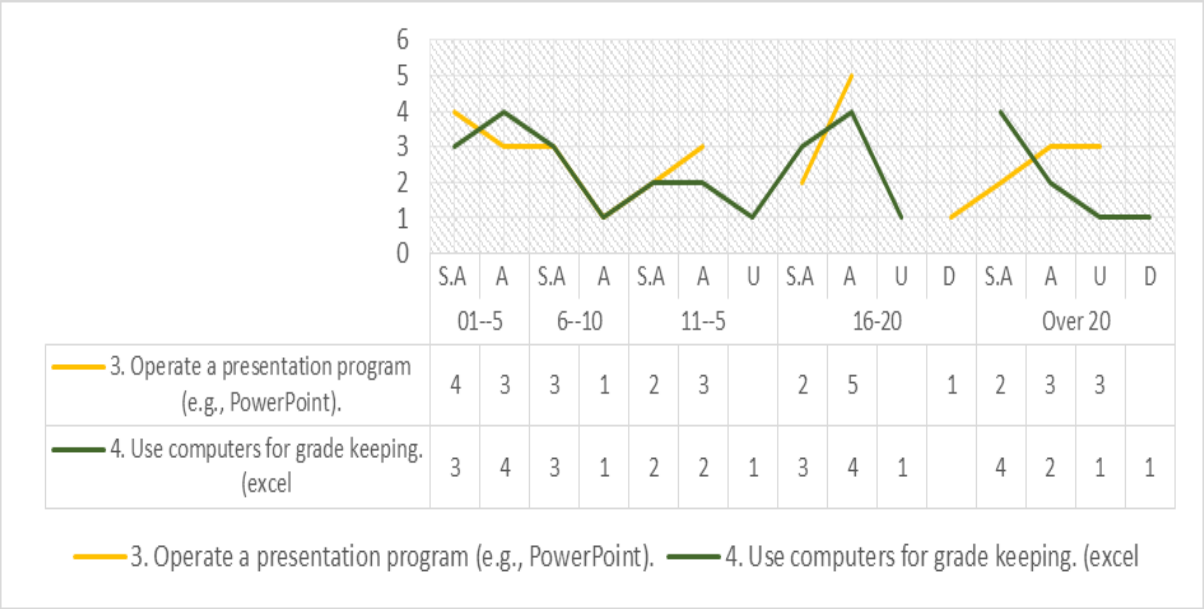
3.2.6.1 Computer Competency and Access Level According To Teaching Experience

When it comes to using computers and its tool, the majority of participants whether novice teachers or experienced ones showed a certain level of computer competency. All participants within 1-5, 6-10 years of teaching experience knew how to use the different tools of the computer and similar responses were given by the majority of the other different groups; 80%, 87.50%, 87.50% and 87.50% of the 11-15, 16-20 and more than 20 years of teaching experience in order.



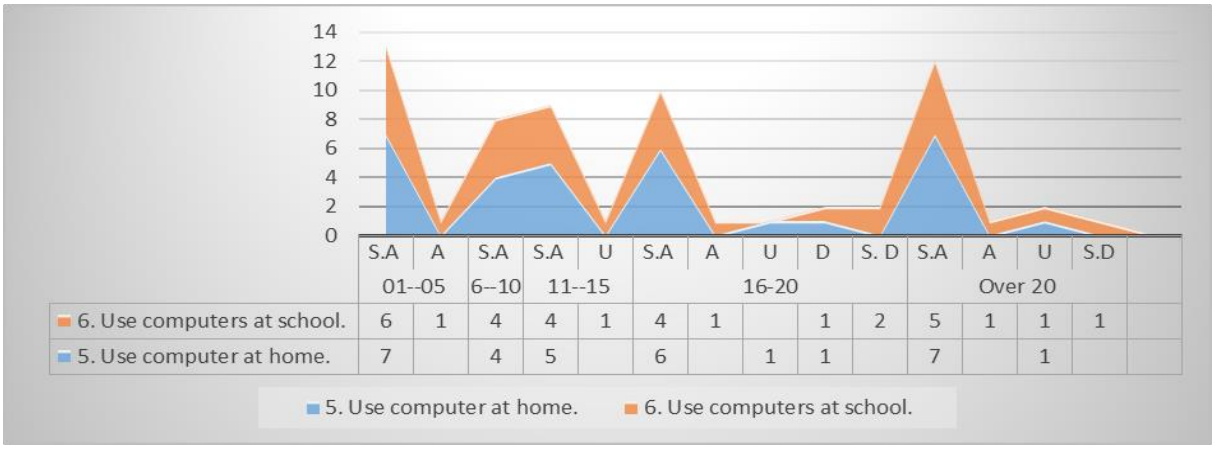
Graph 3.30 Teachers' Competency Level of Computers according to Teaching Experience

Moreover, participants of different groups had good level of competency of using the different tools of computers such as word processor, excel and PowerPoint. All participants of the groups of 1-5, 6-10, 11-15 years of teaching experience, knew how to operate on PowerPoint while just a small minority of 12.5% of the 16-20 stated that they did not know while 37.50% among the group of more than 20 years of teaching experience were undecided.



Graph 3.31 Teachers' Competency Level of Computers according to Teaching Experience

In terms of computer accessibility whether at home or school, participants of different groups had responses in favour of using computers at both settings. All participants of the 1-5,6-10,11-15 years of teaching experience stated that they used it at home while the majority of the 16-20 group (75%) and 87.50% of participants with more than 20 years of teaching experience stated that they used it at home. Moreover, not all participants stated that they used computers at school. Yet, the majority of them were in favour of using computers at school as 100% of participants among the 1-5 and 6-10 group stated that they used it at school while only 12.50% of the 16-20 group stated that they did not use it at school given the nature of the module they taught.

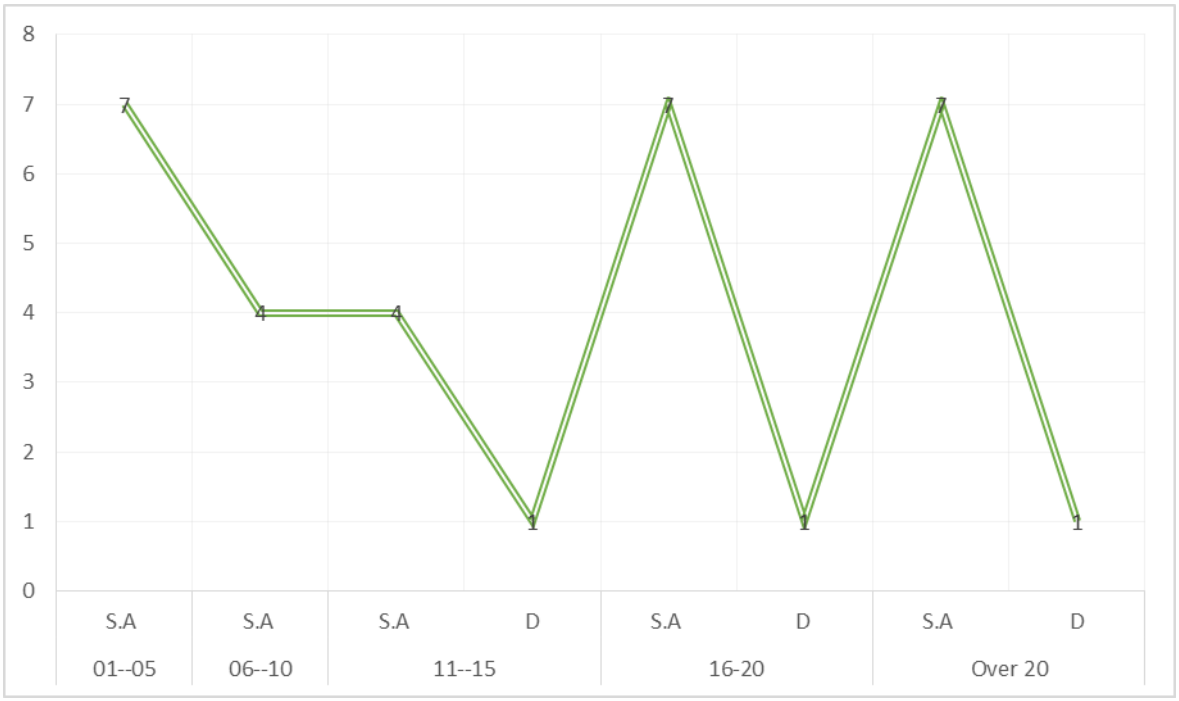


	S.A	A	S.A	S.A	U	S.A	A	U	D	S. D	S.A	A	U	S.D
	01--05		6--10	11--15		16-20					Over 20			
6. Use computers at school.	6	1	4	4	1	4	1		1	2	5	1	1	1
5. Use computer at home.	7		4	5		6		1	1		7		1	

Graph 3.32 Teachers' Use of Computers at Different Settings According To Teaching Experience

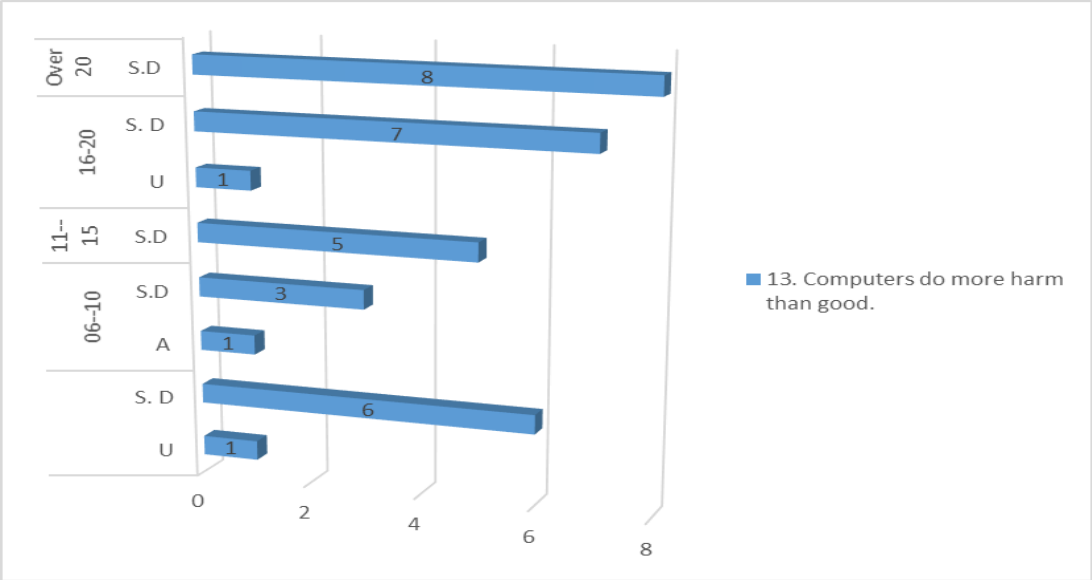
3.2.6.2 Teachers' Attitude towards ICT In Terms Of Teaching Experience

In general, participants of this study whether novice or experienced teachers showed mostly positive attitude towards the use of ICT. The majority participants of preferred using ICT in teaching. Only few participants (20%, 12.5% and 12.5% among the 11-15,16-20 and more than 20 years of teaching experience in order, had negative attitude towards the existence of computers these days.



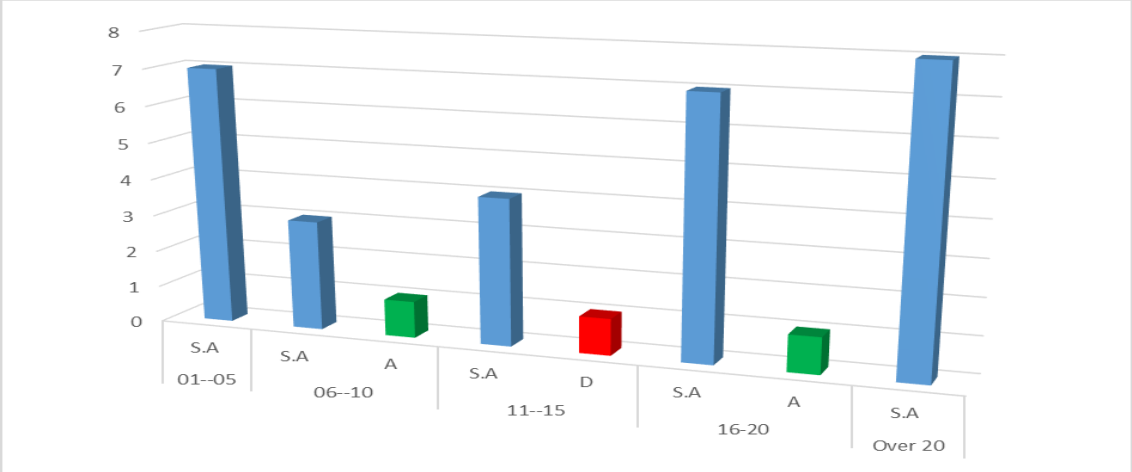
Graph 3.33 Teachers' Attitude towards ICT In Terms Of Teaching Experience

In general, novice teachers and experienced ones had positive attitude towards the different advantages of computers. However, only 25% of the 6-10 years of teaching experience group stated that computers did more harm than good while the majority of participants of different groups disagreed with this statement. 85.71 % of the 1-5 group, 75% of the 6-10 group, 100% of the 11-15 group, 87.50% of the 16-20 group and 100% of the participants with more than 20 years of teaching experience disagreed with this statement. However, some participants of different groups took a neutral stand in their response: 14.29% of the 1-5 group and 12.50% among the 16-20 years of teaching experience were undecided (see graph 3.34)



Graph 3.34 Teachers' Attitude towards the Advantages of Computers According To Teaching Experience

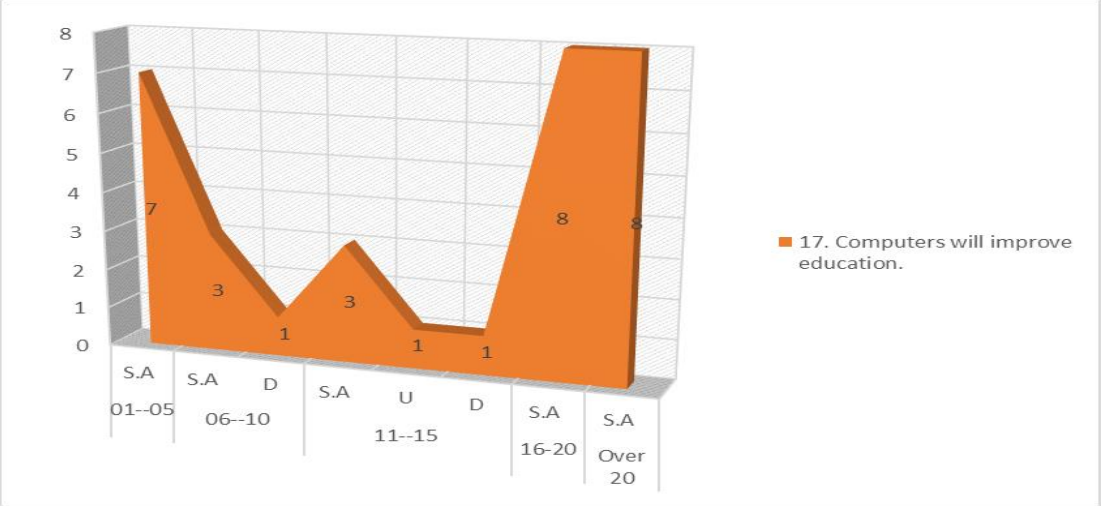
Participants of different years of teaching experience had generally positive attitude towards learning more about computers given their acknowledgement to the importance of computers in all aspects of life. All participants within the group of 1-5, 6-10, 16-20 and more than 20 years of teaching experience wanted to learn more while only 20 % of participants within the 11-15 years of teaching experience did not want to learn about computers.



Graph 3.35 Teachers' Attitude towards Learning More about Computers According To Teaching Experience

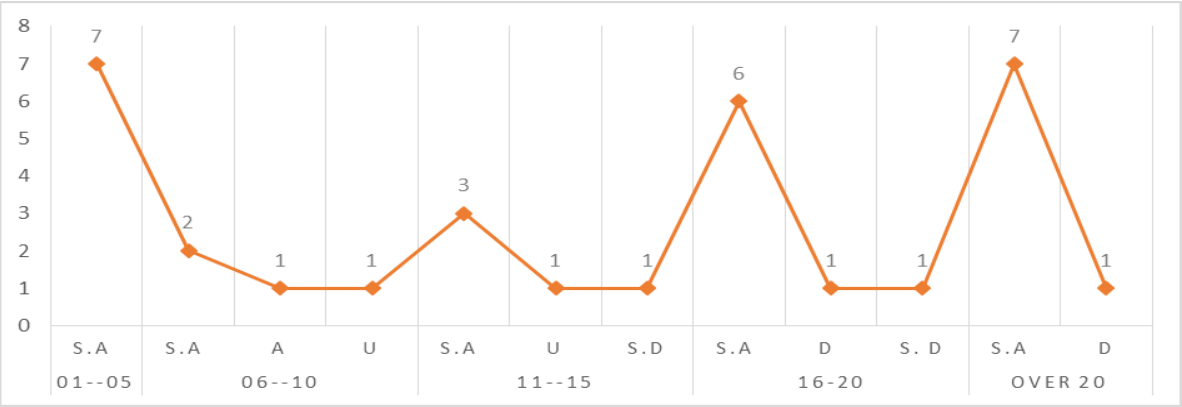
3.2.6.3 Teachers' Points Of View of ICT in Education and Culture In Terms Of Teaching Experience

In general, participants of different years of teaching experience had a positive view towards the impact of ICT on education. All participants within the 1-5, 6-10, 15-20 and more than 20 years of teaching experience acknowledged the positive impact of ICT on education while only 20% of participants within 11-15 years of teaching experience felt the opposite.



Graph 3.36 Teachers' View of the Impact of ICT on Education In Terms Of Teaching Experience

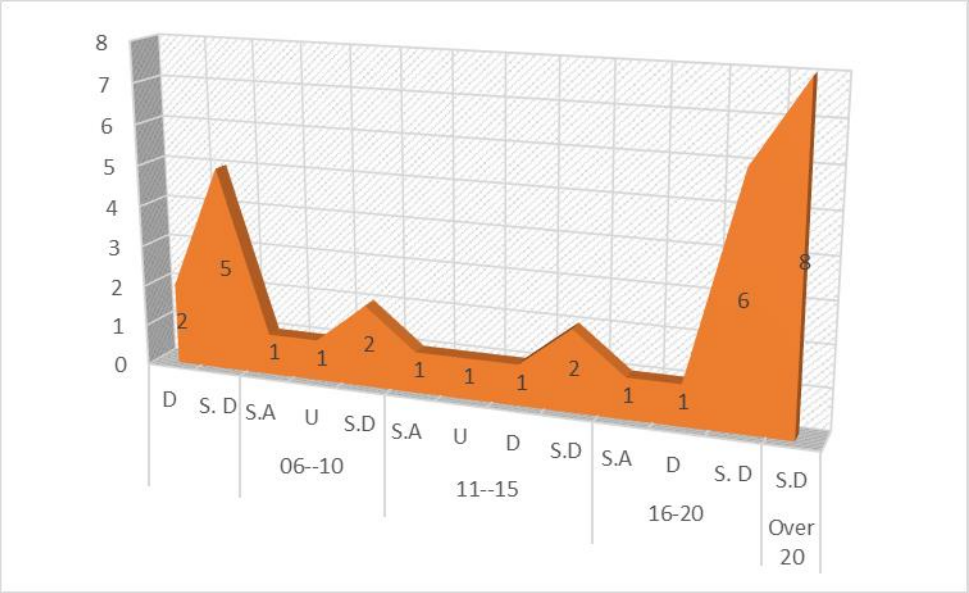
Participants of different years of teaching experience had generally positive views about the impact of ICT on language classroom. Since participants of this study were, teachers of foreign language were able to determine whether the impact of ICT was positive or negative.



Graph 3.37 Teachers' View about the Impact of ICT on Language Classroom According To Teaching Experience

All participants from the group of 1-5 years of teaching experience acknowledged the positive impact of ICT on language classroom in addition to the majority of 6-10 group (75%) , the majority of 11-15 group (60%) , the majority of 16-20 (75%) and 87.5% of participants with 20 years of teaching experience.

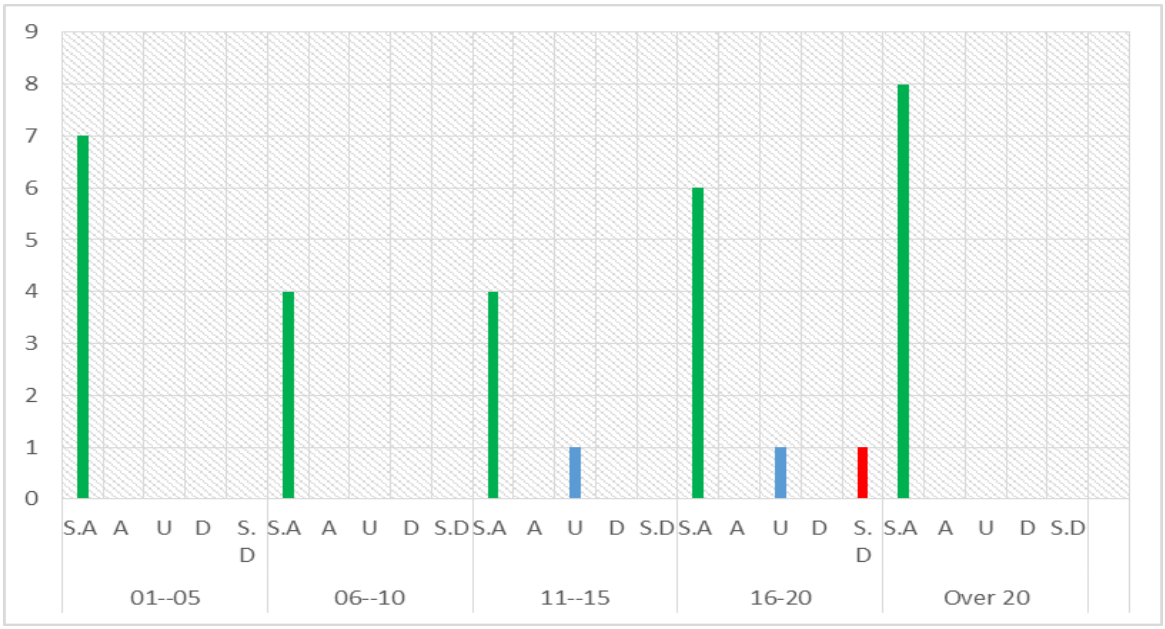
According to teachers' point of view about the impact of ICT on society whether it was positive or negative, novice teachers and experienced ones recognised the positive impact of ICT on society since they disagreed with the statement that ICT dehumanized society. Just minority of participants among the 6-10 years of teaching experience (25%), 20% from the 11-15 group and 12.5% within the 16-20 group thought that ICT had a negative impact on society.



Graph 3.38 Teachers' View about the Impact of ICT on Society According To Teaching Experience

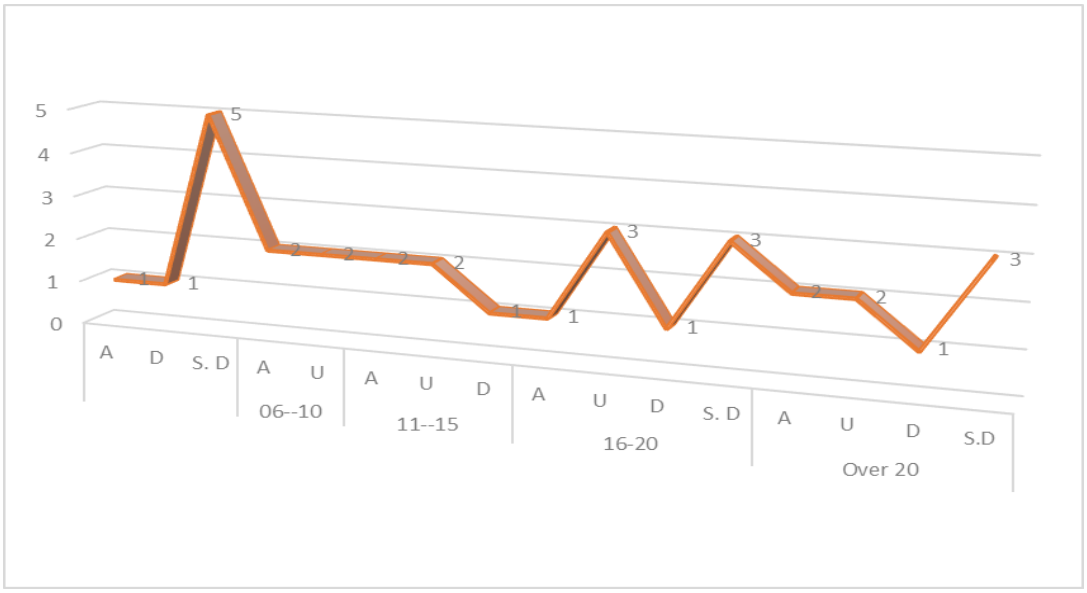
3.2.6.4 Computer Anxiety Level of Participants According To Age

A low level of anxiety is noticed among participants' responses despite of years of teaching experience. All participants within the 1-5, 6-10 and more than 20 years of teaching experience stated that they felt comfortable when using computers in addition to the majority of the 11-15 group (80%) and the majority of the 16-20 years of teaching experience group (75%). While just a minority of the group 16-20 felt uncomfortable while using computers (12.5%).



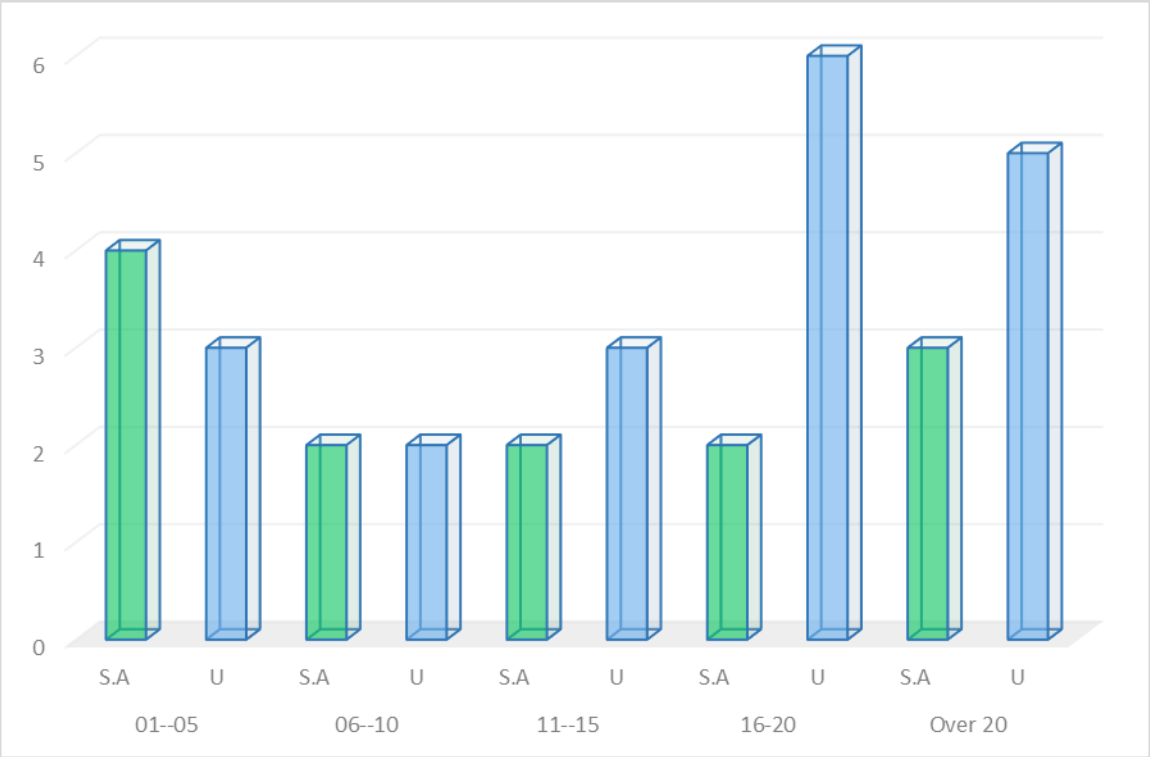
Graph 3.39 Teachers' Computer Level of Anxiety According To Teaching Experience

When teachers faced technical difficulties while using computers, it is clear that the level of anxiety can increase yet with small degrees. This can be seen with the minorities of the different groups who felt anxious when facing technical problem. 14.29 %, 12.5% and 25 % of the 1-5 group, 16-20 group and more than 20 years of teaching experience group in respected order.



Graph 3.40 Teachers' Anxiety Level When Facing Technical Difficulty According To Teaching Experience.

Participants of this study acknowledged the importance of training in reducing anxiety level. Yet, only those who had received computer training were in favour of computer training while those who did not receive a computer training chose to take a neutral stand.



Graph 3.41 The Impact Of Computer Training On Reducing Anxiety Level

3.2.7 ICT and Computer Training

As it is previously shown on table 3.4, there are three categories in terms of computer training : those who are self-taught, which represented 50% of the participants while 40.62% are a computer trainees while the rest of the participants which represented a small percentage (9.38%) , were neutral in their answers.

3.2.7.1 Computer Competency and Access Level According To Their Computer Training

This section of the questionnaire focuses on teachers' competency level and access in terms of computer training. The answers given by the respondents are categorised according to the following scale: strongly agree, agree, undecided, disagree and strongly disagree, as shown in the following table:

	Statements	Strongly agree			agree			undecided			Disagree			Strongly disagree		
		S-T	T	O	S-T	T	O	S-T	T	O	S-T	T	O	S-T	T	O
Computer competence level and access	1. Install new software on a computer.		13		16					3						
	2. Operate a word processing program (e.g., Word).		13		15					3	1					
	3. Operate a presentation program (e.g., PowerPoint).		13		15					3			1			
	4. Use computers for grade keeping.	3	12		12	1		1		2			1			
	5. Use computer at home.	16	13							2			1			
	6. Use computers at school.	10	13		3					2			1	3		

Table 3.17Participants' Competency Level and access to computers in terms of Training

In their responses to the first statement 'Install new software on a computer', all participants with computer training were in total agreement while those who were self-taught were all in agreement while three participants were undecided. Similarly, in their responses to the statement 'operate a word processing program (e.g., Word).' All participants with computer training strongly agreed while the self-taught participants gave varied answers as fifteen participants agreed and only one of them disagreed while three participants were undecided.

In their responses to the statement, 'Operate a presentation program (e.g., PowerPoint).' All participants with computer training strongly agreed while 15 participants among the self-taught ones agreed, one of those group disagreed whereas three participants were undecided. When participants were asked if they used computers for grade keeping, participants with computer training were distributed since 12 participants strongly agreed and one of them agreed. Self-taught participants gave also various answers as three participants strongly agreed, twelve participants agreed, one of them was undecided. While the responses of the group of others varied as two participants were neutral and only one of them disagreed.

When participants were asked if they used computers at home, all participants whether self-taught or received computer training were in total agreement while two participants were undecided and one of them disagreed. Similarly, when they were asked if they used computers at school, self-taught participants were divided between 10 participants who strongly agreed, three of them agreed and three of them strongly disagreed. All participants

with computer training strongly agreed while two participants were undecided and only one of that group disagreed.

3.2.7.2 Teachers' Attitude towards ICT According To Their Computer Training

In Section C of the questionnaire, ten items are designed to investigate participants' attitude towards the use of ICT. Table 3.18 displays the scores used to determine positive and negative attitude of the respondents in terms of their computer training. Positive attitude is the total responses of "strongly agree" and "agree" while negative one is the total of "strongly disagree" and "disagree" responses of the participants.

	Statements	Strongly agree			agree			undecided			Disagree			Strongly disagree		
		S-T	T	O	S-T	T	O	S-T	T	O	S-T	T	O	S-T	T	O
Attitude to ICT	7. Computers do not scare me at all.	16	13							3						
	8. Computers make me feel uncomfortable.			3										16	13	
	9. I am glad there are more computers these days.	16	13										3			
	10. I dislike using computers in teaching.			2	2			3	2	1				11	11	
	11. Computers save time and effort.	16	13										3			
	12. I do not think I would ever need a computer in my classroom.									2	3		1	13	13	
	13. Computers do more harm than good.						1			2				16	13	
	14. I would rather do things by hand than with a computer.			3										16	13	
	15. I would avoid computers as much as possible.			1						2				16	13	
	16. I would like to learn more about computers.	16	13				2						1			

Table 3.18 Teachers' Attitude towards ICT In Terms Of Training

When participants were asked if computers did not scare them at all, all participants whether they are self-taught or trained were in total agreement while three participants were undecided. Similarly, When participants were asked if computers made them feel uncomfortable, all participants with computer training and self-taught were in total disagreement while three participants strongly agreed with this statement.

In their responses to the statement 'I am glad there are more computers the days' all participants within computer training and self-taught were in total agreement while three participants were undecided. Moreover, when answering the following statement, 'I dislike using computers in teaching', self-taught participants answered differently since eleven participants strongly disagreed, three were undecided and two of them disagreed. Eleven participants with computer training strongly disagreed while two of them were undecided. Finally, two participants strongly agreed while one of them was neutral.

When participants were questioned if computers saved time and effort, self-taught and computer-training participants were all in total agreement while three participants were in disagreement with this statement. On the contrary, in their responses to the statement, 'I do not think I would ever need a computer in my classroom.' All participants with computer training were in total disagreement while self-taught participants did not share the same responses as thirteen participants strongly disagreed and three participants disagreed. Finally, two participants were undecided while another one disagreed.

Participants gave similar responses to the statement "computers do more harm than good". All participants with computers training and self-taught ones were in total disagreement while two participants were undecided and one who agreed with this statement. Moreover, in their responses to the statement 'I would rather do things by hand than with a computer', participants with computer training and self-taught ones were all in total disagreement while three participants strongly agreed.

When participants were asked if they would avoid computers as much as possible, participants with computer training and self-taught ones were completely in total disagreement while two participants were undecided and one participant who strongly agreed. In their response to the final statement 'I would like to learn more about computers' participants with computer training and self-taught one agreed while two participants agreed and one participant disagreed.

3.2.7.3 Teachers' Points Of View about ICT in Education and Culture In Terms Of Computer Training

In this section of the questionnaire, nine items are designed to seek teachers' points of view and opinions about ICT in culture and in education. Table 3.19 displays the scores used to seek the opinions of the respondents in terms of computer training. Positive points of view are the total responses of "strongly agree" and "agree" while negative ones are the total of "strongly disagree" and "disagree" responses of the participants.

	Statements	Strongly agree			agree			Undecided			disagree			Strongly disagree		
		S-T	T	O	S-T	t	O	S-T	T	O	S-T	T	O	S-T	T	O
View about ICT in education and culture	17. Computers will improve education.	16	13							1			2			
	18. Computer technology cannot improve the quality of students' learning.						2			1	3			13	13	
	19. Computers are not useful for language learning.						1			2	3			13	13	
	20. Class time is too limited for computer use.	1			10	13		5		1						2
	21. Computer use is appropriate for many language-learning activities.	12	13		1			2			1		1			2
	22. Teaching with computers offers real advantages over traditional methods of instruction.	13	13		3					2						1
	23. There are other social issues that need to be addressed before implementing computers in education.	9	10		3	3		4								3
	24. Computers dehumanize society.			3				2			4			10	13	
	25. Computers encourage unethical practices.	1		3				1			5			9	13	

Table 3.19 Teachers' Points of View about ICT in Education and Culture According to Computer Training

When participants were asked if computers would improve education, participants with computer training and self-taught one completely agreed while one was undecided and two participants disagreed. In their responses to the statement 'computer technology cannot improve the quality of students' learning' participants with computer training all disagreed while self-taught ones gave various answers as thirteen strongly disagreed and three of them disagreed while two participants agreed and one of them was undecided.

In their responses to the statement 'computers are not useful for language learning', participants with computer training were all in total disagreement while self-taught ones were divided between thirteen participants who strongly disagreed and three of them disagreed. However, two participants were undecided and one of them agreed with this statement.

Participants were questioned if class time was too limited for computer use, participants with computer training totally agreed while ten participants among the self-taught category agreed and one of them strongly agreed. Yet, five participants from the self-taught group were undecided in addition to another one from the group of others who was neutral. Finally, only two participants strongly disagreed with this statement.

In their responses to the statement 'computer use is appropriate for many language-learning activities' all participants with computer training strongly agreed while the self-taught ones were divided between twelve who strongly agreed, one of them agreed, two were undecided and only one of them disagreed in addition to another participant who disagreed and two among others who strongly disagreed.

Participants gave similar responses to the statement, 'Teaching with computers offers real advantages over traditional methods of instruction.' Both participants with computer training and self-taught ones agreed whereas two participants from the group of others were undecided and only one of them was in total disagreement.

A mixture of responses were given to the statement 'There are other social issues that need to be addressed before implementing computers in education.' Participants with computer training shared different opinions as ten of them strongly agreed and three of them agreed while the self-taught' answers varied between nine participants who strongly agreed, three who agreed and four of them were undecided. However, three participants were in total disagreement with this statement.

When participants were asked if computers dehumanized society, participants with computer training disagreed while the self-taught ones gave various answers as ten of them strongly disagreed, four of them disagreed and two of them took a neutral stand whereas three participants strongly agreed with this statement.

In their responses to the final statement 'computers encourage unethical practices' computer training participants strongly completely agreed while the self-taught ones were divided between nine participants who strongly agreed, five of them disagreed, one of them was undecided and one among those strongly agreed in addition to three participants who also strongly agreed with this statement.

3.2.7.4 Computer Anxiety Level of Participants According to Computer Training

The final part of the questionnaire is designed to determine the anxiety level of participants towards the use of ICT in EFL classrooms. Ten items are designed concerning this regard and the table 3.20 shows the ratings used to determine high and low anxiety of the respondents in terms of their computer training.

In their responses to the first statement 'I generally think of computers as friendly tools' both participants with computer training and self-taught ones agreed while three participants took a neutral stand. Similarly, when participants were asked if teaching using computers made them comfortable, all participants with either computer training or were self-taught were in total agreement while two participants were undecided and one of them strongly disagreed.

When participants were questioned if writing a lesson plan using computers made them comfortable, all participants whether they received computer training or were self-taught agreed while two participants were undecided and one of them strongly disagreed (see table 3.20).

	Statements	Strongly agree			agree			Undecided			disagree			Strongly disagree		
		S-T	T	O	S-T	t	O	S-T	T	O	S-T	T	O	S-T	T	O
Computer Anxiety level	26. I generally think of computers as friendly tools.	16	13							3						
	27.teaching using computers makes me comfortable	16	13							2						1
	28. Writing a lesson plan using computers makes me comfortable.	16	13							2						1
	29. working on the keyboard makes me uncomfortable			1						2				16	13	
	30. when keyboard stops working , it makes me uncomfortable				5	1		1		3	10				12	
	31. when a message appears on the screen instantly while presenting a lecture makes me uncomfortable	9			7	2				3					11	
	32. Discussing computers with a group of people who know a lot about using them makes me uncomfortable				3			2		3	10			1	13	
	33. I feel uncomfortable when my presentation does not work.				8			6		3		2		2	11	
	34. The more opportunities I have to present, the less anxious I feel	10	13		6					3						
	35. After the training provided, I felt less anxious when I use ICT in teaching		13					16		3						

Table 3.20 Computers Anxiety Level of Participants According To Training

Concerning the statement of ‘working on keyboard makes me uncomfortable’, the majority of participants of different categories were against this statement yet, two participants were undecided and one of them strongly agreed. Similar statement about the a technical difficulty about the keyboard met with objection specially among the participants who had computer training however, the self-taught ones were divided between ten participants who disagreed, one was undecided and five of them agreed with this statement while three participants took a neutral stand.

Another statement was addressed to focus on the different technical difficulties such a sudden appearance of a message on the screen while presenting. The answers participants with computer training varied as eleven who did not feel comfortable while two of them felt anxious. In the same respect, the self-taught participants expressed discomfort in addition to three participants who took a neutral stand.

In their responses to the statement, 'Discussing computers with a group of people who know a lot about using them makes me uncomfortable' all participants with computer training were in total disagreement. While the self-taught one were divided between one participant who strongly disagreed, ten participants disagreed, three of them agreed and two of them were undecided in addition to another three who took a neutral stand.

A mixture of responses were given to the statement 'I feel uncomfortable when my presentation does not work'. Eleven participants with computer training strongly disagreed and two who disagreed while the self-taught ones were distributed since two of them strongly disagreed, six were undecided and eight of them agreed. In addition, three participants took a neutral stand.

When participants were asked if having more opportunities to present made them feel less anxious, all participants with computer training shared the same feeling, which was agreement. Whereas the self-taught ones expressed different ideas as ten participants strongly agreed and six of them agreed while three participants were neutral.

In their responses to the final statement,' after the training provided, I felt less anxious when I use ICT in teaching' only those who received a computer training strongly agreed with this statement while the rest of participants took a neutral stand.

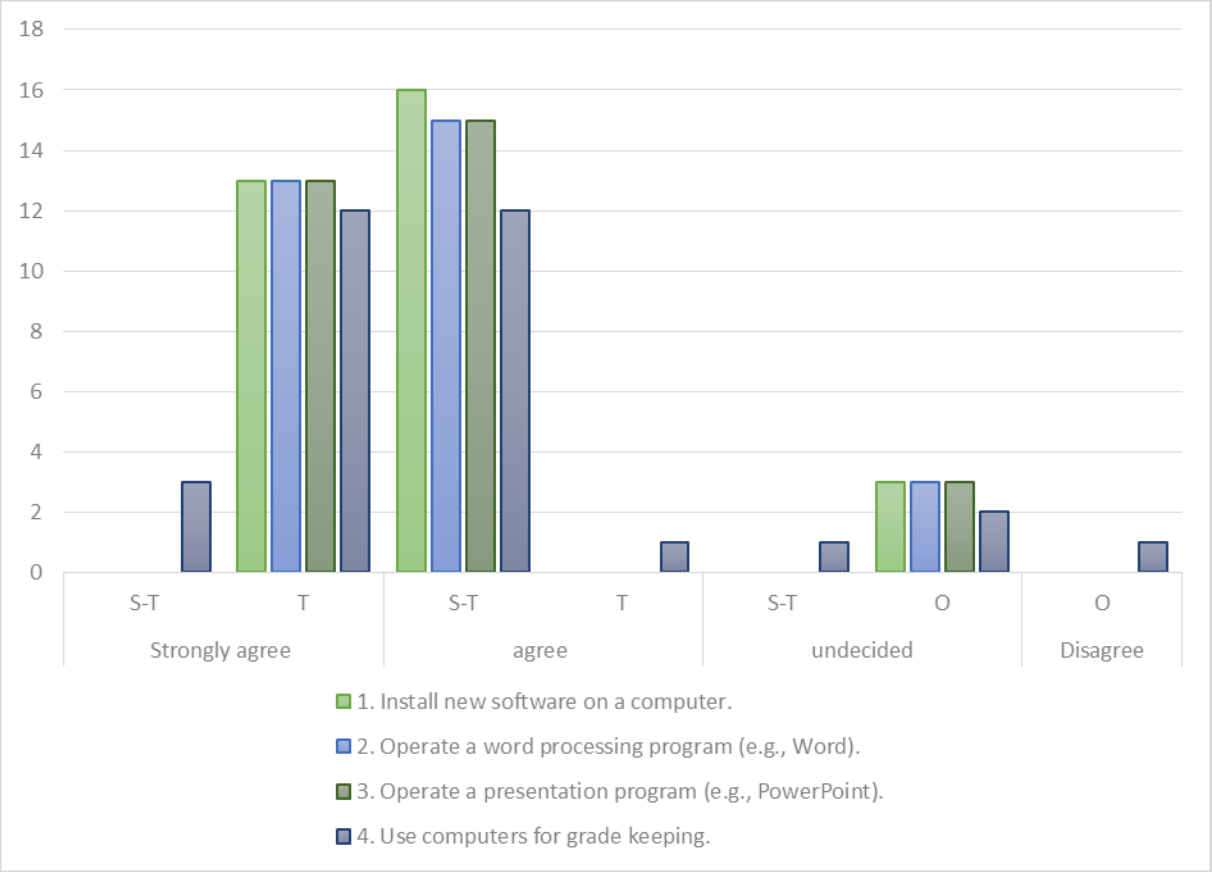
3.2.8 Discussion of ICT and Computer Training Findings

In general, responses of the participants of the current study showed an attitude in favour of ICT and its advantages despite of those who did not have a computer training.

3.2.8.1 Computer Competency and Access Level According to computer training

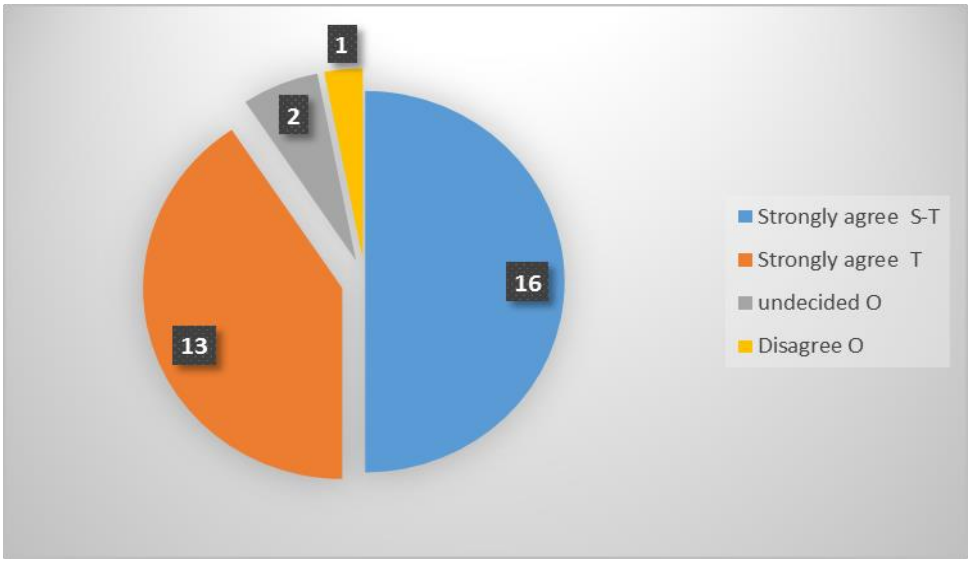
When it comes to using computers and its tool, the majority of participants whether those with computer training and self-taught ones showed a certain level of computer

competency however, there was a minority group who decided to remain neutral in their answers. participants whether self-taught or trained in computers all knew how to install software and operate on the different tools of computers such as Microsoft word processor, Excel and PowerPoint except for only one participant who did not know how to use those tools . While three participants were neutral and did not respond in favour or disfavour.



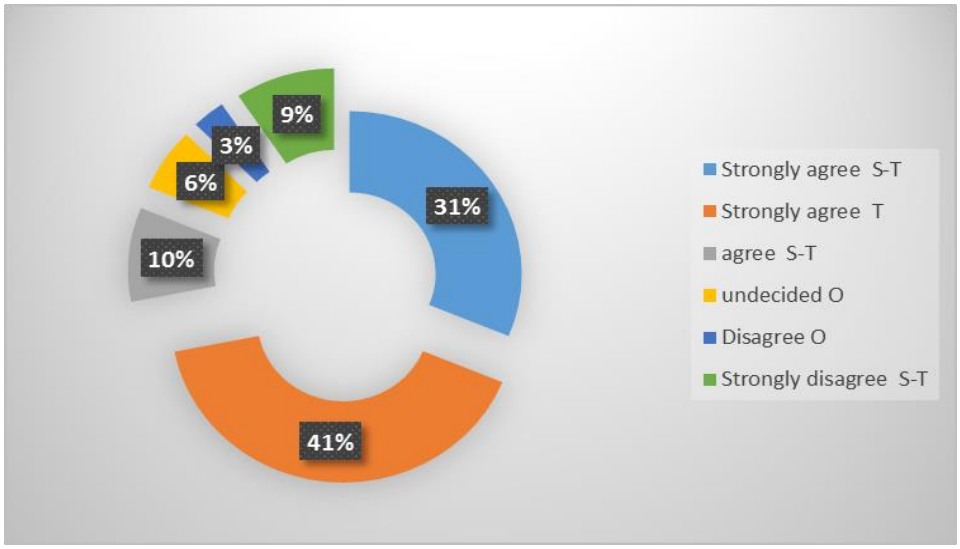
Graph 3.42 Computer Competency Level According To Computer Training

In terms of computer access whether at home or school, the use of computers at home by different groups of respondents seem high since all participants stated that they used it at home. However, one participant stated that he did not use it at home.



Graph 3.43 Accessibility of Computers At Home According To Computer Training

Nevertheless, when respondents were questioned if they used computers at school, their answers varied. All participants with computer training stated that they used it at school in addition to 62.50% of self-taught who claimed the same. While 33.33% stated that they did not use it in addition to 18.75 % of self-taught participants who stated that they did not use it at school.

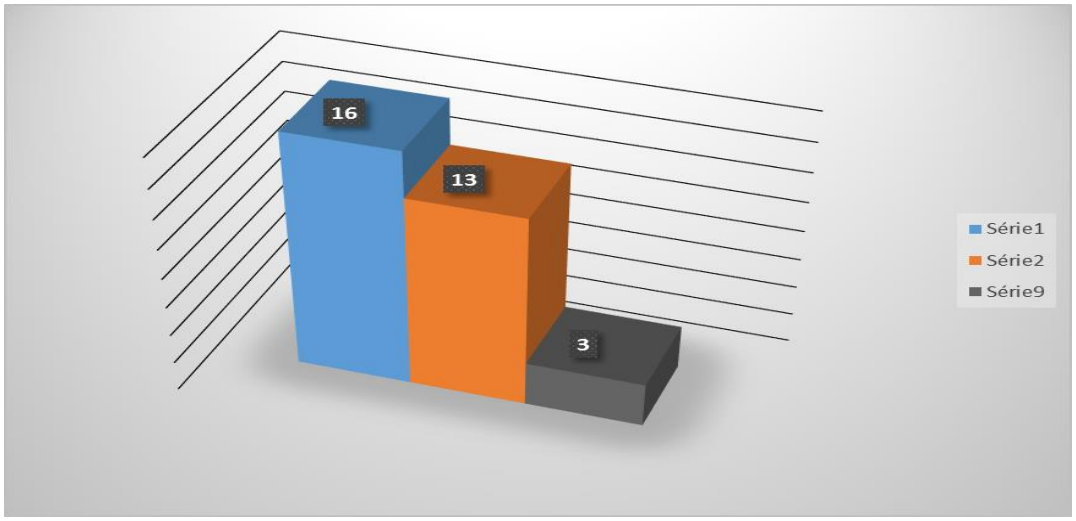


Graph 3.44 Computer Accessibility At School According To Computer Training

3.2.8.2 Teachers' Attitude towards ICT In Terms Of Computer Training

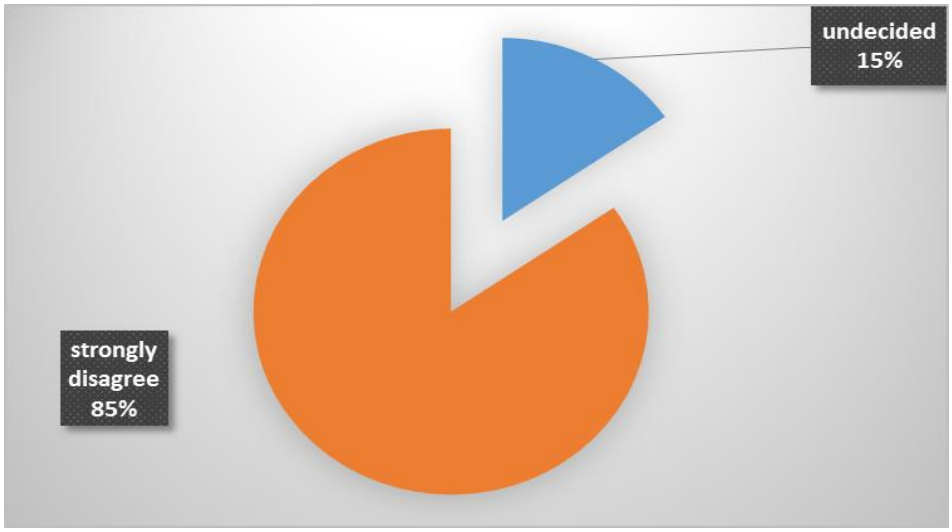
In general, participants of this study whether self-taught or trained in computers showed mostly positive attitude towards the use of ICT. The majority of participants preferred using ICT in teaching.

Respondents of this study showed mostly positive attitude as all of them whether computer trained or self-taught agreed on the statement 'computers do not scare me at all' however, a minority of 9.75% were undecided.



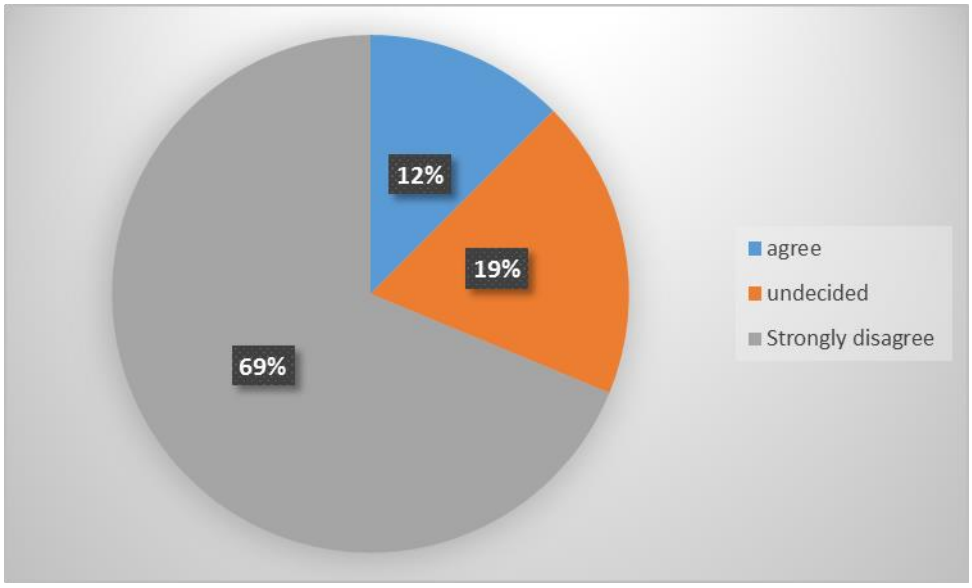
Graph 3.45 Teachers' Attitude towards Computers according to Computer Training

Mostly, participants showed positive attitude towards using ICT in teaching whether they were self-taught or received a computer training. First, those with computer training expressed different opinions as 84.62% who were in favour of using ICT in teaching while 15.38% were undecided about the statement 'I dislike using computers in teaching'.



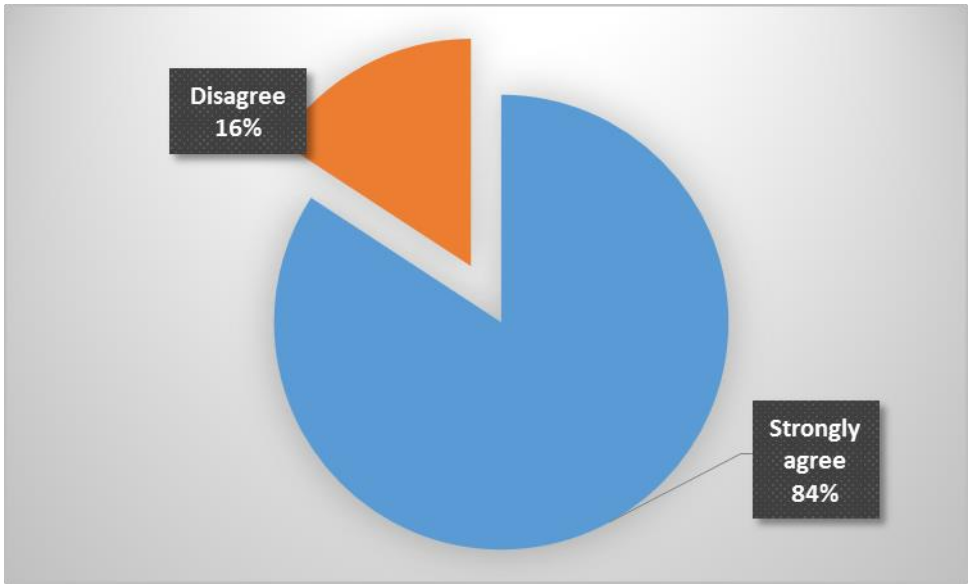
Graph 3.46 Teachers' Attitude towards Using Computer in Teaching

Similarly, self-taught participants' answers were various since 68.75% were in favour of using computers in teaching while 18.75% were undecided and 12.50% disliked using computers in teaching while the group of others were against using computers in teaching.



Graph 3.47 Self-Taught Teachers' Attitude towards Using Computers in Teaching

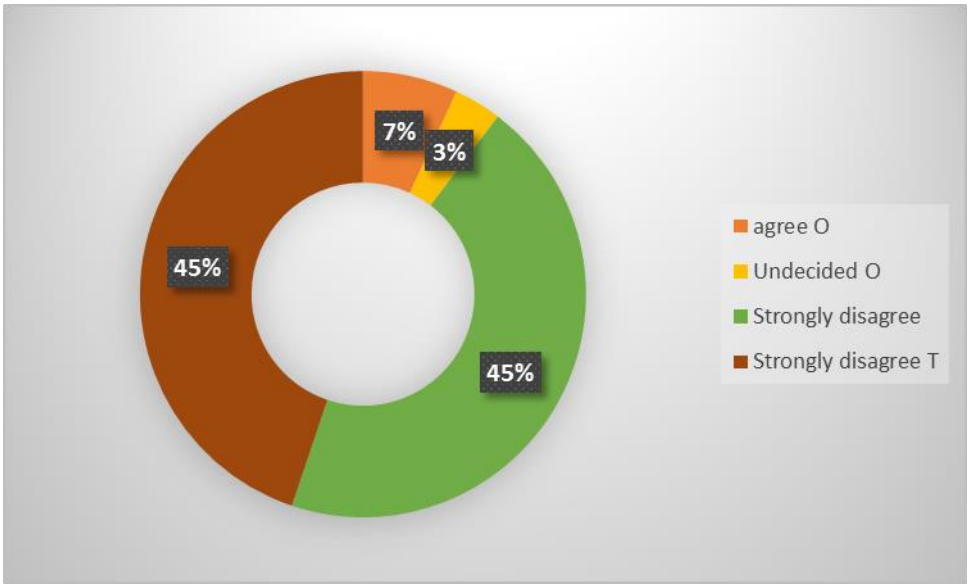
All participants whether trained or self-taught acknowledged the advantages offered by computers since they all agreed with the statement 'computers save time and effort' however, just a minority group of 16% disagreed with the statement.



Graph 3.48 Teachers' Attitude towards the Advantages of ICT

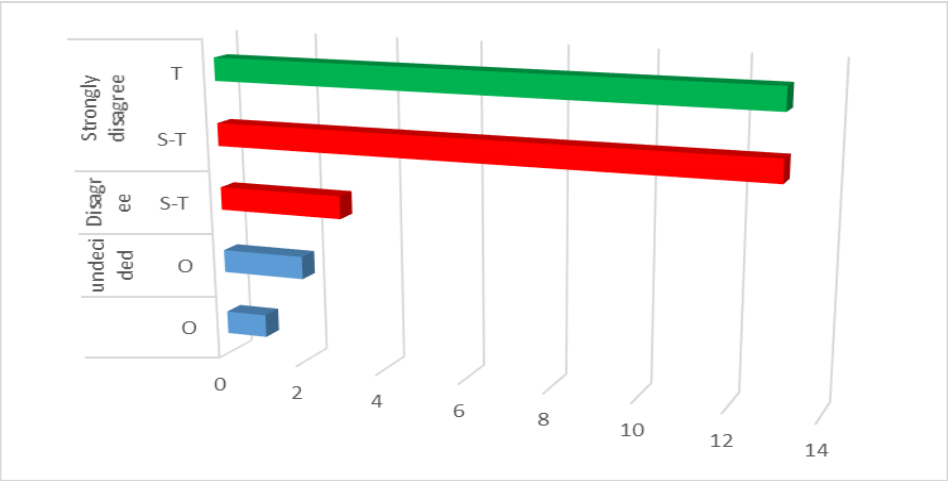
3.2.8.3 Teachers' Points of View of ICT in Education and Culture in Terms Of Computer Training

In general, participants whether self-taught or received computer training, had a positive view towards the impact of ICT on education. The respondents gave different answers mostly in disagreement since 90% of them disagreed with 'computer technology cannot improve the quality of students' learning' while 7 % agreed and 3% were undecided.



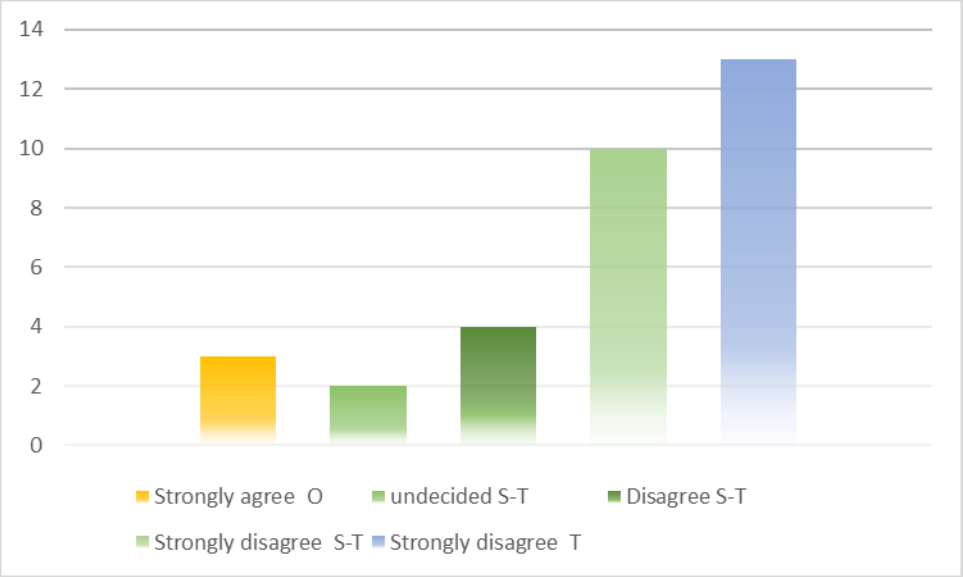
Graph 3.49 Teachers' Points Of View about the Impact of ICT on Education

Similarly, participants had mostly a positive view towards the impact of ICT on language learning since 100% of respondents who received computer training and were self-taught thought so. However, a minority group had a negative view as 33.33% among this group of others thought ICT had a negative impact on language learning while 66.67% of the same group were undecided.



Graph 3.50 Teachers' Points Of View about the Impact of ICT on Language Learning

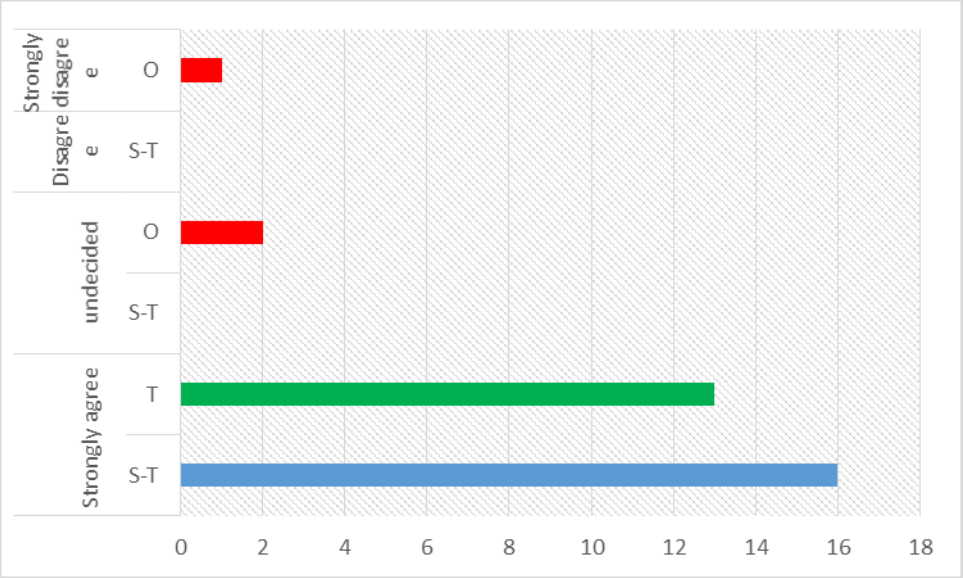
The majority of participants acknowledged the positive effect of ICT on society and this is show by their disagreement whether ICT had a negative affect society. All of those with computer training disagreed in addition to 87.50% from the group of self-taught participants, which indicate awareness among participants about the positive effects of technology on society. While those who thought ICT had a negative impact on ICT were not many as only 12.50% from the group of self-taught participants thought so. Yet, a minority group of others (3 participants) viewed ICT as a threat to society since they agreed with the statement.



Graph 3.51 Teachers' Points Of View about the Impact of ICT on Society according to Computer Training

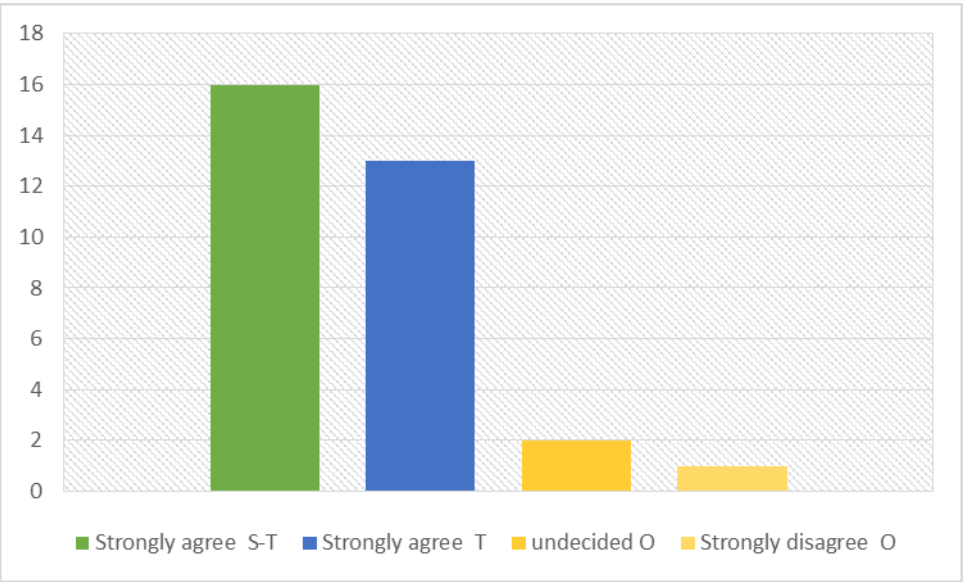
3.2.8.4 Computer Anxiety Level of Participants According to computer training

A low level of anxiety is noticed among participants' responses especially among those who received computer training. Mostly, participants showed low anxiety level when they were asked if they felt comfortable using different tools of computers whether self-taught participants or computer trained yet, a minority group of others showed high level of anxiety as 33.33% strongly disagreed while 66.67% took a neutral stand in their responses.



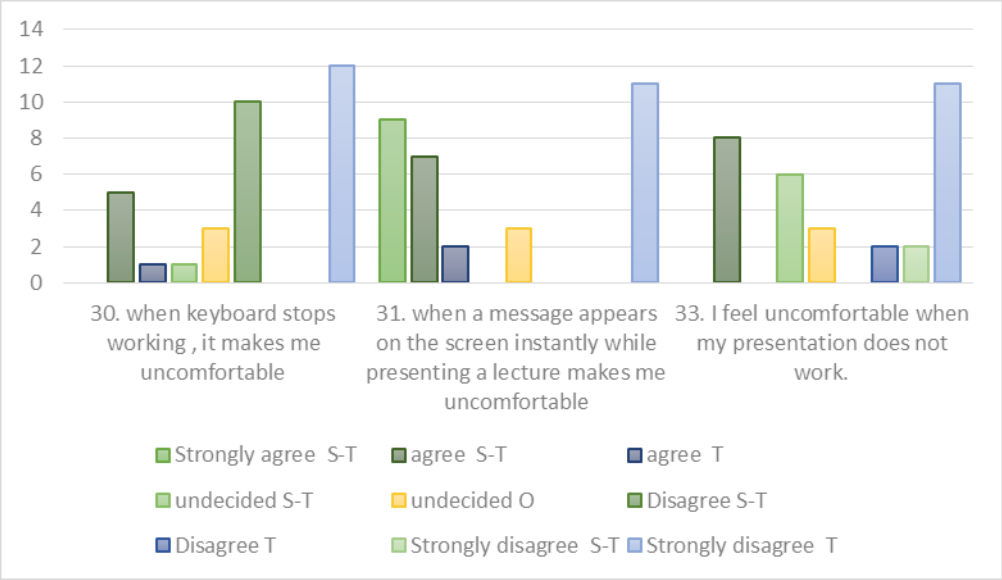
Graph 3.52 Teachers' Anxiety Level When Using Computers

Likewise, participants' level of anxiety was low as they exposed comfort while using the different tools of computers in teaching whether they were self-taught or received computer training. Nevertheless, a minority group of others showed high level of anxiety as 33.33% strongly disagreed while 66.67% took a neutral stand in their responses.



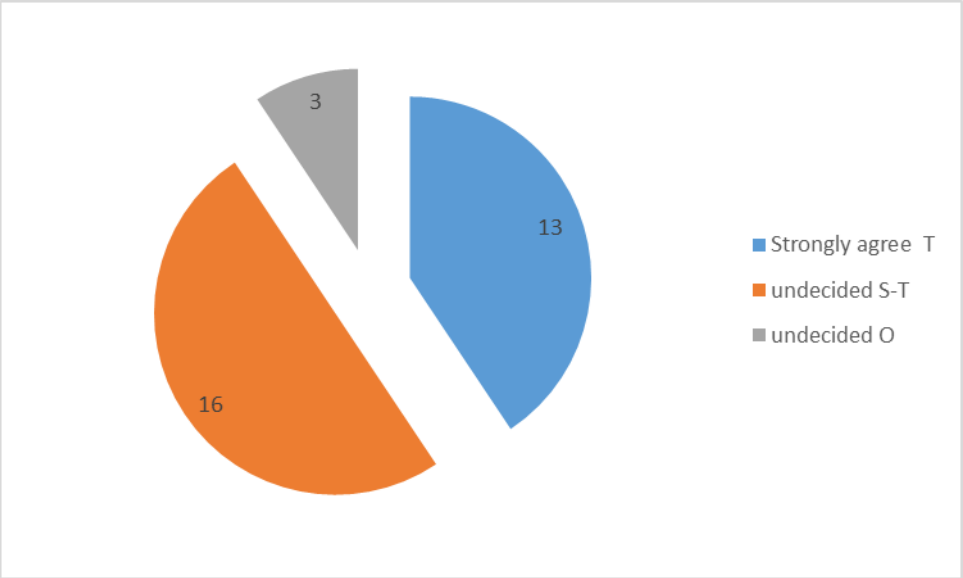
Graph 3.53 Teachers' Anxiety Level When Using Computers in Teaching

When teachers faced technical difficulties while using computers, it is clear that the level of anxiety can increase especially among those who were self-taught and here we can notice the importance of computer training in reducing anxiety level. The majority of those who received computer training had low anxiety level yet only 15.38% among computer training participants felt anxious when a message appeared on the screen while presenting. While all of those participants who were self-taught were anxious to this technical difficulty.



Graph 3.54 teachers' Anxiety Level When Facing Technical Difficulties according to Computer Training.

Following the same line of thoughts, computer training can have a positive impact on reducing anxiety level and it can be noticed in the answers of participants who received computer training since all of them agreed with this statement. However, the self-taught participants and the group of others were neutral to this statement.



Graph 3.55 The Impact of Computer Training On Reducing Anxiety Level

3.3. The Interview Results

In order to back up the data obtained from the questionnaire, an interview, composed of ten questions, is set out for 15 selected participants among those who completed the questionnaire. The interviews questions (see appendix F) are meant to provide further information about whether teachers view ICT as helpful tool in teaching English, bringing a positive atmosphere to learners and teacher themselves. A question is designed to seek which attitude the teachers have while presenting a lesson that requires the use of ICT. Moreover, another question is designed to seek their level of anxiety when using different ICT tools in their teaching while another one is intended to see the importance of computer training and how can other factors such as age, gender and teaching experience influence their preference to use technology in their teaching. Furthermore, a question is aimed to seek teachers' preference about the current methods or traditional ones and the difficulties faced by teachers while using these innovative tools.

In response to first question, "Can the use of ICT in teaching be considered as a parameter that helps to acquire good English?" The majority of the participants (80%) agreed that the use of computers in general has a positive impact on learning English. However, it can be used only as effective tool when it is linked with other tools. One interviewee said "I really believe that the use of ICT helps to acquire English, but only when it is associated with other tools". While another one said "yes because it can provide audio and visual that can improve pronunciation….. and it can facilitate visual contact with aspects of culture." .

Another participant stated: "Interestingly enough, ICT can be used to enhance the learning typology in an EFL class. However, it should be monitored by teachers, in order not to have students distracted from the learning objectives."

While on the other hand, three participants disagreed with the question and stated that English language can also be learned through the same old methods. One participant said:" we did not use technology in learning English and I'm doing fine right now." While another one said: "I do not use technology in my module because I don't know how to use it and still my students are enjoying my method."

The majority of interviewees (80%) thought that ICT brought a positive atmosphere to language classrooms especially for learners since they are using it on a daily basis and even for teachers. One interviewee said: "I enjoy using technology in my teaching because my students also enjoy when I do so." While another one said: "ICT brings a good atmosphere to students and teachers."

On the contrary, three participants had a bad feeling about impact of ICT on language classroom and thought of it as a barrier between the teacher and learners. One interviewee said "ICT made learners more passive than before and depending only on technology." While another one stated:" ICT does not bring positive attitude, teachers already have it in them." Interestingly, another participant has focused on one of the negative effects of ICT. He stated "Not always a positive attitude as many teachers stop preparing while they only focus on copy paste."

The majority of participants had positive attitude towards the use of ICT especially while using it in conferences. One participant stated, "When I used to participate in conferences and we only had only piece of paper to hold, it was a bit boring but now thanks to ICT, I feel motivated." While another one stated, "When presenting a lesson using ICT, class atmosphere shift positively as learners become more attentive. They read slides, or watch the video and listen to the explanation. It reduces boredom and push learners to remain focused."

However, only three participants stated that ICT made no difference in their language classrooms and precisely said that they did not have positive attitude while presenting and felt forced to do so.

When participants were asked if the use of different computer tools such as PowerPoint presentation made them, most of them said no, because they were motivated to associate technology with English learning. One participant stated: “No on the contrary, it's very relaxing since it makes me gain a lot of time.” While another one stated: “On the contrary, the use of technology in class helps me focus more and reduce anxiety as I am able to see the points I am discussing while delineating them orally to learners.”

However, some participants emphasized on some situations that can lead to the escalation of anxiety level. One participant stated: “I feel a bit stressed because I'm afraid that the power cut and I need to present my lecture a different way”. In addition, another one stated that in order to use technology, it took good preparation and the need to be skilful with technology. He stated:” Yes, because I have to make good animation and it needs skills” and another participants added:” yes, when it takes a lot of time”.

Participants of the interview questions were asked about the importance of computer training in acquiring a good level. Their results revealed that it is not necessary to be trained in computers to use it since the tools of computers were easy to manage thanks to the guidelines and YouTube channel that can tutor users. One participant stated: “I did not have a computer training but I can use any tool easily because there are tutorials on YouTube that can help me.”

However, some participants emphasized on the importance of computer training to use it better. One participant stated: “training in all fields is very important to gain knowledge and experience.” While another participant stated that training can help to show readiness and avoid technical problems. He stated: “Without training, teachers would face difficulty in presenting the lesson. Learners nowadays are very acquainted with computing skills. If a teacher is unable to perform perfectly it will reduce his appreciation and his class managements, as learners see him unfit to use technology or present a lesson using them.”

The participants of the interviews were from different genders and ages. In their responses to the question, “Do you think age and gender are determining factors in influencing your preference to use technology?” all participant stated that there is no difference in using technology between young or older, male or female. One participant stated: “No, nowadays both genders are fond of using new technologies.” While another

participant stated :" we see nowadays even little kids using mobile phone and at the same time a very old man or woman using computer to chat or surf the web."

However, one participant stated that the use of technology is influenced by society. He stated: "I don't think age and gender are determining factors in influencing my preference to use technology, I think it is more about the influence of society and we are adjusting to the new changes that happens to the world."

Participants were asked if experience in teaching was a factor that can influence the use of ICT in teaching. In general, participants stated that long years of teaching could help the teacher to be more relaxed and more prepared to face any difficulty. One participant stated that experience could help to compensate the lack of computer skills. He stated : "If teachers were unable to receive the suitable computer training; experience would give them the right skills to overcome obstacles when using technology in class as they are going to hone and harness their skills with time."

When participants were asked if the use of ICT is better than the traditional methods, many participants felt that technology made it easier for them. One participant stated: "it was hard to write lectures on the board and sometimes, we ask students to come and write on board but now, thanks to technology, the lecture is presented and in case of misunderstanding, I can go back to the slide."

However, some participants felt it would be better to mix up between the old methods and the new ones. One participant stated: "I'm for an eclectic method. Developing good hand writing habits are important for me too .Algeria is still far from the setting where all schools are equipped with computers and where our students who will be future teacher can use the internet and the different ICT tools to deliver a lecture." While another participant stated : "For me, it is better to mix between the traditional method of learning .i.e. using hand outs while backing it up with PPT presentations or audio-visual presentation. This would enhance the learning outcome and achieve a paradigm shift.

Most of the participants seemed to really appreciate teaching English through the use of ICT since most of them said "No" when they were asked if they face any difficulty when using PowerPoint to learn English. Again, this is an evidence that most learners at that level are not techno phobic.

However, some participants mentioned the difficulties that teachers faced on daily basis given the hardship to find special rooms and materials. One stated :" Sometimes because of lack special room as well as materials."

For the last question, there was unanimity of respondents that ICT should be included in education and especially EFL classrooms for various reasons. One interviewee stated "Yes because visual aids help students to learn better", another interviewee said: "yes because students can take notes without making mistakes". Another commented: "it includes clear pictures and sounds which helps to memorise the information." Another one focused on the influence of society: "Sure for nowadays young generation are more visually oriented

However, one participant agreed with the statement yet with conditions. He said: "I agree with the inclusion of ICT in class with few conditions. Teachers should respect technology and try to know how to master it completely. Teachers should not count on technology and stop preparing their lessons. They should not plagiarise or bring someone else's work to present without acknowledgment. They should push their students to search online for additional information. Teachers should stop considering their information as the ultimate truth and sustain relativity."

3.4 Conclusion

The focus on this chapter is to discuss the results obtained from both the questionnaire and interview that were addressed to EFL teachers at the department of English Djilali Liabes University, Sidi Bel Abbes Algeria. Teachers' attitude and anxiety level to ICT are investigated to see if there is a link between EFL teachers and different characteristics such as age, gender, teaching experience and computer training. Moreover, teachers' points of view and perceptions towards the influence of ICT in both education and society are also investigated in addition to their competency level and computer access whether at home or schools.

The results can help to provide some implications and recommendations, which can be discussed on the following chapters. They would help to integrate ICT in EFL classroom successfully and maintain this positive attitude towards the use of ICT in education and EFL classroom in Algeria since ICT has become a necessity in global world that demands using this technology in education.

Chapter Four:

Implications and Recommendations

Chapter Four: Implications and Recommendations

4.1 Introduction

This chapter focuses at reporting the findings of the study drawn from the study and introducing implications as well as suggestions and tentative recommendations devised about the future of using ICT in the Algerian educational system in general and EFL classroom in particular .

The results from the questionnaire and interview reveal that ICT is definitively a necessity and a complement to conventional teaching, especially with the positive attitude and low anxiety noticed by the target population of the study: EFL teachers at the English department Faculty of Letters, Languages and Arts at Djilali Liabes University Sidi Bel Abbes Algeria. This chapter focuses on the summary of the results followed up by a main section devoted to pedagogical implications of this study then a final section that provides other recommendations for further research.

4.2 Summary of the Results

This study aims to examine EFL teachers' attitude and anxiety towards the use of ICT in language classrooms. Many factors that can influence teachers' attitude and anxiety (Roger, 1995) which in return can determine whether teachers can use or reject the use of ICT. Hence, teachers' attitude and anxiety towards ICT were investigated in terms of age, gender, years of teaching experience and computer training.

Fisher (2003) emphasises on the existence of ICT tools in all different fields including education. He states that the reason for the delay of using technology is the cost of these tools. Due to the crucial role of ICT in the development of the quality of ICT, the Algerian government spent around 3 billions Dinars in June 2002 following the reform of the educational process and insertion of ICT with a set of structure, which is included in the country's formal ICT policy (Hamdy, 2007). Therefore, it is no longer an excuse for Algerian teachers to avoid using technology in teaching since Algerian universities in general and Sidi Bel Abbes University in particular has already been provided with those tools.

The reasons for integration ICT in the Algerian education are mainly to improve the quality of education and prepare students for a world that depends on technology and at the same time to help teachers achieve their goals in education.

Despite those goals, the successful integration of ICT in education depends mostly on the agents in charge of this trend, which are teachers. Although the integration of ICT in Algeria is compulsory and is seen by Algerian government as a sign of development and modernization, teachers play a big role in this change. Their attitude towards ICT can be significant in this equation. Hence, in order to comprehend what pushes EFL teachers to use ICT or reject it; teachers' attitude and anxiety towards ICT were investigated. The questions that needed to be asked: are factors such as age, gender, years of teaching experience and computer training influencing teachers' attitude and anxiety towards ICT?

This question opens a wide range of speculations about the use of ICT in Algeria. Hence, the research questions used in this study would provide answers. The results would reveal first, the attitude of EFL teachers at the department of Faculty of Letters, Languages and Arts at Djilali Liabes University Sidi Bel Abbes towards the use of ICT in classrooms. Second, whether there is a relationship between teachers' attitude and teachers' characteristics such as age, gender, teaching experience and computer training or not. Moreover, the results would reveal the teachers' points of view about ICT in terms of educational and cultural perceptions, their Computer competency and computer access. On the other hand, other research questions would be answered concerning the level of the participants' anxiety and whether gender, age, teaching experience and computer training affecting their anxiety level.

4.2.1 EFL Teachers' Competency and Computer Access

The first part of the questionnaire focuses on the common uses and settings of ICT. Items (1-4) of the questionnaire used in the study focuses on basic common uses of computers in education and daily life such as knowing how to install a software, using word processor, excel and PowerPoint presentation.

Despite the variables used in this study, the overall results indicate that participants of this study have good level in using computers.

When it comes to gender, the male population responded that they knew how to install new software with 64.29% who strongly agreed in addition to 28.57% who agreed while the female population's answers were similar to those of the males' ones with 22.22% who strongly agreed and 66.67% who agreed. Similar replies were expressed among male and female population: 92.86% of the male population and 83.33% of the female population knew how to operate on word processing program and a presentation program. In addition, 85.72%

of the male population and 88.89 % of the female ones responded that they used computers for grade keeping while few participants were either undecided or in disagreement.

In terms of age, the majority of participants of different ages showed a certain level of computer competency. 100 % of participants in the 20-29, 30-39 and over years old range knew how to operate on the different tools of a computer while the majority of participants in the 40-49 range (88.78%) and 66.67% of the participants within the 50-59 range responded positively.

In terms of teaching experience, the majority of participants whether novice teachers or experienced ones showed a certain level of computer competency. All participants within 1-5, 6-10 years of teaching experience knew how to use the different tools of the computer and similar responses were given by the majority of the other different groups; 80%, 87.50%, 87.50% and 87.50% of the 11-15, 16-20 and more than 20 years of teaching experience in order. Moreover, participants of different groups had good level of competency when using the different tools of computers such as word processor, excel and PowerPoint. All participants of the groups of 1-5, 6-10, 11-15 years of teaching experience, knew how to operate on PowerPoint while just a small minority of 12.5% of the 16-20 stated that they did not know while 37.50% among the group of more than 20 years of teaching experience were undecided.

In terms of computer training, the majority of participants whether those with computer training and self-taught ones showed a certain level of computer competency however, there was a minority group who decided to remain neutral in their answers. All participants whether self-taught or trained in computers knew how to install software and operate on the different tools of computers such as Microsoft word processor, Excel and PowerPoint except for only one participant who did not know how to use those tools . While three participants were neutral and did not respond in favour or disfavour.

Items (5-6) focuses on the possible settings where teachers used computers such as home or school. The overall results indicate that participants used computers at home more than they used it at school despite of the variables of the study.

In terms of gender, participants of different gender responded positively as 92.86% of the male population and 88.89 % of the female population used computers at home. While 78.57% of the male population and 61.11% of the female one used it at school though 14.29%

of the male population and 22.22% of the female ones were undecided due to the nature of the modules they teach at university.

In terms of age, all the participants within 20-29, 30-39, and over 60 years old range used computers at home while the majority of 40-49 range (88.89%) and 66.67% of the 50-59 range stated that they used computers at home.

In terms of teaching experience, participants of different groups had responses in favour of using computers at both settings. All participants of the 1-5,6-10,11-15 years of teaching experience stated that they used it at home while the majority of the 16-20 group (75%) and 87.50% of participants with more than 20 years of teaching experience stated that they used it at home. Moreover, not all participants stated that they used computers at school. Yet, the majority of them were in favour of using computers at school as 100% of participants within the 1-5 and 6-10 group stated that they used it at school while only 12.50% of the 16-20 group stated that they did not use it at school given the nature of the module they taught.

In terms of computer training, the use of computers at home by different groups of respondents seem high since all participants stated that they used it at home. However, one participant stated that he did not use it at home. However, when respondents were asked if they used computers at school, their answers were varied. All participants with computer training stated that they used it at school in addition to 62.50% of self-taught who claimed the same. While 33.33% stated that they did not use it in addition to 18.75 % of self-taught participants who stated that they did not use it at school.

4.2.2 EFL teachers' Attitude and ICT

Attitude is defined by Ajzen and Fishbein (1980) as a positive or a negative feeling associated with performing a specific behaviour. Woodrow (1992) points out that teachers' positive attitude toward technology is a required condition for the effective use of computers in the classroom. Hence, it was important to seek teachers' attitude towards ICT in order to state whether the use of ICT in Algeria is beneficial or not.

The questionnaire used in this study to determine EFL teachers' attitude focuses on teachers' actual familiarity with ICT tools and the advantages offered by ICT in language classrooms. Results from the questionnaire and interviews reveal that teachers have positive

attitude in general despite of the variables used in the study such as age, gender, teaching experience and computer training.

Items (7-16) of the questionnaire focuses on finding out teachers' attitude towards ICT. In addition, two of the interview questions are addressed to seek teachers' attitude towards ICT. The overall results of the questionnaire indicate that EFL teachers have positive attitude towards ICT and the majority of participants preferred using ICT in teaching.

The majority of participants have positive attitude towards the use of ICT especially while using it in conferences. One participant stated, "When I used to participate in conferences and we only had only piece of paper to hold, it was a bit boring but now thanks to ICT, I feel motivated." While another one stated, "When presenting a lesson using ICT, class atmosphere shift positively as learners become more attentive. They read slides, or watch the video and listen to the explanation. It reduces boredom and push learners to remain focused."

Based on these results, the first hypothesis of the study is confirmed that EFL teachers' attitude towards the use of ICT is largely positive.

The second research question of the study aims to find a link between teachers' attitude and their characteristics such as age, gender, teaching experience and computer training.

4.2.2.1 EFL Teachers' Attitude and Age

Woodrow (1992) states that age is not an important factor in correlation to teachers' attitude towards technology. Other scholars like Handler (1993) and Massoud (1991) have also shared the same point of view. On the contrary, Blankenship (1998) concludes that age is a crucial factor in correlation with teachers' attitude towards the use of ICT. Moreover, Chio (1992) comes to conclude in his study that despite the fact that young teachers are more knowledgeable and skilful when it comes to computers, senior teachers have positive attitude towards computer. However, in the study of Kendel (1995), results reveal that young teachers have more positive attitude towards ICT than senior teachers do. Another study conducted by Spiegel (2001) to seek the attitude of secondary school teachers towards ICT at four public schools in Netherlands, shows that age is not strongly related to attitude towards ICT.

Unlike previous studies, this study reveals that age is not a factor that influence teachers' attitude given the results obtained from the questionnaire and the interview.

Results obtained from the questionnaire indicate that participants of different ages have mostly positive attitude towards the use of ICT. The majority participants of all different ages preferred using ICT in teaching .100% within 20-29 range, 66.67% within the 30-39, 55.56% within the 40-49, 50% within the 50-59 range, and 100 % of participants with over 60 years old range disagreed with the statement 'I dislike using computers in teaching'.

Teachers of different ages showed positive attitude towards the variable tools offered by computers. All participants within the 20-29 age group, 88.89% of the 30-39 age group, 88.89% of the 40-49 age group, 83.33% of the 50-59 age group and 100% of participants with more than 60 years old had positive attitude towards the efficiency of computers in time and efforts.

Participant of different ages showed positive attitude towards learning more about computers due to their knowledge of the importance of ICT in all aspects of life. All participants within the 20-29, 30-39, 50-59, over 60 years old and the majority of the 40-49 age group (88.89%) wanted to learn more about computers.

In addition, the participants of the interview stated that there is no difference in using technology between young or older. One participant stated, "We see nowadays even little kids using mobile phone and at the same time a very old man or woman using computer to chat or surf the web."

Based on these results, age is not a determining factor in changing teachers' attitude towards the use of ICT in classrooms.

4.2.2.2 EFL Teachers' Attitude and Gender

Woodrow (1992) states that gender has no significant influence on teachers' attitude towards computers. Other researchers such as Kendel (1995) have also concluded that gender does not pay a major role in influencing teachers' attitude towards ICT. However, the results of a study conducted by North and Noyes (2002) indicate that computing is considered a "***masculine activity".*** The results of the study have also revealed a correlation between gender and technophobia and "***technological gender gap"*** (North and Noyes, 2002).

The results obtained from the questionnaire and the interview indicate that gender has no significant influence on teachers' attitude towards ICT.

Results obtained from the questionnaire reveal that participants of different gender have mostly positive attitude towards the use of ICT. The majority of male population 92.86% and similarly the majority of female one 88.89% showed positive attitude towards computers while a very small group of participants were undecided.

The majority of participants show positive attitude in using computers in their language classroom as 78.57% of the male and 61.11% of the female one disagreed with the statement 'I dislike using computers in teaching' . However, a very small group of participants showed negative attitude as 7.14% of the male and 5.56% of female population agreed with this statement. However, 14.29 % of male and 22.22% of female population were undecided.

Results obtained from the interview reveal also that all participant thought there was no difference in using technology between male or female. One participant stated, "No, nowadays both genders are fond of using new technologies."

Based on these results, gender is not a determining factor in changing teachers' attitude towards the use of ICT in classrooms.

4.2.2.3 EFL Teachers' Attitude and Teaching Experience

The results obtained from the study of Na (1993) suggest that there is no significant relationship between teaching experience and attitudes towards ICT. Similarly, Albirini's (2004) results also indicate that there is no relationship between teachers' attitude and teaching experience. Furthermore, Samak (2006) concludes in her results that teaching experience does not affect teachers' attitude towards ICT.

Likewise, the results obtained from the questionnaire and the interview indicate that teaching experience has no significant influence on teachers' attitude towards ICT.

Results of the questionnaire indicate that participants whether novice or experienced teachers show mostly positive attitude towards the use of ICT. The majority participants of preferred using ICT in teaching. Only few participants (20%, 12.5% and 12.5% among the

11-15,16-20 and more than 20 years of teaching experience in order, had negative attitude towards the existence of computers these days.

Novice teachers and experienced ones have positive attitude towards the different advantages of computers. However, only 25% of the 6-10 years of teaching experience group stated that computers did more harm than good while the majority of participants of different groups disagreed with this statement. 85.71 % of the 1-5 group, 75% of the 6-10 group, 100% of the 11-15 group, 87.50% of the 16-20 group and 100% of the participants with more than 20 years of teaching experience disagreed with this statement. However, some participants of different groups took a neutral stand in their response: 14.29% of the 1-5 group and 12.50% among the 16-20 years of teaching experience were undecided.

Participants of different years of teaching experience have positive attitude towards learning more about computers given their acknowledgement to the importance of computers in all aspects of life. All participants within the group of 1-5, 6-10, 16-20 and more than 20 years of teaching experience wanted to learn more while only 20 % of participants within the 11-15 years of teaching experience did not want to learn about computers.

Results of the interviews reveal that long years of teaching could help the teacher to be more relaxed and more prepared to face any difficulty. One participant stated that experience could help to compensate the lack of computer skills. He stated, "If teachers were unable to receive the suitable computer training; experience would give them the right skills to overcome obstacles when using technology in class as they are going to hone and harness their skills with time."

Based on these results, teaching experience is not a determining factor in changing teachers' attitude towards the use of ICT in classrooms.

4.2.2.4 EFL Teachers' Attitude and Computer training

Gobbo and Girardi (2001) state that the relationship between teachers' attitude and computer technology training is positive. Gobbo and Girardi (2001) stress on the fact that training has a considerable influence on the ways in which a teacher fosters technology tools in the classroom. Moreover, Ridgway and Passey (1991) point out to that teachers should be provided with computer training that covers all computer skills unlike the use of word processor in the classroom. In the same context, Jones (2002) states that there is a need for

teachers to be informed users of technology and this can be done through technology training offered for them.

However, according to a study of Mcalister (2005) about the use of computers to teach mathematics, teachers had a positive attitude towards using computers despite the fact that many of them had a limited experience with technology.

The results obtained from the questionnaire and the interview indicate that computer training has no significant influence on teachers' attitude towards ICT.

The results obtained from the questionnaire reveal that participants whether self-taught or trained in computers have mostly positive attitude towards the use of ICT. Respondents of this study show positive attitude as all of them whether computer trained or self-taught agreed on the statement 'computers do not scare me at all' however a minority of 9.75% were undecided.

In addition, participants of the questionnaire showed positive attitude towards using ICT in teaching whether they were self-taught or received a computer training. First, those with computer training were divided between 84.62% who were in favour of using ICT in teaching while 15.38% were undecided about the statement 'I dislike using computers in teaching'. Similarly, self-taught participants were also divided between 68.75% who were in favour of using computers in teaching while 18.75% were undecided and 12.50% disliked using computers in teaching while the group of others were against using computers in teaching.

All participants whether trained or self-taught acknowledged the advantages offered by computers since they all agreed with the statement 'computers save time and effort' however, just a minority group of 16% disagreed with the statement.

Results obtained from the interview also revealed that even without computer training, participants had positive attitude towards ICT and its use. One participant stated: "I did not have a computer training but I can use any tool easily because there are tutorials on YouTube that can help me."

Based on these results, computer training is not a determining factor in changing teachers' attitude towards the use of ICT in classrooms.

4.2.3 EFL Teachers' Views about the Impact of ICT in Education and Society

Ajzen and Fishbein (1980) states that an attitude of a person toward a behaviour composes of two phases: a belief of a good outcome resulting from a particular behaviour and after that proceeded with an evaluation of the outcome of that behaviour. Hence, it was important to seek the views and opinions of teachers about the importance of ICT in society in general and in education in particular. A section from the questionnaire was devoted to seek teachers' actual familiarity with ICT, their use of ICT and their views about ICT in education and society.

In general, EFL teachers have positive views towards the use of ICT in education despite of the variables such as age, gender, teaching experience and computer training.

In terms of gender, The majority of participants population show positive attitude towards the impact of ICT on education since 85.75% of male and 94.44% of female population were in agreement with the statement of 'computers will improve education'. However, 7.14% of the male population were undecided while another 7.14% showed negative attitude and similarly 6% of female ones had the same negative attitude.

The majority of participants have a positive view towards the impact of ICT on language learning despite of their gender: 71.43% of the male population and 83.33% of the female ones. However, few participants were undecided about the impact of ICT on language classroom and few participants did not acknowledge the importance of ICT on education as 7.14% of male and 5.56% of female ones disagreed with the statement.

In terms of age, participants of different ages showed positive attitude towards the impact of ICT on education and we can notice that in their disagreement with the statement that technology cannot improve the quality of students' learning. All participants within 20-29, 30-39 and 40-49 range were in total disagreement in addition to the majority of participants within 50-59 (66.67%) and 75% of participants with more than 60 years old felt the same way. However, only 16.67% among the 50-59 age group and 25% among the 60 years old and over agreed with this statement.

Participants with all different ages have a positive view towards the usefulness of ICT since the majority of participants acknowledged the positive role in using ICT in different

language learning activities. 100% of participants within the 20-29 range, 88.89% within the 30-39 range, 77.78% within the 40-49 range, 66.67% within the 50-59 range and 75% of participants within 60 years old and above replied positively to this statement.

In terms of teaching experience, both novice and experienced teachers have a positive view towards the impact of ICT on education. All participants within the 1-5, 6-10, 15-20 and more than 20 years of teaching experience acknowledged the positive impact of ICT on education while only 20% of participants within 11-15 years of teaching experience felt the opposite.

Participants of different years of teaching experience have positive view about the impact of ICT on language classroom. Since participants of this study were, teachers of foreign language were able to determine whether the impact of ICT was positive or negative. All participants within 1-5 years of teaching experience acknowledged the positive impact of ICT on language classroom in addition to the majority of 6-10 group (75%) , the majority of 11-15 group (60%) , the majority of 16-20 (75%) and 87.5% of participants with 20 years of teaching experience.

In terms of computer training, participants whether self-taught or received computer training, have a positive view towards the impact of ICT on education. The respondents were divided between 90% who disagreed with the statement 'computer technology cannot improve the quality of students' learning' while 7 % agreed and 3% were undecided.

Participants have a positive view towards the impact of ICT on language learning since all respondents who received computer training and were self-taught thought so. However, a minority group had a negative view as 33.33% among this group of others thought ICT had a negative impact on language learning while 66.67% of the same group were undecided.

According to the results of the interviews, the majority of the participants (80%) agreed that the use of computers in general has a positive impact on learning English. However, it can be used only as effective tool when it is linked with other tools. One interviewee said "I really believe that the use of ICT helps to acquire English, but only when it is associated with other tools". While another one said "yes because it can provide audio and visual that can improve pronunciation….. and it can facilitate visual contact with aspects of culture." . Another participant stated, "Interestingly enough, ICT can be used to enhance

the learning typology in an EFL class. However, it should be monitored by teachers, in order not to have students distracted from the learning objectives."

In addition, interviewees felt that technology made it easier for them in language classroom. One participant stated, "It was hard to write lectures on the board and sometimes, we ask students to come and write on board but now, thanks to technology, the lecture is presented and in case of misunderstanding, I can go back to the slide."

Moreover, there is unanimity among respondents that ICT should be included in education and especially EFL classrooms for various reasons. One interviewee stated "Yes because visual aids help students to learn better", another interviewee said: "yes because students can take notes without making mistakes". Another commented: "it includes clear pictures and sounds which helps to memorise the information." Another one focused on the influence of society: "Sure for nowadays young generation are more visually oriented

Based on these results, EFL teachers are aware of the importance and the positive effect that ICT has on education in general and also on EFL language classrooms.

Similarly, EFL teachers have positive views towards the impact of ICT on society despite of the variables such as age, gender, teaching experience and computer training.

In terms of gender, similar responses were given in favour of ICT by both genders about its impact on society. The majority of participants (77.78% males and 64.29% females) did not agree with the statement that ICT dehumanized society. However, few participants thought of ICT as a negative influence on society as only 7.14% of male and 11.11% of female population responded negatively.

In terms of age, the majority of participants with different ages have similar views about the impact of ICT on society. All participants within the 20-29 age group and 60 years old and above stated that ICT had positive impact on society in addition to the majority of the other age groups had the same view: 77.78%, 77.78% and 93.43 % of participants within 30-39, 40-49 and 50-59 age groups in order.

In terms of teaching experience, both novice and experienced teachers recognise the positive impact of ICT on society since they disagreed with the statement that ICT dehumanized society. Just minority of participants within the 6-10 years of teaching

experience (25%), 20% within the 11-15 group and 12.5% within the 16-20 group thought that ICT had a negative impact on society.

In terms of computer training, participants were asked if ICT had a negative affect society, participants of different groups were in disagreement with this statement. All of those with computer training were in disagreement in addition to 87.50% from the group of self-taught participants. While those who thought ICT had a negative impact on ICT were not many as only 12.50% from the group of self-taught participants thought so. Yet, only three participants viewed ICT as a threat to society.

Based on these results, EFL teachers are aware of the importance and the positive effect that ICT has on society.

4.2.4 EFL Teachers' Computer Anxiety Level

Fletcher and Langley (2009) state that every human being can experience anxiety, which is a natural feeling that can occur during an unusual situation or different changes in life like starting a new work. Anxiety can help to either perform better or lead to the feeling of fear that can cause failure to achieve the task (Fletcher and Langley, 2009).

According to the Psychiatric American Society (2000), teaching anxiety is not considered a disorder. Scholars such as Thomas (1974), views teaching anxiety as every feelings, beliefs, or behaviours that can obstruct the process of teaching during the phase of preparation or during the teaching phase.

Brown, Robson and Rosenkjar (2001) state that the neglecting or misusing of equipment needed in classroom lead teachers to be anxious. Among these tools, computers which are integrated in language classroom nowadays. It is predictable that lack of knowledge about computers can lead to a psychological fear, which can be an obstacle to the success of integrating ICT in classroom. This psychological fear is referred to as computer anxiety (Beckers and Schmidt, 2006).

The last section of the questionnaire devoted to determine teachers' computer anxiety level whether during the phase of preparation and the teaching phase. Computer anxiety is inevitable and it always exists on different levels. Yet, in this study, the level of anxiety

among EFL teachers was not high in different stages. These results confirm the hypothesis that EFL teachers were less anxious when they use ICT in their classrooms.

4.2.4.1 EFL Teachers' Computer Anxiety Level and Gender

Reinen and Plomp (1996) state that introducing ICT in education has led to a new differentiation between male and females hence gender inequalities. While Dyck and Smither (1994) conclude in their study that gender was not a major factor in computer anxiety. Yet, there was a slight difference between females' higher anxiety, less liking, less confidence and less positive attitude towards computers compare to males' ones.

Oetting (1983) also concludes that the levels of computer anxiety between females and males were not different. The results of a study conducted by Kotrlik and Smith (1988) also support the results of Oetting (1983) that female teachers and male ones' anxiety level is not different. Other researchers like Howard (1986), Igbaria and Parasurraman (1989) conclude that gender does not influence computer anxiety and there is no relationship between gender and computer anxiety.

Likewise, the results of this study reveal that gender has no relationship with computer anxiety.

A low level of anxiety was noticed among participants' responses despite of their gender. 92.86 % of male population and 88.89% of female ones stated that they felt comfortable while using computers. However, small participants among males (7.14%) stated that they felt anxious while using computers while 11.11% of female participants were undecided.

When participants faced technical difficulties while using computers, level of anxiety was somehow higher in comparison to previous statement yet, it was noticeable among both female and male populations. For example, in responses to the statement 'when keyboard stops working, it makes me uncomfortable' 35.71% male and 22.22% of female population had higher anxiety level. While 14.29% male and 5.56% of female population took a neutral stand.

Participants of different gender felt that having more opportunities was important in reducing the anxiety level when using computers. 100% of male and 83.22% of female

population stated that practicing more on computers had a direct link with reducing anxiety level. Yet, a small population among females 16.67% were undecided.

Based on these results, Gender is not affecting EFL teachers' anxiety level of computers.

4.2.4.2 EFL Teachers' Computer Anxiety Level and Age

Namlu and Ceyhan (2002) state that there is a connection between age and computer anxiety. Even though it is hard to profile a computer anxious person, Appelbaum (1990) states that the majority of people with computer anxiety are over 30 due to the early introduction of computers that youngsters have had in school. Other researchers such as Gardner, Render, Ruth, and Ross (1985) suggest a profile for a computer anxious person. This profile suggests a 50 years old, female, well ordered, unskilled in math and competent enough to work without a computer. According to the results of study by Igbaria (1993), age has a major impact on computer anxiety. Ibgaria (1993) concludes that older individuals did not have neither enough knowledge about computers nor past use of it. Hence, they were resistant to change.

According to a study of Dyck and Smither (1994), senior citizens have more positive attitude towards computer with a low level of anxiety despite the fact of their lack of experience compared to younger adults. Based from these results, Dyck and Smithers (1994) suggest that older people have little experience with computers yet, they enjoy the idea of what computer could do.

The results of this study reveal that young teachers and even older ones had low level of computer anxiety.

A low level of anxiety was noticed among participants' responses despite of their age. Only 16.67% among the 50-59 age group showed a high level of anxiety when using ICT while the majority of participants within all group age showed a low level of anxiety

When participants were asked about their level of anxiety when facing technical difficulty while using computers, the level of anxiety was a bit high. 25% of participants within the 20-29 age group, 22.22% of them within the 30-39 and 40-49 age groups, 33.33%

among the 50-59 age group and 25% of participants with more than 60 years old stated that they felt anxious when they faced a technical problem.

When participants were asked about the importance of training in reducing anxiety level, many participants of different ages took a neutral stand since they stated that they did not have ICT training. While those who had a formal training stated that computer training was important in reducing computer level as 75% within the 20-29, 55.56% within the 30-39 age group, 22.22% within the 40-49 age group, 33.33% within the 50-59 age group and 25% of participants with 60 years old and more replied positively to this statement.

Based on these results, age is not affecting EFL teachers' anxiety level of computers.

4.2.4.3 EFL Teachers' Computer Anxiety Level and Teaching experience

There are not many studies concerning computer anxiety with years of teaching experience. Yet, some studies such as the study of the National Center for Educational Statistics USA (2000) points out to a relationship between lacks of using ICT with years of teaching experience. On the contrary, results of study conducted by Niederhauser and Stoddart (2001) indicate that experienced and less experienced teachers' computer anxiety level is not different. However, Ursavas and Karal (2009) state that experienced teachers display low level of computer anxiety and at the same time, they exhibit positive attitudes towards computers.

According to the results of study conducted by Pamuk and Peker (2009), young teachers are more tolerant towards the use of computers while older teachers are technophobic. The unfamiliarity and lack of computer experience and use of experienced teachers are the reasons of why experienced teachers are more technophobic than less experienced ones (Combs, 2005).

The results of this study reveal that both novice and experienced teachers had low level of anxiety.

A low level of anxiety was noticed among participants' responses despite of years of teaching experience. All participants within the 1-5, 6-10 and more than 20 years of teaching experience stated that they felt comfortable when using computers in addition to the majority of the 11-15 group (80%) and the majority of the 16-20 years of teaching experience group

(75%). While just a minority of the group 16-20 felt uncomfortable while using computers (12.5%).

When teachers faced technical difficulties while using computers, it is clear that the level of anxiety can increase yet with small degrees. This can be seen with the minorities of the different groups who felt anxious when facing technical problem. 14.29 %, 12.5% and 25 % of the 1-5 group, 16-20 group and more than 20 years of teaching experience group in respected order.

The results of the interviews reveal that participants that that teaching experience can compensate lack of computer skills. In general, participants stated that long years of teaching could help the teacher to be more relaxed and more prepared to face any difficulty. One participant stated that experience could help to compensate the lack of computer skills. He stated "If teachers were unable to receive the suitable computer training; experience would give them the right skills to overcome obstacles when using technology in class as they are going to hone and harness their skills with time."

Based on these results, teaching experience is not affecting EFL teachers' anxiety level of computers.

4.2.4.4 EFL Teachers' Computer Anxiety Level and Computer training

Howard and Smith (1986) link the lack of knowledge about computers and lack of training with computer anxiety. The results of their study indicate that training and learning about computers can decrease computer anxiety. Bloom (1985) states that computer anxiety can be reduced by knowledge, techniques of building computer skills and more practice. Bloom (1985) explains that training should also help to understand why and how an individual develops anxiety and how to control it. Furthermore, Galagan (1983) states that an efficient computer-training program can help to acquire better knowledge about computers and encourage computer use which lead to decrease the level of computer anxiety.

Similarly, the results of this study reveal the importance of computer training in reducing the level of computer anxiety.

A low level of anxiety was noticed among participants' responses especially among those who received computer training. All participants showed low anxiety level when they

were asked if they felt comfortable using different tools of computers whether self-taught participants or computer trained yet, a minority group of others showed high level of anxiety as 33.33% strongly disagreed while 66.67% took a neutral stand in their responses.

When teachers faced technical difficulties while using computers, it is clear that the level of anxiety can increase especially among those who were self-taught and here we can notice the importance of computer training in reducing anxiety level. The majority of those who received computer training had low anxiety level yet only 15.38% among computer training participants felt anxious when a message appeared on the screen while presenting. While all of those participants who were self-taught were anxious to this technical difficulty.

Following the same line of thoughts, computer training has a positive impact on reducing anxiety level and it is clear from the answers of participants who received computer training since all of them agreed with this.

Furthermore, the results obtained from the interview reveal that participants emphasized on the importance of computer training to use it better. One participant stated: "training in all fields is very important to gain knowledge and experience." While another participant stated that training can help to show readiness and avoid technical problems. He stated: "Without training, teachers would face difficulty in presenting the lesson. Learners nowadays are very acquainted with computing skills. If a teacher is unable to perform perfectly it will reduce his appreciation and his class managements, as learners see him unfit to use technology or present a lesson using them."

Based on these results, Computer training is a factor in reducing anxiety level of computers.

4.3 Pedagogical Implications

The data obtained from this study reveal that the use of ICT in Algeria is acceptable given the circumstances that can hinder its progress. The proper use of ICT by teachers would help to improve the teaching process of English as Foreign language. The success of ICT when implemented in the foreign language classroom depends mostly on the teacher. In addition, it is very important that the teacher should be well known about the different tools of ICT in order to fully take advantage of the benefits that ICT offers a conventional classroom.

Computer training is important however, teachers with no computer training still can manage the simple ICT tools.

Teachers play an important role in the successful integration of ICT. Teachers' attitude towards ICT is a determining factor about their enthusiasm to incorporate technology in their language classrooms. This relationship between teachers' attitude towards ICT and the successful integration of ICT is valued by the numerous researches conducted in developed countries concerning this issue. (Woodrow, 1992; Chiero, 1999; Hardy, 1998; Hignite & Echternacht, 1992; Kendel, 1995; Koohang, 1987; Rizza, 2000; Spiegel, 2001; Becker, 2000; Braak, 2001; Christensen & Knezek, 2001; Dupagne & Krendel, 1992; Earle, 2002; Hendricks, 1998; Hignite & Echternacht, 1992; Kotrlik, et al., 2000;Kumar & Kumar, 2003; Murphy, 2000; Turnbull & Lawrence, 2002).

As it is known, teaching a foreign language is a complex process, teachers need encouragement in this difficult field and with these new technological-based classrooms, may be good solutions for improving the teaching process. Some suggestions on pedagogical changes are provided based from the feedback of the respondents. These steps can help teachers improve the teaching process.

First, the results of this study already proves that teachers are interested in using ICT in their language classrooms since they seemed having positive attitude. This positive attitude is also derived from their positive views towards the impact of ICT on society in general and on education in particular. Teachers viewed ICT as a tool that can help to save time and efforts and can improve the quality of teaching and learning. These results indicate that Algerian EFL teachers and especially those at Sidi Bel Abbes are flexible and tolerant to the introduction of ICT in their language classrooms.

Hence, all teachers should incorporate ICT in their English class since so far, not all teachers at the English department Djilali Liabes University are embracing this technology. They can either use it to teach or make it a part of the student activity since they certainly need also more opportunities.

Moreover, teachers should take into consideration how the students like to learn because learning style differs from one learner to another. Educational technology is playing an important role in the teaching profession but it does not mean that teachers should be totally enslaved to the ICT tools. They can use ICT as a tool, not as a method. They can

incorporate the use of technology to teach as a way to add variety into classroom procedures so students do not get bored. It could be a form of inspiration for the students and also the teachers themselves.

In the technological revolution and the information age, using technology in teaching English becomes essential. Giving this fact, even if teachers show positive attitudes towards the use of ICT in their language classrooms, teachers should also be more competent in using this technology. The idea of introducing ICT is not because these tools are perfect; the use of them have also its shortcomings. However, teachers should at least try with it in their class to see what works and what does not work with their students because ICT tools can be good addition to the traditional teaching methods.

Despite the fact that the use of ICT by teachers is still not high compared to the developed countries, it is important for universities to provide computer training for their teachers. Computer training is needed for teachers yet; teachers are required to have an excellent command in using ICT since they are obliged to provide proper guidance to students on learning the language and how to use ICT in a beneficial way. Policy makers need to establish a model that would smooth the transition into technology with ease. Before ICT is placed in the classrooms, teachers should acquire at least basic training. Afterwards, the training should be on going and offered at different levels, such as basic, moderate, and expert.

Teachers should not think that using technology is the only solution for creating a learning atmosphere. The lessons should be established on well-designed technological classrooms and pedagogical considerations. A good planning is highly required even though the use of ICT is encouraged to guarantee beneficial and expected outcomes from ICT and not only using it just to follow the trend. It is important to emphasis on the fact that ICT is not a substitute for the teachers because teachers' role is unquestionable however; ICT can be rather complements to teachers. Moreover, lesson planning is crucial to prevent problems like conducting an activity that could result in a high level of anxiety that obstructs learning. Hence, the new lesson plan would only include newer theories and ways of conducting the class that fits with the conventional methods.

Moreover, the use of ICT needs to have clear strategies in the curriculum so that improvement in the classroom can be supervised. Using these tools has to be supervised for various reasons, but the main issue that can hinder this process is, teachers becoming lazy. They may present a ready-made lecture by using the data show without any interaction between their learners while students are only watching and writing which leads to the loss of communication between teachers-learners.

A good teaching-learning process should be supported by technological equipment, which would provide students with more interest since students are now a generation of computers. Teachers should be encouraged to use computers as well as providing them with those tools for maximum success in EFL classrooms.

English Foreign Language teachers who decide to use ICT in their classrooms should be familiar with the standards for software (e.g. goals, presentation, appropriateness, and outcomes). Moreover, time and efforts are two important factors that teachers should consider. Teachers should be aware that there are many different types of software or online materials available for ESL / EFL. However, some of these tools are not useful.

Moreover, teachers should also ensure that the materials used in class are helpful to their learners and are ideal, so that progress can be attained. Yet, a careful consideration should be given to students' level of computers since choosing the right software accordingly can be beneficial to both teachers and learners. Furthermore, EFL teachers should always up to date when it comes to new methodologies that involve the use of technology to fully benefit from this trend.

4.4 Recommendations

Due to the small size of the sample of this study, there is no certainty that the findings of the study generalise or may truly represent the entire population of university teachers in Algeria or other educational and cultural contexts. Hence, a further investigation should be carried out among teachers in universities all over Algeria to find out their attitude towards using technology and ICT to teach language. It is also possible to identify reasons why many teachers still do not use technology in their lectures.

Furthermore, as the relationship between ICT use and teachers' age and experience seems to be universal, and while this study results reveal that age is not a factor, a widen survey should be required to find out the reasons why teachers' willingness of using ICT tools can be a question of age on a national level. Because only after getting lecturers' opinions, reactions, and feedback, the image is more complete and then, it would be possible to see if there is a match or mismatch between teachers at the national level and worldwide .

It would also be interesting to investigate a correlation between teachers and new teaching methods in terms of how ICT is implemented into the English foreign language classroom, since the teaching methods keep changing as a response to the high demands of using ICT into all fields of education.

Given another significant influence of cultural perceptions in determining EFL teachers' attitudes toward ICT, future studies on different parts of Algeria may consider examining further the role of cultural background on EFL teachers' attitudes towards ICT and the rate of adoption of such innovations in settings. It is evident that culture is a significant factor influencing the decision to accept or reject an innovation as well as the rate of adoption of an innovation, particularly in developing countries.

Besides using a questionnaire and interview, there should be used other data collection tools to enlarge the scope. These other data collection tools can be gathering field notes by conducting a classroom observation, documentation techniques like asking the teacher to keep a journal during the research study and audio-visual materials like videotaping the real situation in the classroom if it is also possible.

Schneider (2004) claims that, the lack of replication in education studies produces contrasting results that destabilises the education research field's ability to gather knowledge. In Schneider's view, replication represents an important and unifying concept, and is a starting point for a fruitful discussion that might promote the unity of a community in terms of diverse methods in the educational level. Hence, there should more studies following the same theme to cover all the questions that educationalists still have not found a prevailing remedy to all our foreign language-teaching issues.

It is clear the in this world of technology, ICT plays an important role in the progress of society and improve the quality of education. If we consider that ICT is integrated in all stages of education, it is important to provide the right conditions and materials for teachers to

practice their job more effectively. Furthermore, policy makers should take into consideration that providing the right conditions depends on preparing an ICT master plan improvement, enlarging ICT networks in schools; promote the importance of ICT and raising the awareness of the positive impact of ICT to have more involvement of teachers mainly.

The integration of ICT into education has become an inevitability due to the age of technology. Technology is changing rapidly and likewise, young learners are learning about these new innovations. Hence, schools and especially teachers should be up to date when it comes to these innovations. Nevertheless, the use of ICT in Algeria is still limited and if we want to maximize the positive outcomes of ICT, it is necessary for policy makers to consider this issue because the integration of ICT in Algeria remains impracticable and controversial issue.

4.5 Conclusion

This chapter is intended to suggest implications and some recommendations drawn from the experiment we had in this case study for the hope that these would benefit the teachers of English and encourage them to make full use of the resources available to them. The tools of the study are aimed to answers the research questions related to the study. It is found out in this study that participants have good level in using computers. They used computers at home more than they used it at school. Moreover, teachers have positive attitude in general towards ICT despite of the variables used in the study such as age, gender, teaching experience and computer training. In addition, EFL teachers are aware of the importance and the positive effect that ICT has on education in general and also on EFL language classrooms. Similarly, EFL teachers have positive views towards the impact of ICT on society.

Another part of the study is focused on EFL teachers' anxiety level towards computers. The level of anxiety among EFL teachers in this study was not high in different stages despite of the different variables such as age, gender and teaching experience however, Computer training is a factor in reducing anxiety level of computers. It is important to stress that using ICT in EFL classroom can be a factor to enhance language proficiency. However, teachers' role remains unquestionable since ICT promotes autonomy.

General Conclusion

General Conclusion

The reason to choose this topic "The effects of using ICT on EFL teachers' attitude and anxiety" is mainly due to the awareness of the importance of teachers in successful ICT integration in language classroom. Despite the technology gap between developed and developing countries such as Algeria, the use of ICT in Algerian universities in general and especially at the department of English languages, Djilali Liabes University seems acceptable so far.

The main objective is to determine what factors can influence teachers' attitude and anxiety towards ICT. There is still a need for many studies to be done in order to determine the future of ICT in Algerian EFL classroom because Algeria is still considered left behind with modern technology especially in the educational field. In this study, questions were asked to determine first, the attitude of EFL teachers at the department of Faculty of Letters, Languages and Arts at Djilali Liabes University Sidi Bel Abbes towards the use of ICT in classrooms. Second, whether there is a relationship between teachers' attitude and teachers' characteristics such as age, gender, teaching experience and computer training or not. Moreover, the results would reveal the teachers' points of view about ICT in terms of educational and cultural perceptions, their computer competency and access. On the other hand, other research questions would be answered concerning the level of the participants' anxiety and whether gender, age, teaching experience and computer training affecting their anxiety level when using the ICT tools.

Nevertheless, the results of the study reveal that ICT is definitively a necessity and a complement to conventional teaching, especially with the positive attitude and low anxiety noticed by the target population of the study: EFL teachers at the English department Faculty of Letters, Languages and Arts at Djilali Liabes University Sidi Bel Abbes Algeria.

The Algerian government as well as many developing countries recognises the crucial role of ICT in the development of the quality of education due to the increasing demand to use ICT in education and to teach students the knowledge and skills they need in order to keep up with this trend.

Nevertheless, nowadays , using ICT as tool in EFL classroom has become crucial to teachers and an enormous factor that contributes to improving EFL teaching and learning objectives by increasing motivation, facilitating collaboration, promoting global understanding and not to mention developing language skills if it is used effectively in the context where teaching takes place. With all of the technological advances that exist lately, ICT is becoming more important in the teaching learning process in the FL/L2 language classroom. However, the role of the EFL teachers is very important in the incorporation of ICT in EFL classroom and the success of ICT tools when applied depends on the teacher.

In addition, it is necessary for teachers to be well knowledgeable in using the ICT tools in order to fully benefit from ICT tools, which offer more advantages than the usual conventional classrooms. It is fair to say that despite the availability of ICT tools, there is no assurance about its uses by teachers in their language classrooms. Their attitude is a prominent factor as well as convincing them with its advantages in enhancing the quality of teaching and learning. The attitude of teachers can be altered especially if it is negative through a proper training, support and guidance for teachers in how to incorporate these ICT tools into their language classrooms, which can be smoothly improved by practice. Moreover, establishing continuous training to teachers is very essential so they can familiarise with the changes of educational methods.

There are some positive and negative points regarding using ICT as tools in EFL classrooms from an academic point of view. Yet, there is no doubt that ICT has made life easier in the classrooms for both teachers and students equally. However, the most important thing that needs to be stressed here is the fact that everyone including ministry, administration, instructors, teachers and even learners are responsible somehow and have to collaborate on setting up, employing approaches and guidelines in order to successfully integrate ICT in the EFL classroom.

The results drawn from this study would show the importance of teachers' attitude towards ICT in integrating ICT in language classroom successfully. Furthermore, teachers' views about the impact of ICT on education and society can be associated with teachers' attitude which lead ultimately to reducing their anxiety level and then be at ease and be joyful in their teaching. Moreover, teachers' attitude towards ICT can be linked to computer anxiety.

Many studies such as the study of Farina, Arc, Sobral, and Carames (1991) which reveal that those who display positive attitude towards computers are those who feel that computers can make their work a lot easier while those who display negative attitude towards computers are those who feel computers as a threatening tool. This negative attitude is probably due to an unsuccessful experience with computers at a previous time and the negative feeling i.e., computer anxiety resulted from using these tools (Farina, Arc, Sobral, and Carames, 1991).

When answering the research questions, it is found that teachers had good level in using computers. They used computers at home more than they used it at school. Moreover, teachers had positive attitude in general despite of the variables used in the study such as age, gender, teaching experience and computer training. However, there is a need to give them more opportunities to use these tools. In addition, EFL teachers showed awareness of the importance and the positive effect that ICT has on education in general and also on EFL language classrooms in particular. Similarly, EFL teachers had positive views towards the impact of ICT on society.

Finally, despite the fact that anxiety is foreign language classroom is inevitable, EFL teachers were less anxious when using ICT in their language classrooms. Yet, there is always the good training and the availability of more opportunities for teachers, which, are needed to increase their self-confidence. This can be seen from another part of the study, which focuses on EFL teachers' anxiety level towards computers. The level of anxiety among EFL teachers in this study was not high in different stages despite of the different variables such as age, gender and teaching experience however, Computer training is noticed as a factor in reducing anxiety level of computers.

EFL teachers can use the different ICT tools in their language classrooms as an effective additional instrument for the traditional methods of teaching. Using ICT by EFL teachers can be motivating and beneficial for both students and teachers while promoting autonomy among EFL students since the integration of ICT in education and in language classroom is unavoidable. Undoubtedly, target language communication and cultures are easily accessible through the current and emerging innovative tools and using these resources is freely accessible online. However, the popular, courageous and innovative teacher is the one who endeavours into this virtual world, find reliable assets, and customise them to make school language classroom a fabulous place to study.

General Conclusion

There are many advantages of ICT that can be seen into the educational setting. ICT provide an atmosphere for teachers to be flexible and joyful in their teaching. Moreover, ICT can help also to expand new knowledge and skills for both teachers and learners. In addition, the implementation of ICT in language classrooms can be beneficial to teachers in terms of understanding their subjects, how to prepare their lesson plan effectively. At the same time, ICT can help teachers to be familiarised with the development of knowledge, improve their proficiency levels and self-confidence. Furthermore, ICT can make the classroom more exciting which motivate students to take learning as fun task and widen their computer experience and knowledge. In addition, the implementation of ICT in education is a part of a bigger broader context of economic sector and global market. In other words, the use of ICT in education can be helpful to the other sectors. However, technology can neither replace teachers nor become the content for instruction and supersede it.

Moreover, ICT cannot substitute complex language learning and progressive goals with simpler technology goals. In addition, the different ICT tools cannot replace nor dominate the traditional print materials and minimise accessibility to these proper resources. Likewise, it should come into consideration that ICT cannot interrupt or obscure normal classroom community efforts nor extend the social, gender and economic gap. More importantly, ICT tools cannot be an obstacle that can halt the use of imagination and break the bridge of communication between teachers and learners.

The awareness of teachers to technology seems gradually improving with time. This awareness, however, is faced with many obstacles like the restriction of access to computer facilities, which can limit the use of ICT in language classrooms and prevent teachers from taking full advantage of it. EFL teachers at the English department of Djilali Liabes University are using their own resources and money to provide learners with a technology based classroom. The unavailability of ICT tools can be a reason why few respondents of the study showed negative attitude towards ICT. Moreover, placing computers in education can be a double edge sword especially when the technological tools and the curriculum are not compatible. Therefore, experimenting stage for using technology within the new approaches that based on ICT should be extended to help teachers and also policy-makers find an effective plan for this educational change.

To be fair, the successful integration of ICT in education is not the only job of policy makers alone; it is a teamwork from all the bodies in the field and individuals such as teachers. Therefore, policy makers, governments and schools should foster the partnership with schools from worldwide or organisations from developed countries that can help the Algerian setting. Although the policy makers should also focus on promoting social and cultural acceptance of ICT since the views of the users can affect the attitude towards ICT.

Moreover, we cannot neglect the key role of teachers as changing agents and ICT integrators. However, the Algerian teachers are facing a great amount of pressure, which is coming from many sources, and somehow this can make their job a bit difficult given the current circumstances. Hence, there should be more encouragement for teachers in terms of providing the right conditions and tools so Algeria can stop the brain drain towards western countries. In addition, the government's job is not limited only to provide the tools but also to nurture a culture of approval between the non-users of technology.

Having said this, the use of ICT in EFL classrooms offers significant advantage in language teaching learning; teachers can be more at ease and less anxious. Yet, the use of ICT is not the answer to all foreign language problems. What more is certain is that, when this tool is used considerately, it can increase the quality of education, and therefore backing up the teacher to make his job less stressful and more efficient in order to achieve their objectives.

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Appendices

Appendix A

Dear Respondents,

The purpose of this study is to investigate "**Teachers' Attitude and Anxiety When ICT is Used in Teaching English."**

Please read each statement and tick the relevant box, which suits your level of agreement/disagreement.

Thank you for your time and collaboration in completing this questionnaire.

1. **What is your gender?** Male ☐ Female ☐
2. **What is your age?** 20-29 ☐ 30-39 ☐ 40-49 ☐ 50-59 ☐ 60 and over ☐
3. **How many years you have been teaching?**
   1-5 ☐ 6-10 ☐ 11-15 ☐ 16-20 ☐ over 20 ☐
4. **Have you ever attended any in-service training on using computers?** No ☐ Yes ☐
5. **What kind of computer training you received?**
   - I have not received any training. ☐
   - I taught myself about computers. ☐
   Other (please specify) _____

	Statements	Strongly agree	agree	undecided	Disagree	Strongly disagree
Computer competence level and access	1. Install new software on a computer.					
	2. Operate a word processing program (e.g., Word).					
	3. Operate a presentation program (e.g., PowerPoint).					
	4. Use computers for grade keeping.					
	5. Use computer at home.					
	6. Use computers at school.					
Attitude to ICT	7. Computers do not scare me at all.					
	8. Computers make me feel uncomfortable.					
	9. I am glad there are more computers these days.					
	10. I dislike using computers in teaching.					
	11. Computers save time and effort.					
	12. I do not think I would ever need a computer in my classroom.					
	13. Computers do more harm than good.					
	14. I would rather do things by hand than with a computer.					

	15. I would avoid computers as much as possible.					
	16. I would like to learn more about computers.					
	Statements	Strongly agree	agree	Undecided	disagree	Strongly disagree
View about ICT in education and culture	17. Computers will improve education.					
	18. Computer technology cannot improve the quality of students' learning.					
	19. Computers are not useful for language learning.					
	20. Class time is too limited for computer use.					
	21. Computer use is appropriate for many language-learning activities.					
	22. Teaching with computers offers real advantages over traditional methods of instruction.					
	23. There are other social issues that need to be addressed before implementing computers in education.					
	24. Computers dehumanize society.					
	25. Computers encourage unethical practices.					
Computer Anxiety level	26. I generally think of computers as friendly tools.					
	27.teaching using computers makes me comfortable					
	28. Writing a lesson plan using computers makes me comfortable.					
	29. working on the keyboard makes me uncomfortable					
	30. when keyboard stops working , it makes me uncomfortable					
	31. when a message appears on the screen instantly while presenting a lecture makes me uncomfortable					
	32. Discussing computers with a group of people who know a lot about using them makes me uncomfortable					
	33. I feel uncomfortable when my presentation does not work.					
	34. The more opportunities I have to present, the less anxious I feel					
	35. After the training provided, I felt less anxious when I use ICT in teaching					

Appendix B (classification according to age)

	age	20-29					30-39					40-49					50-59					Over 60				
	Statements	S.A	A	U	D	S. D	S. A	A	U	D	S. D	S. A	A	U	D	S. D	S. A	A	U	D	S. D	S. A	A	U	D	S. D
Computer competence level and access	1. Install new software on a computer.	4					5	4				1	7	1			1	3	2			2	2			
	2. Operate a word processing program (e.g., Word).	4					5	4				1	6	2			1	4		1		2	1	1		
	3. Operate a presentation program (e.g., PowerPoint).	4					5	4				1	6	2			1	4		1		2	1	1		
	4. Use computers for grade keeping.	4					5	4				4	4	1			1	5				1		2	1	
	5. Use computer at home.	4					9					8		1			4		1	1		4				
	6. Use computers at school. (computer lab)	3	1				7	1		1		7		1		1	3	1	1		1	3				1

Appendix B (classification according to age)

	age	20-29					30-39					40-49					50-59					Over 60				
	Statements	S.A	A	U	D	S. D	S. A	A	U	D	S. D	S. A	A	U	D	S. D	S. A	A	U	D	S. D	S. A	A	U	D	S. D
Attitude to ICT	7. Computers do not scare me at all.	4					9					8		1			5		1			3		1		
	8. Computers make me feel uncomfortable.					4					9	1				8	1				5	1				3
	9. I am glad there are more computers these days.	4					9					8			1		5			1		3			1	
	10. I dislike using computers in teaching.					4		1	2		6	1	1	2		5	1		2		3					4
	11. Computers save time and effort.	4					8			1		8			1		5			1		4				
	12. I do not think I would ever need a computer in my classroom.				1	3				1	8			1	1	7			1		5				1	3
	13. Computers do more harm than good.			1		3		1			8					9			1		5					4
	14. I would rather do things by hand than with a computer.					4	1				8	1				8	1				5					4
	15. I would avoid computers as much as possible.					4					9			1		8	1				5			1		3
	16. I would like to learn more about computers.	4					8	1				8			1		5	1				4				

Appendix B (classification according to age)

	age	20-29					30-39					40-49					50-59					Over 60				
	Statements	S.A	A	U	D	S. D	S. A	A	U	D	S. D	S. A	A	U	D	S. D	S. A	A	U	D	S. D	S. A	A	U	D	S. D
View about ICT in education and culture	17. Computers will improve education.	4					8			1		7		1	1		6					4				
	18. Computer technology cannot improve the quality of students' learning.					4				1	8				2	7		1	1		4		1			3
	19. Computers are not useful for language learning.					4				2	7				1	8		1	1		4			1		3
	20. Class time is too limited for computer use.		4				1	6	2				7	2				4	1		1		2	1		1
	21. Computer use is appropriate for many language-learning activities.	4					7	1	1			7		1		1	4			1	1	3			1	
	22. Teaching with computers offers real advantages over traditional methods of instruction.	4					7	2				6	1	1		1	5		1			4				
	23. There are other social issues that need to be addressed before implementing computers in education.	4					7		2			5	2			2	3	2			1		2	2		
	24. Computers dehumanize society.				2	2	1		1		7	1		1	1	6	1			1	4					4
	25. Computers encourage unethical practices.	1				3	1				8	1			1	7	1			2	3			1	2	1

Appendix B (classification according to age)

	Age	20-29					30-39					40-49					50-59					Over 60				
	Statements	S.A	A	U	D	S. D	S. A	A	U	D	S. D	S. A	A	U	D	S. D	S. A	A	U	D	S. D	S. A	A	U	D	S. D
Computer Anxiety level	26. I generally think of computers as friendly tools.	4					9					8		1			5		1			3		1		
	27.teaching using computers makes me comfortable	4					9					8		1			4		1		1	4				
	28. Writing a lesson plan using computers makes me comfortable.	4					9					8		1			4		1		1	4				
	29. working on the keyboard makes me uncomfortable					4					9			1		8	1		1		4					4
	30. when keyboard stops working , it makes me uncomfortable		1	1		2		1	1	4	3		2		4	3		1	1	1	3		1	1	1	1
	31. when a message appears on the screen instantly while presenting a lecture makes me uncomfortable			1		3	3	3			3	3	3	1		2	2	2	1		1	1	1			2
	32. Discussing computers with a group of people who know a lot about using them makes me uncomfortable				2	2			2	4	3		1	1	2	5		2		2	2			2		2
	33. I feel uncomfortable when my presentation does not work.		1		1	2		2	2		5		2	2	1	4		2	3	1			1	2	1	
	34. The more opportunities I have to present, the less anxious I feel	4					6	3				5	3	1			5		1			3		1		
	35. After the training provided, I felt less anxious when I use ICT in teaching	3		1			5		4			2		7			2		4			1		3		

Appendix B (classification according to age: percentages)

	age	20-29					30-39					40-49					50-59					Over 60				
	Statements	S.A	A	U	D	S. D	S.A	A	U	D	S. D	S.A	A	U	D	S.D	S.A	A	U	D	S. D	S.A	A	U	D	S. D
Computer competence level and access	1. Install new software on a computer.	100 ,00					55,5 6	44, 44				11, 11	77, 78	11, 11			16, 67	50, 00	33, 33			50, 00	50, 00			
	2. Operate a word processing program (e.g., Word).	100 ,00					55,5 6	44, 44				11, 11	66, 67	22, 22			16, 67	66, 67		16, 67		50, 00	25	25		
	3. Operate a presentation program (e.g., PowerPoint).	100 ,00					55,5 6	44, 44				11, 11	66, 67	22, 22			16, 67	66, 67		16, 67		50, 00	25	25		
	4. Use computers for grade keeping.	100 ,00					55,5 6	44, 44				44, 44	44, 44	11, 11			16, 67	83, 33				25, 00		50	25	
	5. Use computer at home.	100 ,00					100					88, 89		11, 11			66, 67		16, 67	16, 67		100 ,00				
	6. Use computers at school. (computer lab)	75, 00	25,0 0				77,7 8	11, 11		11, 11		77, 78		11, 11		11, 11	50, 00	16, 67	16, 67	0,0 0	16, 67	75, 00				25

Appendix B (classification according to age: percentages)

	age	20-29					30-39					40-49					50-59					Over 60				
	Statements	S.A	A	U	D	S.D	S.A	A	U	D	S.D	S.A	A	U	D	S.D	S.A	A	U	D	S.D	S.A	A	U	D	S.D
Attitude to ICT	7. Computers do not scare me at all.	100,00			0,00	0,00	100,00	0,00	0,00	0,00	0,00	88,89	0,00	11,11	0,00	0,00	83,33	0,00	16,67	0,00	0,00	75,00	0,00	25,00	0,00	0,00
	8. Computers make me feel uncomfortable.	0,00			0,00	100,00	0,00	0,00	0,00	0,00	100,00	11,11	0,00	0,00	0,00	88,89	16,67	0,00	0,00	0,00	83,33	25,00	0,00	0,00	0,00	75,00
	9. I am glad there are more computers these days.	100,00			0,00	0,00	100,00	0,00	0,00	0,00	0,00	88,89	0,00	0,00	11,11	0,00	83,33	0,00	0,00	16,67	0,00	75,00	0,00	0,00	25,00	0,00
	10. I dislike using computers in teaching.	0,00			0,00	100,00	0,00	11,11	22,22	0,00	66,67	11,11	11,11	22,22	0,00	55,56	16,67	0,00	33,33	0,00	50,00	0,00	0,00	0,00	0,00	100,00
	11. Computers save time and effort.	100,00			0,00	0,00	88,89	0,00	0,00	11,11	0,00	88,89	0,00	0,00	11,11	0,00	83,33	0,00	0,00	16,67	0,00	100,00	0,00	0,00	0,00	0,00
	12. I do not think I would ever need a computer in my classroom.	0,00			25,00	75,00	0,00	0,00	0,00	11,11	88,89	0,00	0,00	11,11	11,11	77,78	0,00	0,00	16,67	0,00	83,33	0,00	0,00	0,00	25,00	75,00
	13. Computers do more harm than good.	0,00		25,00	0,00	75,00	0,00	11,11	0,00	0,00	88,89	0,00	0,00	0,00	0,00	100,00	0,00	0,00	16,67	0,00	83,33	0,00	0,00	0,00	0,00	100,00

Appendix B (classification according to age: percentages)

	14. I would rather do things by hand than with a computer.	0,00			0,00	100,00	11,11	0,00	0,00	0,00	88,89	11,11	0,00	0,00	0,00	88,89	16,67	0,00	0,00	0,00	83,33	0,00	0,00	0,00	0,00	100,00
	15. I would avoid computers as much as possible.	0,00			0,00	100,00	0,00	0,00	0,00	0,00	100,00	0,00	0,00	11,11	0,00	88,89	16,67	0,00	0,00	0,00	83,33	0,00	0,00	25,00	0,00	75,00
	16. I would like to learn more about computers.	100,00			0,00	0,00	88,89	11,11	0,00	0,00	0,00	88,89	0,00	0,00	11,11	0,00	83,33	16,67	0,00	0,00	0,00	100,00	0,00	0,00	0,00	0,00

	age	20-29					30-39					40-49					50-59					Over 60				
	Statements	S.A	A	U	D	S.D	S.A	A	U	D	S.D	S.A	A	U	D	S.D	S.A	A	U	D	S.D	S.A	A	U	D	S.D
View about ICT in education and culture	17. Computers will improve education.	100,00	0,00	0,00	0,00	0,00	88,89	0,00	0,00	11,11	0,00	77,78	0,00	11,11	11,11	0,00	100,00	0,00	0,00	0,00	0,00	100,00	0,00	0,00	0,00	0,00
	18. Computer technology cannot improve the quality of students' learning.	0,00	0,00	0,00	0,00	100,00	0,00	0,00	0,00	11,11	88,89	0,00	0,00	0,00	22,22	77,78	0,00	16,67	16,67	0,00	66,67	0,00	25,00	0,00	0,00	75,00
	19. Computers are not useful for language learning.	0,00	0,00	0,00	0,00	100,00	0,00	0,00	0,00	22,22	77,78	0,00	0,00	0,00	11,11	88,89	0,00	16,67	16,67	0,00	66,67	0,00	0,00	25,00	0,00	75,00

Appendix B (classification according to age: percentages)

	20. Class time is too limited for computer use.	0,00	100,00	0,00	0,00	0,00	11,11	66,67	22,22	0,00	0,00	0,00	77,78	22,22	0,00	0,00	0,00	66,67	16,67	0,00	16,67	0,00	50,00	25,00	0,00	25,00
	21. Computer use is appropriate for many language-learning activities.	100,00	0,00	0,00	0,00	0,00	77,78	11,11	11,11	0,00	0,00	77,78	0,00	11,11	0,00	11,11	66,67	0,00	0,00	16,67	16,67	75,00	0,00	0,00	25,00	0,00
	22. Teaching with computers offers real advantages over traditional methods of instruction.	100,00	0,00	0,00	0,00	0,00	77,78	22,22	0,00	0,00	0,00	66,67	11,11	11,11	0,00	11,11	83,33	0,00	16,67	0,00	0,00	100,00	0,00	0,00	0,00	0,00
	23. There are other social issues that need to be addressed before implementing computers in education.	100,00	0,00	0,00	0,00	0,00	77,78	0,00	22,22	0,00	0,00	55,56	22,22	0,00	0,00	22,22	50,00	33,33	0,00	0,00	16,67	0,00	50,00	50,00	0,00	0,00
	24. Computers dehumanize society.	0,00	0,00	0,00	50,00	50,00	11,11	0,00	11,11	0,00	77,78	11,11	0,00	11,11	11,11	66,67	16,67	0,00	0,00	16,67	66,67	0,00	0,00	0,00	0,00	100,00
	25. Computers encourage unethical practices.	25,00	0,00	0,00	0,00	75,00	11,11	0,00	0,00	0,00	88,89	11,11	0,00	0,00	11,11	77,78	16,67	0,00	0,00	33,33	50,00	0,00	0,00	25,00	50,00	25,00

Appendix B (classification according to age: percentages)

	Age	20-29					30-39					40-49					50-59					Over 60				
	Statements	S.A	A	U	D	S.D	S.A	A	U	D	S.D	S.A	A	U	D	S.D	S.A	A	U	D	S.D	S.A	A	U	D	S.D
Computer Anxiety level	26. I generally think of computers as friendly tools.	100,00	0,00	0,00	0,00	0,00	100,00	0,00	0,00	0,00	0,00	88,89	0,00	11,11	0,00	0,00	83,33	0,00	16,67	0,00	0,00	75,00	0,00	25,00	0,00	0,00
	27.teaching using computers makes me comfortable	100,00	0,00	0,00	0,00	0,00	100,00	0,00	0,00	0,00	0,00	88,89	0,00	11,11	0,00	0,00	66,67	0,00	16,67	0,00	16,67	100,00	0,00	0,00	0,00	0,00
	28. Writing a lesson plan using computers makes me comfortable.	100,00	0,00	0,00	0,00	0,00	100,00	0,00	0,00	0,00	0,00	88,89	0,00	11,11	0,00	0,00	66,67	0,00	16,67	0,00	16,67	100,00	0,00	0,00	0,00	0,00
	29. working on the keyboard makes me uncomfortable	0,00	0,00	0,00	0,00	100,00	0,00	0,00	0,00	0,00	100,00	0,00	0,00	11,11	0,00	88,89	16,67	0,00	16,67	0,00	66,67	0,00	0,00	0,00	0,00	100,00
	30. when keyboard stops working , it makes me uncomfortable	0,00	25,00	25,00	0,00	50,00	0,00	11,11	11,11	44,44	33,33	0,00	22,22	0,00	44,44	33,33	0,00	16,67	16,67	16,67	50,00	0,00	25,00	25,00	25,00	25,00
	31. when a message appears on the screen instantly while presenting a lecture makes me uncomfortable	0,00	0,00	25,00	0,00	75,00	33,33	33,33	0,00	0,00	33,33	33,33	33,33	11,11	0,00	22,22	33,33	33,33	16,67	0,00	16,67	25,00	25,00	0,00	0,00	50,00
	32. Discussing computers with a group of people who know a lot about using them makes me uncomfortable	0,00	0,00	0,00	50,00	50,00	0,00	0,00	22,22	44,44	33,33	0,00	11,11	11,11	22,22	55,56	0,00	33,33	0,00	33,33	33,33	0,00	0,00	50,00	0,00	50,00

Appendix B (classification according to age: percentages)

	33. I feel uncomfortable when my presentation does not work.	0,00	25,00	0,00	25,00	50,00	0,00	22,22	22,22	0,00	55,56	0,00	22,22	22,22	11,11	44,44	0,00	33,33	50,00	16,67	0,00	0,00	25,00	50,00	25,00	0,00
	34. The more opportunities I have to present, the less anxious I feel	100,00	0,00	0,00	0,00	0,00	66,67	33,33	0,00	0,00	0,00	55,56	33,33	11,11	0,00	0,00	83,33	0,00	16,67	0,00	0,00	75,00	0,00	25,00	0,00	0,00
	35. After the training provided, I felt less anxious when I use ICT in teaching	75,00	0,00	25,00	0,00	0,00	55,56	0,00	44,44	0,00	0,00	22,22	0,00	77,78	0,00	0,00	33,33	0,00	66,67	0,00	0,00	25,00	0,00	75,00	0,00	0,00

Appendix C (classification according to gender)

	Statements	Strongly agree		agree		undecided		Disagree		Strongly disagree	
		male	Female	male	Female	Male	Female	Male	Female	Male	Female
Computer competence level and access	1. Install new software on a computer.	9	4	4	12	1	2				
	2. Operate a word processing program (e.g., Word).	7	6	6	9	1	2		1		
	3. Operate a presentation program (e.g., PowerPoint).	7	6	6	9	1	2		1		
	4. Use computers for grade keeping.	6	9	6	7	1	2	1			
	5. Use computer at home.	13	16			1	1		1		
	6. Use computers at school.	11	11			2	4		2	1	1

Appendix C (classification according to gender)

	Statements	Strongly agree		agree		undecided		Disagree		Strongly disagree	
		male	Female	male	Female	Male	Female	Male	Female	Male	Female
Attitude to ICT	7. Computers do not scare me at all.	13	16			1	2				
	8. Computers make me feel uncomfortable.	1	2							13	16
	9. I am glad there are more computers these days.	13	16					1	2		
	10. I dislike using computers in teaching.	1	1		2	2	4			11	11
	11. Computers save time and effort.	13	16					1	2		
	12. I do not think I would ever need a computer in my classroom.					1	1	3	1	10	16
	13. Computers do more harm than good.			1		1	1			12	17
	14. I would rather do things by hand than with a computer.	1	2							13	16
	15. I would avoid computers as much as possible.		1			1	1			13	16
	16. I would like to learn more about computers.	13	16		1		1	1			

Appendix C (classification according to gender)

	Statements	Strongly agree		agree		Undecided		disagree		Strongly disagree	
View about ICT in education and culture	17. Computers will improve education.	12	17			1		1	1		
	18. Computer technology cannot improve the quality of students' learning.			1	1		1	1	2	12	14
	19. Computers are not useful for language learning.				1	1	1	1	2	12	14
	20. Class time is too limited for computer use.	1		10	13	3	3				2
	21. Computer use is appropriate for many language-learning activities.	10	15	1		1	1	1	1	1	1
	22. Teaching with computers offers real advantages over traditional methods of instruction.	12	14	1	2	1	1				1
	23. There are other social issues that need to be addressed before implementing computers in education.	8	11	2	4	2	2			2	1
	24. Computers dehumanize society.	1	2			1	1	3	1	9	14
	25. Computers encourage unethical practices.	1	3				1	2	3	11	11

Appendix C (classification according to gender)

	Statements	Strongly agree		agree		undecided		Disagree		Strongly disagree	
		male	Female	male	Female	Male	Female	Male	Female	Male	Female
Computer Anxiety level	26. I generally think of computers as friendly tools.	12	17			2	1				
	27.teaching using computers makes me comfortable	13	16				2			1	
	28. Writing a lesson plan using computers makes me comfortable.	11	12	1	2	1	1	1	1		2
	29. working on the keyboard makes me uncomfortable		1			1	1			12	17
	30. when keyboard stops working , it makes me uncomfortable			2	4	3	1	4	6	5	7
	31. when a message appears on the screen instantly while presenting a lecture makes me uncomfortable	5	4	4	5	2	1			3	8
	32. Discussing computers with a group of people who know a lot about using them makes me uncomfortable			1	2	3	2	3	7	7	7
	33. I feel uncomfortable when my presentation does not work.			5	3	4	5	2	2	3	8
	34. The more opportunities I have to present , the less anxious I feel	12	11	2	4		3				
	35. After the training provided, I felt less anxious when I use ICT in teaching	6	7			8	11				

Appendix C (classification according to gender : percentages)

	Statements	Strongly agree		agree		undecided		Disagree		Strongly disagree	
		male	Female	male	Female	Male	Female	Male	Female	Male	Female
Computer competence level and access	1. Install new software on a computer.	64,29	22,22	28,57	66,67	7,14	11,11	0,00	0,00	0,00	0,00
	2. Operate a word processing program (e.g., Word).	50,00	33,33	42,86	50,00	7,14	11,11	0,00	5,56	0,00	0,00
	3. Operate a presentation program (e.g., PowerPoint).	50,00	33,33	42,86	50,00	7,14	11,11	0,00	5,56	0,00	0,00
	4. Use computers for grade keeping.	42,86	50,00	42,86	38,89	7,14	11,11	7,14	0,00	0,00	0,00
	5. Use computer at home.	92,86	88,89	0,00	0,00	7,14	5,56	0,00	5,56	0,00	0,00
	6. Use computers at school.	78,57	61,11	0,00	0,00	14,29	22,22	0,00	11,11	7,14	5,56

Appendix C (classification according to gender : percentages)

	Statements	Strongly agree		agree		undecided		Disagree		Strongly disagree	
		male	Female	male	Female	Male	Female	Male	Female	Male	Female
Attitude to ICT	7. Computers do not scare me at all.	92,86	88,89	0,00	0,00	7,14	11,11	0,00	0,00	0,00	0,00
	8. Computers make me feel uncomfortable.	7,14	11,11	0,00	0,00	0,00	0,00	0,00	0,00	92,86	88,89
	9. I am glad there are more computers these days.	92,86	88,89	0,00	0,00	0,00	0,00	7,14	11,11	0,00	0,00
	10. I dislike using computers in teaching.	7,14	5,56	0,00	11,11	14,29	22,22	0,00	0,00	78,57	61,11
	11. Computers save time and effort.	92,86	88,89	0,00	0,00	0,00	0,00	7,14	11,11	0,00	0,00
	12. I do not think I would ever need a computer in my classroom.	0,00	0,00	0,00	0,00	7,14	5,56	21,43	5,56	71,43	88,89
	13. Computers do more harm than good.	0,00	0,00	7,14	0,00	7,14	5,56	0,00	0,00	85,71	94,44
	14. I would rather do things by hand than with a computer.	7,14	11,11	0,00	0,00	0,00	0,00	0,00	0,00	92,86	88,89
	15. I would avoid computers as much as possible.	0,00	5,56	0,00	0,00	7,14	5,56	0,00	0,00	92,86	88,89
	16. I would like to learn more about computers.	92,86	88,89	0,00	5,56	0,00	5,56	7,14	0,00	0,00	0,00

Appendix C (classification according to gender : percentages)

	Statements	Strongly agree		agree		Undecided		disagree		Strongly disagree	
View about ICT in education and culture	17. Computers will improve education.	85,71	94,44	0,00	0,00	7,14	0,00	7,14	5,56	0,00	0,00
	18. Computer technology cannot improve the quality of students' learning.	0,00	0,00	7,14	5,56	0,00	5,56	7,14	11,11	85,71	77,78
	19. Computers are not useful for language learning.	0,00	0,00	0,00	5,56	7,14	5,56	7,14	11,11	85,71	77,78
	20. Class time is too limited for computer use.	7,14	0,00	71,43	72,22	21,43	16,67	0,00	0,00	0,00	11,11
	21. Computer use is appropriate for many language-learning activities.	71,43	83,33	7,14	0,00	7,14	5,56	7,14	5,56	7,14	5,56
	22. Teaching with computers offers real advantages over traditional methods of instruction.	85,71	77,78	7,14	11,11	7,14	5,56	0,00	0,00	0,00	5,56
	23. There are other social issues that need to be addressed before implementing computers in education.	57,14	61,11	14,29	22,22	14,29	11,11	0,00	0,00	14,29	5,56
	24. Computers dehumanize society.	7,14	11,11	0,00	0,00	7,14	5,56	21,43	5,56	64,29	77,78
	25. Computers encourage unethical practices.	7,14	16,67	0,00	0,00	0,00	5,56	14,29	16,67	78,57	61,11

Appendix C (classification according to gender : percentages)

	Statements	Strongly agree		agree		undecided		Disagree		Strongly disagree	
		male	Female	male	Female	Male	Female	Male	Female	Male	Female
Computer Anxiety level	26. I generally think of computers as friendly tools.	85,71	94,44	0,00	0,00	14,29	5,56	0,00	0,00	0,00	0,00
	27.teaching using computers makes me comfortable	92,86	88,89	0,00	0,00	0,00	11,11	0,00	0,00	7,14	0,00
	28. Writing a lesson plan using computers makes me comfortable.	78,57	66,67	7,14	11,11	7,14	5,56	7,14	5,56	0,00	11,11
	29. working on the keyboard makes me uncomfortable	0,00	5,56	0,00	0,00	7,14	5,56	0,00	0,00	85,71	94,44
	30. when keyboard stops working , it makes me uncomfortable	0,00	0,00	14,29	22,22	21,43	5,56	28,57	33,33	35,71	38,89
	31. when a message appears on the screen instantly while presenting a lecture makes me uncomfortable	35,71	22,22	28,57	27,78	14,29	5,56	0,00	0,00	21,43	44,44
	32. Discussing computers with a group of people who know a lot about using them makes me uncomfortable	0,00	0,00	7,14	11,11	21,43	11,11	21,43	38,89	50,00	38,89
	33. I feel uncomfortable when my presentation does not work.	0,00	0,00	35,71	16,67	28,57	27,78	14,29	11,11	21,43	44,44
	34. The more opportunities I have to present , the less anxious I feel	85,71	61,11	14,29	22,22	0,00	16,67	0,00	0,00	0,00	0,00
	35. After the training provided, I felt less anxious when I use ICT in teaching	42,86	38,89	0,00	0,00	57,14	61,11	0,00	0,00	0,00	0,00

Appendix D (classification according to computer training)

	Statements	Strongly agree			agree			undecided			Disagree			Strongly disagree		
		S-T	T	O	S-T	T	O	S-T	T	O	S-T	T	O	S-T	T	O
Computer competence level and access	1. Install new software on a computer.		13		16					3						
	2. Operate a word processing program (e.g., Word).		13		15					3	1					
	3. Operate a presentation program (e.g., PowerPoint).		13		15					3			1			
	4. Use computers for grade keeping.	3	12		12	1		1		2			1			
	5. Use computer at home.	16	13							2			1			
	6. Use computers at school. (computer lab)	10	13		3					2			1	3		
Attitude to ICT	7. Computers do not scare me at all.	16	13							3						
	8. Computers make me feel uncomfortable.			3										16	13	
	9. I am glad there are more computers these days.	16	13										3			
	10. I dislike using computers in teaching.			2	2			3	2	1				11	11	
	11. Computers save time and effort.	16	13										3			
	12. I do not think I would ever need a computer in my classroom.									2	3		1	13	13	
	13. Computers do more harm than good.						1			2				16	13	

Appendix D (classification according to computer training)

	14. I would rather do things by hand than with a computer.			3										16	13		
	15. I would avoid computers as much as possible.			1						2				16	13		
	16. I would like to learn more about computers.	16	13				2						1				
	Statements	Strongly agree			agree			Undecided			disagree			Strongly disagree			
		S-T	T	O	S-T	t	O	S-T	T	O	S-T	T	O	S-T	T	O	
View about ICT in education and culture	17. Computers will improve education.	16	13							1			2				
	18. Computer technology cannot improve the quality of students' learning.						2			1	3			13	13		
	19. Computers are not useful for language learning.						1			2	3			13	13		
	20. Class time is too limited for computer use.	1			10	13		5		1						2	
	21. Computer use is appropriate for many language-learning activities.	12	13		1			2			1		1			2	
	22. Teaching with computers offers real advantages over traditional methods of instruction.	13	13		3					2						1	
	23. There are other social issues that need to be addressed before implementing computers in education.	9	10		3	3		4								3	
	24. Computers dehumanize society.			3				2			4			10	13		

Appendix D (classification according to computer training)

	25. Computers encourage unethical practices.	1		3				1			5			9	13	
Computer Anxiety level	26. I generally think of computers as friendly tools.	16	13							3						
	27.teaching using computers makes me comfortable	16	13							2						1
	28. Writing a lesson plan using computers makes me comfortable.	16	13							2						1
	29. working on the keyboard makes me uncomfortable			1						2				16	13	
	30. when keyboard stops working , it makes me uncomfortable				5	1		1		3	10				12	
	31. when a message appears on the screen instantly while presenting a lecture makes me uncomfortable	9			7	2				3					11	
	32. Discussing computers with a group of people who know a lot about using them makes me uncomfortable				3			2		3	10			1	13	
	33. I feel uncomfortable when my presentation does not work.				8			6		3		2		2	11	
	34. The more opportunities I have to present, the less anxious I feel	10	13		6					3						
	35. After the training provided, I felt less anxious when I use ICT in teaching		13					16		3						

Appendix D (classification according to computer training: percentages)

	Statements	Strongly agree			agree			undecided			Disagree			Strongly disagree		
		S-T	T	O	S-T	T	O	S-T	T	O	S-T	T	O	S-T	T	O
Computer competence level and access	1. Install new software on a computer.	0,00	100,00	0,00	100,00	0,00	0,00	0,00	0,00	100,00	0,00	0,00	0,00	0,00	0,00	0,00
	2. Operate a word processing program (e.g., Word).	0,00	100,00	0,00	93,75	0,00	0,00	0,00	0,00	100,00	6,25	0,00	0,00	0,00	0,00	0,00
	3. Operate a presentation program (e.g., PowerPoint).	0,00	100,00	0,00	93,75	0,00	0,00	0,00	0,00	100,00	6,25	0,00	0,00	0,00	0,00	0,00
	4. Use computers for grade keeping.	18,75	92,31	0,00	75,00	7,69	0,00	6,25	0,00	66,67	0,00	0,00	33,33	0,00	0,00	0,00
	5. Use computer at home.	100,00	100,00	0,00	0,00	0,00	0,00	0,00	0,00	66,67	0,00	0,00	33,33	0,00	0,00	0,00
	6. Use computers at school. (computer lab)	62,50	100,00	0,00	18,75	0,00	0,00	0,00	0,00	66,67	0,00	0,00	33,33	18,75	0,00	0,00
Attitude to ICT	7. Computers do not scare me at all.	100,00	100,00	0,00	0,00	0,00	0,00	0,00	0,00	100,00	0,00	0,00	0,00	0,00	0,00	0,00
	8. Computers make me feel uncomfortable.	0,00	0,00	100,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	100,00	100,00	0,00
	9. I am glad there are more computers these days.	100,00	100,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	100,00	0,00	0,00	0,00
	10. I dislike using computers in teaching.	0,00	0,00	66,67	12,50	0,00	0,00	18,75	15,38	33,33	0,00	0,00	0,00	68,75	84,62	0,00

Appendix D (classification according to computer training: percentages)

	11. Computers save time and effort.	100,00	100,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	100,00	0,00	0,00	0,00
	12. I do not think I would ever need a computer in my classroom.	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	66,67	18,75	0,00	33,33	81,25	100,00	0,00
	13. Computers do more harm than good.	0,00	0,00	0,00	0,00	0,00	33,33	0,00	0,00	66,67	0,00	0,00	0,00	100,00	100,00	0,00
	14. I would rather do things by hand than with a computer.	0,00	0,00	100,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	100,00	100,00	0,00
	15. I would avoid computers as much as possible.	0,00	0,00	33,33	0,00	0,00	0,00	0,00	0,00	66,67	0,00	0,00	0,00	100,00	100,00	0,00
	16. I would like to learn more about computers.	100,00	100,00	0,00	0,00	0,00	66,67	0,00	0,00	0,00	0,00	0,00	33,33	0,00	0,00	0,00
	Statements	Strongly agree			agree			Undecided			disagree			Strongly disagree		
		S-T	T	O	S-T	t	O	S-T	T	O	S-T	T	O	S-T	T	O
View about ICT in education and culture	17. Computers will improve education.	100,00	100,00	0,00	0,00	0,00	0,00	0,00	0,00	33,33	0,00	0,00	66,67	0,00	0,00	0,00
	18. Computer technology cannot improve the quality of students' learning.	0,00	0,00	0,00	0,00	0,00	66,67	0,00	0,00	33,33	18,75	0,00	0,00	81,25	100,00	0,00
	19. Computers are not useful for language learning.	0,00	0,00	0,00	0,00	0,00	33,33	0,00	0,00	66,67	18,75	0,00	0,00	81,25	100,00	0,00
	20. Class time is too limited for computer use.	6,25	0,00	0,00	62,50	100,00	0,00	31,25	0,00	33,33	0,00	0,00	0,00	0,00	0,00	66,67

Appendix D (classification according to computer training: percentages)

	21. Computer use is appropriate for many language-learning activities.	75,00	100,00	0,00	6,25	0,00	0,00	12,50	0,00	0,00	6,25	0,00	33,33	0,00	0,00	66,67
	22. Teaching with computers offers real advantages over traditional methods of instruction.	81,25	100,00	0,00	18,75	0,00	0,00	0,00	0,00	66,67	0,00	0,00	0,00	0,00	0,00	33,33
	23. There are other social issues that need to be addressed before implementing computers in education.	56,25	76,92	0,00	18,75	23,08	0,00	25,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	100,00
	24. Computers dehumanize society.	0,00	0,00	100,00	0,00	0,00	0,00	12,50	0,00	0,00	25,00	0,00	0,00	62,50	100,00	0,00
	25. Computers encourage unethical practices.	6,25	0,00	100,00	0,00	0,00	0,00	6,25	0,00	0,00	31,25	0,00	0,00	56,25	100,00	0,00
Computer Anxiety level	26. I generally think of computers as friendly tools.	100,00	100,00	0,00	0,00	0,00	0,00	0,00	0,00	100,00	0,00	0,00	0,00	0,00	0,00	0,00
	27.teaching using computers makes me comfortable	100,00	100,00	0,00	0,00	0,00	0,00	0,00	0,00	66,67	0,00	0,00	0,00	0,00	0,00	33,33
	28. Writing a lesson plan using computers makes me comfortable.	100,00	100,00	0,00	0,00	0,00	0,00	0,00	0,00	66,67	0,00	0,00	0,00	0,00	0,00	33,33
	29. working on the keyboard makes me uncomfortable	0,00	0,00	33,33	0,00	0,00	0,00	0,00	0,00	66,67	0,00	0,00	0,00	100,00	100,00	0,00
	30. when keyboard stops working , it makes me uncomfortable	0,00	0,00	0,00	31,25	7,69	0,00	6,25	0,00	100,00	62,50	0,00	0,00	0,00	92,31	0,00

Appendix D (classification according to computer training: percentages)

	31. when a message appears on the screen instantly while presenting a lecture makes me uncomfortable	56,25	0,00	0,00	43,75	15,38	0,00	0,00	0,00	100,00	0,00	0,00	0,00	0,00	84,62	0,00
	32. Discussing computers with a group of people who know a lot about using them makes me uncomfortable	0,00	0,00	0,00	18,75	0,00	0,00	12,50	0,00	100,00	62,50	0,00	0,00	6,25	100,00	0,00
	33. I feel uncomfortable when my presentation does not work.	0,00	0,00	0,00	50,00	0,00	0,00	37,50	0,00	100,00	0,00	15,38	0,00	12,50	84,62	0,00
	34. The more opportunities I have to present, the less anxious I feel	62,50	100,00	0,00	37,50	0,00	0,00	0,00	0,00	100,00	0,00	0,00	0,00	0,00	0,00	0,00
	35. After the training provided, I felt less anxious when I use ICT in teaching	0,00	100,00	0,00	0,00	0,00	0,00	100,00	0,00	100,00	0,00	0,00	0,00	0,00	0,00	0,00

Appendix E (classification according to teaching experience)

	years of teaching experience	1-5					6-10					11-15					16-20					Over 20				
	Statements	S.A	A	U	D	S. D	S. A	A	U	D	S. D	S. A	A	U	D	S. D	S. A	A	U	D	S. D	S. A	A	U	D	S. D
Computer competence level and access	1. Install new software on a computer.	4	3				2	2				3	1	1			2	5	1			2	5	1		
	2. Operate a word processing program (e.g., Word).	4	3				3	1				2	3					5	2	1		4	3	1		
	3. Operate a presentation program (e.g., PowerPoint).	4	3				3	1				2	3				2	5		1		2	3	3		
	4. Use computers for grade keeping.	3	4				3	1				2	2	1			3	4	1			4	2	1	1	
	5. Use computer at home.	7					4					5					6		1	1		7		1		
	6. Use computers at school.	6	1				4					4		1			4	1		1	2	5	1	1		1

Appendix E (classification according to teaching experience)

	years of teaching experience	1-5					6-10					11-15					16-20					Over 20				
	Statements	S.A	A	U	D	S. D	S. A	A	U	D	S. D	S. A	A	U	D	S. D	S. A	A	U	D	S. D	S. A	A	U	D	S. D
Attitude to ICT	7. Computers do not scare me at all.	7					4					5					6		2			7		1		
	8. Computers make me feel uncomfortable.					7					4	1				4	1				7	1				7
	9. I am glad there are more computers these days.	7					4					4			1		7			1		7			1	
	10. I dislike using computers in teaching.					7		1	2		1	1	1	2		1			2		5	1				7
	11. Computers save time and effort.	7					3			1		4			1		7			1		7				
	12. I do not think I would ever need a computer in my classroom.				1	6				1	3			1	1	3			1		7				1	7
	13. Computers do more harm than good.			1		6		1			3					5			1		7					8
	14. I would rather do things by hand than with a computer.					7	1				3	1				4	1				7					8
	15. I would avoid computers as much as possible.					7					4			1		4	1				7			1		7
	16. I would like to learn more about computers.	7					3	1				4			1		7	1				8				

Appendix E (classification according to teaching experience)

	years of teaching experience	1-5					6-10					11-15					16-20					Over 20				
	Statements	S.A	A	U	D	S. D	S. A	A	U	D	S. D	S. A	A	U	D	S. D	S. A	A	U	D	S. D	S. A	A	U	D	S. D
View about ICT in education and culture	17. Computers will improve education.	7					3			1		3		1	1		8					8				
	18. Computer technology cannot improve the quality of students' learning.					7				1	3				2	3		1	1		6		1			7
	19. Computers are not useful for language learning.					7				2	2				1	4		1	1		6			1		7
	20. Class time is too limited for computer use.		7				1	2	2				3	2				6	1		1		6	1		1
	21. Computer use is appropriate for many language-learning activities.	7					2	1	1			3		1		1	6			1	1	7			1	
	22. Teaching with computers offers real advantages over traditional methods of instruction.	7					2	2				2	1	1		1	7		1			8				
	23. There are other social issues that need to be addressed before implementing computers in education.	7					2		2			1	2			2	5	2			1	4	2	2		
	24. Computers dehumanize society.				2	5	1		1		2	1		1	1	2	1			1	6					8
	25. Computers encourage unethical practices.	1				6	1				3	1			1	3	1			2	5			1	2	5

Appendix E (classification according to teaching experience)

	years of teaching experience	1-5					6-10					11-15					16-20					Over 20				
	Statements	S.A	A	U	D	S. D	S. A	A	U	D	S. D	S. A	A	U	D	S. D	S. A	A	U	D	S. D	S. A	A	U	D	S. D
Computer Anxiety level	26. I generally think of computers as friendly tools.	7					4					4		1			7		1			7		1		
	27.teaching using computers makes me comfortable	7					4					4		1			6		1		1	8				
	28. Writing a lesson plan using computers makes me comfortable.	7					4					4		1			6		1		1	8				
	29. working on the keyboard makes me uncomfortable					7					4			1		4	1		1		6					8
	30. when keyboard stops working , it makes me uncomfortable		1	1		5		1	1	2			2		2	1		1	1	2	4		1	1	4	2
	31. when a message appears on the screen instantly while presenting a lecture makes me uncomfortable	3		1		3		2			2		3			2	5		2		1	1	4			3
	32. Discussing computers with a group of people who know a lot about using them makes me uncomfortable				4	3			1		3				2	3		2	1	2	3		1	3	2	2
	33. I feel uncomfortable when my presentation does not work.		1		1	5		2	2				2	2	1			1	3	1	3		2	2	1	3
	34. The more opportunities I have to present, the less anxious I feel	7					1	3				1	3	1			7		1			7		1		
	35. After the training provided, I felt less anxious when I use ICT in teaching	4		3			2		2			2		3			2		6			3		5		

Appendix E (classification according to teaching experience: percentages)

	years of teaching experience	1-5					6-10					11-15					16-20					Over 20				
	Statements	S.A	A	U	D	S.D	S.A	A	U	D	S.D	S.A	A	U	D	S.D	S.A	A	U	D	S.D	S.A	A	U	D	S.D
Computer competence level and access	1. Install new software on a computer.	57,14	42,86				50,00					60,00	20,00	20,00			25,00	62,50	12,50	0,00		25,00	62,50	12,50	0,00	
	2. Operate a word processing program (e.g., Word).	57,14	42,86				75,00					40,00	60,00	0,00			0,00	62,50	25,00	12,50		50,00	37,50	12,50	0,00	
	3. Operate a presentation program (e.g., PowerPoint).	57,14	42,86				75,00					40,00	60,00	0,00			25,00	62,50	0,00	12,50		25,00	37,50	37,50	0,00	
	4. Use computers for grade keeping.	42,86	57,14				75,00					40,00	40,00	20,00			37,50	50,00	12,50	0,00		50,00	25,00	12,50	12,50	
	5. Use computer at home.	100,00	0,00				100,00					100,00	0,00	0,00			75,00	0,00	12,50	12,50		87,50	0,00	12,50	0,00	
	6. Use computers at school.	85,71	14,29				100,00					80,00	0,00	20,00			50,00	12,50	0,00	12,50	25	62,50	12,50	12,50	0,00	12,50

Appendix E (classification according to teaching experience: percentages)

	years of teaching experience	1-5					6-10					11-15					16-20					Over 20				
	Statements	S.A	A	U	D	S.D	S.A	A	U	D	S.D	S.A	A	U	D	S.D	S.A	A	U	D	S.D	S.A	A	U	D	S.D
Attitude to ICT	7. Computers do not scare me at all.	100				0,00	100,00	0,00	0,00	0,00	0,00	100,00	0,00	0,00	0,00	0,00	75,00	0,00	25,00	0,00	0,00	87,50		12		0,00
	8. Computers make me feel uncomfortable.					100,00	0,00	0,00	0,00	0,00	100,00	20,00	0,00	0,00	0,00	80,00	12,50	0,00	0,00	0,00	87,50	12,50				87,50
	9. I am glad there are more computers these days.	100				0,00	100,00	0,00	0,00	0,00	0,00	80,00	0,00	0,00	20,00	0,00	87,50	0,00	0,00	12,50	0,00	87,50			12	0,00
	10. I dislike using computers in teaching.					100,00	0,00	50,00	50,00	0,00	25,00	20,00	20,00	40,00	0,00	20,00	0,00	0,00	25,00	0,00	62,50	12,50				87,50
	11. Computers save time and effort.	100				0,00	75,00	0,00	0,00	25,00	0,00	80,00	0,00	0,00	20,00	0,00	87,50	0,00	0,00	12,50	0,00	87,50				0,00
	12. I do not think I would ever need a computer in my classroom.				14,29	85,71	0,00	0,00	0,00	25,00	75,00	0,00	0,00	20,00	20,00	60,00	0,00	0,00	12,50	0,00	87,50	0,00			12	87,50
	13. Computers do more harm than good.			14,29	0,00	85,71	0,00	0,00	0,00	0,00	75,00	0,00	0,00	0,00	0,00	100,00	0,00	0,00	12,50	0,00	87,50	0,00				100
	14. I would rather do things by hand than with a computer.			0,00	0,00	100,00	25,00	0,00	0,00	0,00	75,00	20,00	0,00	0,00	0,00	80,00	12,50	0,00	0,00	0,00	87,50	0,00		0,00	0,00	100,00

Appendix E (classification according to teaching experience: percentages)

	15. I would avoid computers as much as possible.			0,00	0,00	100,00	0,00	0,00	0,00	0,00	100,00	0,00	0,00	20,00	0,00	80,00	12,50	0,00	0,00	0,00	87,50	0,00		12,50	0,00	87,50
	16. I would like to learn more about computers.	100		0,00	0,00	0,00	75,00	0,00	0,00	0,00	0,00	80,00	0,00	0,00	20,00	0,00	87,50	12,50	0,00	0,00	0,00	100		0,00	0,00	0,00

	years of teaching experience	1-5					6-10					11-15					16-20					Over 20				
	Statements	S.A	A	U	D	S.D	S.A	A	U	D	S.D	S.A	A	U	D	S.D	S.A	A	U	D	S.D	S.A	A	U	D	S.D
View about ICT in education and culture	17. Computers will improve education.	100				0,00	75,00	0,00	0,00	25,00	0,00	60,00	0,00	20,00	20,00	0,00	100,00	0,00	0,00	0,00	0,00	100,00	0,00	0,00	0,00	0,00
	18. Computer technology cannot improve the quality of students' learning.	0,00				100,00	0,00	0,00	0,00	25,00	75,00	0,00	0,00	0,00	40,00	60,00	0,00	12,50	12,50	0,00	75,00	0,00	12,50	0,00	0,00	87,50
	19. Computers are not useful for language learning.					100,00	0,00	0,00	0,00	50,00	50,00	0,00	0,00	0,00	20,00	80,00	0,00	12,50	12,50	0,00	75,00	0,00	0,00	12,50	0,00	87,50
	20. Class time is too limited for computer use.		100				25	50,00	50,00	0,00	0,00	0,00	60,00	40,00	0,00	0,00	0,00	75,00	12,50	0,00	12,50	0,00	75,00	12,50	0,00	12,50
	21. Computer use is appropriate for many language-learning activities.	100					50	25,00	25,00	0,00	0,00	60,00	0,00	20,00	0,00	20,00	75,00	0,00	0,00	12,50	12,50	87,50	0,00	0,00	12,50	0,00

Appendix E (classification according to teaching experience: percentages)

	22. Teaching with computers offers real advantages over traditional methods of instruction.	100					50	0,00	0,00	0,00	0,00	40,00	20,00	20,00	0,00	20,00	87,50	0,00	12,50	0,00	0,00	100,00	0,00	0,00	0,00	0,00
	23. There are other social issues that need to be addressed before implementing computers in education.	100					50	50,00	50,00	0,00	0,00	20,00	40,00	0,00	0,00	40,00	62,50	25,00	0,00	0,00	12,50	50,00	25,00	25,00	0,00	0,00
	24. Computers dehumanize society.				28,57	71,43	25	25,00	25,00	0,00	50,00	20,00	0,00	20,00	20,00	40,00	12,50			12,50	75,00					100,00
	25. Computers encourage unethical practices.	14,29			0,00	85,71	25				75	20			20,00	60,00	12,50			25,00	62,50			12,50	25,00	62,50
	years of teaching experience	1-5					6-10					11-15					16-20					Over 20				
	Statements	S.A	A	U	D	S.D	S.A	A	U	D	S.D	S.A	A	U	D	S.D	S.A	A	U	D	S.D	S.A	A	U	D	S.D
Computer Anxiety level	26. I generally think of computers as friendly tools.	100,00	0,00	0,00	0,00	0,00	100,00	0,00	0,00	0,00	0,00	80,00	0,00	20,00	0,00	0,00	87,50	0,00	12,50	0,00	0,00	87,50	0,00	12,50	0,00	0,00
	27.teaching using computers makes me comfortable	100,00	0,00	0,00	0,00	0,00	100,00	0,00	0,00	0,00	0,00	80,00	0,00	20,00	0,00	0,00	75,00	0,00	12,50	0,00	12,50	100,00	0,00	0,00	0,00	0,00
	28. Writing a lesson plan using computers makes me comfortable.	100,00	0,00	0,00	0,00	0,00	100,00	0,00	0,00	0,00	0,00	80,00	0,00	20,00	0,00	0,00	75,00	0,00	12,50	0,00	12,50	100,00	0,00	0,00	0,00	0,00
	29. working on the keyboard makes me uncomfortable	0,00	0,00	0,00	0,00	100,00	0,00	0,00	0,00	0,00	100,00	0,00	0,00	20,00	0,00	80,00	12,50	0,00	12,50	0,00	75,00	0,00	0,00	0,00	0,00	100,00

Appendix E (classification according to teaching experience: percentages)

						0 0																			
	30. when keyboard stops working , it makes me uncomfortable	0,00	14 ,2 9	14 ,2 9	0,00	7 1, 4 3	0,0 0	25, 00	25, 00	50, 00	0,0 0	0,0 0	40, 00	0,0 0	40, 00	20, 00	0,0 0	12, 50	12, 50	25, 00	50, 00	0,0 0	12, 50	12, 50	50, 00	25, 00
	31. when a message appears on the screen instantly while presenting a lecture makes me uncomfortable	42,8 6	0, 00	14 ,2 9	0,00	4 2, 8 6	0,0 0	0,0 0	0,0 0	0,0 0	50, 00	0,0 0	60, 00	0,0 0	0,0 0	40, 00	62, 50	0,0 0	25, 00	0,0 0	12, 50	12, 50	50, 00	0,0 0	0,0 0	37, 50
	32. Discussing computers with a group of people who know a lot about using them makes me uncomfortable	0,00	0, 00	0, 00	57,1 4	4 2, 8 6	0,0 0	25, 00	25, 00	0,0 0	75, 00	0,0 0	0,0 0	0,0 0	40, 00	60, 00	0,0 0	25, 00	12, 50	25, 00	37, 50	0,0 0	12, 50	37, 50	25, 00	25, 00
	33. I feel uncomfortable when my presentation does not work.	0,00	14 ,2 9	0, 00	14,2 9	7 1, 4 3	0,0 0	50, 00	50, 00	0,0 0	0,0 0	0,0 0	40, 00	40, 00	20, 00	0,0 0	0,0 0	12, 50	37, 50	12, 50	37, 50	0,0 0	25, 00	25, 00	12, 50	37, 50
	34. The more opportunities I have to present, the less anxious I feel	100, 00	0, 00	0, 00	0,00	0, 0 0	25, 00	0,0 0	0,0 0	0,0 0	0,0 0	20, 00	60, 00	20, 00	0,0 0	0,0 0	87, 50	0,0 0	12, 50	0,0 0	0,0 0	87, 50	0,0 0	12, 50	0,0 0	0,0 0
	35. After the training provided, I felt less anxious when I use ICT in teaching	57,1 4	0, 00	42 ,8 6	0,00	0, 0 0	50, 00	50, 00	50, 00	0,0 0	0,0 0	40, 00	0,0 0	60, 00	0,0 0	0,0 0	25, 00	0,0 0	75, 00	0,0 0	0,0 0	37, 50	0,0 0	62, 50	0,0 0	0,0 0

Appendix F

Interview Questions :

1. Can the use of ICT in teaching be considered as a parameter that helps to acquire English better?
2. Do you think the use of ICT brings a positive attitude to learners and teachers themselves?
3. Which attitude do you have when presenting a lesson that requires the use of ICT?
4. Does the use of different computer tools such as Microsoft PowerPoint make you anxious? If yes, why?
5. Do you think computer training is important for better use of ICT in teaching?
6. Do you think age and gender are determining factors in influencing your preference to use technology?
7. Do you think that experience in teaching is a factor that can influence the use of ICT in teaching?
8. Do you think that the use of ICT in your teaching is better than the traditional methods?
9. Do you face difficulties when you use ICT in teaching English? If yes, what are the difficulties?
10. Are you in favour of including ICT in your English lectures? If you agree, why? If you disagree. Why?

ملـخـــص

يمكن أن تؤثر وآراء الأساتذة ومواقفهم تجاه تكنولوجيا المعلومات والاتصال على تعليمهم وسلوكهم. ولهذا كان الهدف من هذه الدراسة هو دراسة العوامل التي يمكن أن تؤثر على موقفهم وقلقهم إزاء استخدام تكنولوجيا المعلومات والاتصال في تدريس اللغات الأجنبية مثل العمر والجنس والخبرة التعليمية والتدريب على الحاسوب. وكان المشاركون في هذه الدراسة أساتذة من قسم اللغة الإنجليزية في جامعة الجيلالي ليابس سيدي بلعباس. ومن أجل التعرف على تأثيرات استخدام تكنولوجيا المعلومات والاتصال على موقف الاساتذة وقلقهم، تم استخدام اثنين من أدوات البحث الرئيسية في هذه الدراسة: استبيان تم توجيهه إلى جميع المشاركين ومقابلة ل 15 من هؤلاء المشاركين، تم اختيارهم عفويا. وبعد تحليل البيانات التي تم جمعها، كشفت النتائج التي تم الحصول عليها من الاستبيان والمقابلة أن الأساتذة ذوي مختلف الأعمار والجنس والخبرة التدريسية والتدريب على الحاسوب كان لديهم موقف إيجابي عموما تجاه التكنولوجيا بسبب البيئة الاجتماعية التي يعيشون فيها. وعلاوة على ذلك، على الرغم من أن القلق في أمر لا مفر منه إلى أن أساتذة اللغة الإنجليزية كانوا أقل قلقا عند استخدام تكنولوجيا المعلومات والاتصال في أقسامهم الدراسية.

Résumé

Les croyances des enseignants et leurs opinions et attitudes à l'égard des technologies de l'information et de la communication peuvent avoir un impact sur leur éducation et leur comportement. Tel était le but de cette étude qui est d'examiner les facteurs qui peuvent influer sur l'attitude des enseignants et leurs préoccupations au sujet de l'utilisation des technologies d'information et de communication dans l'enseignement des langues étrangères, tels que l'âge, le sexe, l'expérience de l'éducation et de la formation informatique. Les participants de cette étude, étaient des professeurs du département de la langue anglaise au sein de l'université Djilali Liabes, Sidi Bel Abbes. Afin d'identifier l'impact de l'utilisation de la technologie de l'information et de la communication sur l'attitude des enseignants et leur préoccupation, Deux principaux outils de recherche ont été utilisés dans cette étude : un questionnaire adressé à tous les participants et une interview pour 15 d'entre eux, choisis au hasard. Après l'analyse des données recueillies, les résultats obtenus à partir du questionnaire et de l'interview ont révélé que les enseignants ayant les différents âges, genre, expérience d'enseignement et formation en informatique avaient généralement une attitude positive envers la technologie en raison de l'environnement social où ils vivaient. En outre, malgré que l'anxiété soit inévitable, les enseignants de la langue anglaise étaient moins anxieux lorsqu'ils utilisaient les technologies de l'information et de la communication dans leurs classes de langues étrangères.