UNIVERSIDAD TÉCNICA PARTICULAR DE LOJA
La Universidad Católica de Loja

ÁREA SOCIO HUMANÍSTICA

TÍTULO DE LICENCIADO EN CIENCIAS DE LA EDUCACIÓN
MENCIÓN INGLÉS

Ecuadorian high school teachers' perceptions on ICT use in their EFL classes

TRABAJO DE TITULACIÓN

AUTOR: Jirón Abad, Marilud Nataly

DIRECTOR: Espinosa Jaramillo, Franklin Oswaldo, Mgtr.

CENTRO UNIVERSITARIO ZUMBA

2018

DECLARACIÓN DE AUTORÍA Y CESIÓN DE DERECHOS

Yo, Marilud Nataly Jirón Abad, declaro ser autora del presente trabajo de titulación: "Ecuadorian high school teachers' perceptions on ICT use in their EFL classes", de la Titulación de Ciencias de la Educación, Mención Inglés, siendo el Mgtr. Franklin Oswaldo Espinosa Jaramillo, director/a del presente trabajo; y eximo expresamente a la Universidad Técnica Particular de Loja y a sus representantes legales de posibles reclamos o acciones legales. Además, certifico que las ideas, conceptos, procedimientos y resultados vertidos en el presente trabajo investigativo, son de mi exclusiva responsabilidad.

Adicionalmente declaro conocer y aceptar la disposición del Art. 88 del Estatuto Orgánico de la Universidad Técnica Particular de Loja que en su parte pertinente textualmente dice: "Forman parte del patrimonio de la Universidad la propiedad intelectual de investigaciones, trabajos científicos o técnicos y tesis de grado o trabajos de titulación que se realicen con el apoyo financiero, académico o institucional (operativo) de la Universidad"

f._____

Autor: Marilud Nataly Jirón Abad

Cédula: 1105071706

DEDICATION

I dedicate this research to my parents and my son, because they have supported me during the whole process to achieve the current academic goal.

.

Marilud

ACKNOWLEDGMENT

First, I would like to thank God. In addition, I want to thank UTPL for giving me the opportunity to study and becoming a professional. Finally, I want to thank my professors for their patience and dedication.

Marilud

CONTENTS

LIST OF TABLES

ABSTRACT

The current research is about Ecuadorian high school teachers' perceptions on ICT use in their EFL classes. The purpose of the current study was to know the barriers that prevent the ICT use within the classroom, and the teachers' characteristics that are the most influential in the use of these technological tools. Regarding the methodology, two methods were applied: quantitative method to collecting statistical data, and qualitative method to analyze the relationship between the variables. Likewise, the instruments for the analysis were a survey and several interviews. Regarding population, twenty EFL teachers from high schools of Quito city participated in this study. The results show that teachers consider the lack of ICT training and the teachers' age as barriers on ICT integration within the EFL classes.

KEY WORDS: ICT, EFL teaching, teachers' perceptions, teachers' characteristics, training, gender, age.

RESUMEN

La investigación actual trata de las percepciones de los docentes ecuatorianos sobre el uso de las TIC en sus clases de EFL. El propósito del presente estudio fue conocer las barreras que impiden el uso de las TIC dentro del aula y las características de los docentes que son las más influyentes en el uso de estas herramientas tecnológicas. En cuanto a la metodología, se aplicaron dos métodos: el método cuantitativo para la recolección de datos estadísticos y el método cualitativo para analizar la relación entre las variables. Asimismo, los instrumentos para el análisis fueron una encuesta y varias entrevistas. En cuanto a la población, veinte docentes de EFL de las escuelas secundarias de la ciudad de Quito participaron en este estudio. Los resultados muestran que los profesores consideran la falta de capacitación en TIC y la edad de los docentes como barreras para la integración de las TIC en las clases de EFL.

PALABRAS CLAVE: TIC, enseñanza de EFL, percepciones de los docentes, características de los docentes, formación, género, edad.

INTRODUCTION

In the educational field, Information and Communication Technologies (ICT) have become indispensable tools. The current generation of students are digital natives, that is, they belong to a generation that is familiar with technology (Hepp, Prats, and Holgado, 2015). For this reason, teachers must be prepared to include in their teaching ICT resources. According to UNESCO (2014), there is a great demand for data regarding ICT in educational field, but there is a lack of statistical information about ICT integration policies. Consequently, the current study was conducted to know Ecuadorian high schools teachers' perceptions on ICT use in their EFL classes. The main purpose of the current study is to know EFL teachers' strengths and weaknesses regarding ICT use in their lesson performances.

The results gotten from the analysis of the information gathered will be valuable for teachers who will identify the necessity to learn about the use of ICT in their lessons; the results obtained in the current study will be also beneficial for students who will benefit from the extra learning motivation that the inclusion of ICT in the lessons will cause. The results gotten in the current result will be also beneficial for the educational institution and its authorities since the prestige of the institution will be

In order to provide a response to the problem addressed in the current study, it was necessary to provide a response to the following research questions:

Which aspects related to teachers' characteristics are considered by most of teachers as barriers to use ICT in their classroom?

Which factor regarding to teachers' characteristics does influence the most of on teachers to use ICT in their classrooms?

How is ICT perceived by EFL teachers in relation to their gender?

In order to get a wider idea about the current topic, some previous studies were analyzed, they are presented below.

First, Aprianti (2017) carried out a study for investigating how EFL teachers perceive ICT in their professional development. Regarding the methodology, the author used qualitative approach for determining the perceptions of 16 EFL teachers from five schools in West Java (Indonesia). The results showed that teachers use ICT for enhancing their professional development. Additionally, the study revealed that EFL teachers mainly use ITC tools to enhance their understanding about the subject matter and also pedagogical knowledge.

An additional study performed by Salinas, Nussbaum, Herrera, Solarte, and Aldunate (2017) describes the level of adoption of ICT resources in EFL class. Regarding the instrument of methodology, these authors implemented an online survey for 89 EFL teachers in order to know their opinions about ICT advantages. The results reveal that most teachers have high levels of ICT adoption. However, there are differences by country associated with the perceptions on the ICT contribution to teaching, and the training that teachers have about technological tools.

A similar study carried out by Solano, Cabrera, Ulehlova, and Espinosa (2017) describes the use of educational technology in the EFL teaching. The main objective was find the current state of ICT use in English classrooms in the south of Ecuador. Regarding the methodology, this research combines quantitative and qualitative methods. The results showed that the technology is not adequately applied. In many cases, technological tools are not often used for reasons of lack of training in appropriate teaching strategies with ICT in EFL classes.

Additionally, it is important to highlight that the previous studies and the current research have educational interest for later researches in the same topic. Likewise,

researchers working on the field of technology and education may consult this valuable material. Additionally, the information contained in these studies will serve as a support to know the state of progress regarding the ICT integration in Ecuadorian high schools. Finally, through the results of the current research, educational actors can consider technically the needs of EFL teachers regarding the knowledge and application of ICT in EFL teaching.

In order to develop the current study, it was necessary to start by making a bibliographic research with topics related to the current study, these topics are stated in CHAPTER I: ICT use in EFL teaching, Teachers and ICT use, Teachers' characteristics regarding ICT use; these information was the scaffolding for the development of the current study.

At the same time that the bibliography research was developed, it was necessary to develop the methodology that was going to be used in order to obtain trustworthy information valuable to the current research; in this sense as part of the information included in CHAPTER II we have: the same of study, which consisted of twenty EFL teachers of high schools; it was also necessary to decide on the instruments used to collect information, which were a survey and several interviews; besides, it was also necessary to determine the methodology to be used, which consist of quantitative method to collecting statistical data, and qualitative method to analyze the relationship between the variables.

Once all the data was gathered and organized it was necessary to make the description, analysis and interpretation of the data collected; the conclusions and results obtained from this process are stated in CHAPTER III.

Finally, it is relevant to mention that the desire to improve the quality of EFL teaching and learning throughout implementing ICTs in the classroom has become the highest motivation for the development of the current study.

CHAPTER I

LITERATURE REVIEW

ICT has become a necessary resource for teaching of English as a Foreign Language (EFL). Therefore, it is essential to know the relationship between ICT and EFL teaching. To fulfill this objective, the corresponding literature has been investigated, analyzed and summarized. Thus, the most relevant topics to address are ICT use in EFL teaching, teachers and ICT use, and teachers' characteristics regarding ICT. In addition, six previous studies related to EFL teachers' perceptions on ICT were searched in order to support the current study. Finally, it should be noted that the information has been obtained from textbooks, journals specialized in education and technology, and websites.

ICT Use in EFL teaching

ICT definition

The acronym ICTs means «Information and Communication Technologies». This concept is used in several fields related to business, science, medicine and, of course, education. According to Celebic and Ilija (2011), "ICT encompasses all of the technology that we use to collect, process, protect and store information" (p. 2). Therefore, it can be said that ICTs are a set of physical tools and digital applications used for multiples tasks.

Additionally, ICTs are classified in two categories namely hardware and software. Hardware refers to electronic devices such as computers, video projectors, and cellphones among others. On the other hand, software includes all digital applications and Internet benefits (Rahman and Kaiser, 2016). It is important to mention that ICTs are constantly growing in terms of digital and technological resources.

Likewise, ICT is useful in all fields of modern society, but these tools are especially necessary in education. According to Pegalajar (2017), ICT tools are enablers in the learning and teaching dynamic, since this resources invite interaction and information exchange inside and outside the classroom. In fact, ICT is a potentially powerful tool for

improving and extending educational opportunities in areas of knowledge such as science, humanities and language teaching (Safiul and Alam, 2010).

ICT Importance

ICT have relevance in the social field and in the educational field. Regarding the first field, technology has shown that it can provide great benefits for good living in the modern world. According to Bradley (2017), one of the main objectives of ICT in society is to provide human welfare and life quality for all. In the same way, the ICT challenge today is how to manage news digital tools to create societies based on respect of cultural difference in order to promote the social equality (Vrasidas, Zembylas, and Glass, 2009). As you can see, the present and the future of our societies depend on the correct and responsible use of technology.

On the other hand, in the educational field, EFL teachers cannot afford to ignore the potential of ICT for enhancing their methodology and for encouraging their students learning (Inspectorate Evaluation Studies of Ireland, 2008). Experts believe that technological resources increase the success of learning in the educational process. Additionally, "ICTs can empower, under certain circumstances, educational efforts to promote development and social justice" (Vrasidas et al., 2009, p. 7). For this reasons, it is fundamental to know how to use these tools correctly, its advantages and disadvantages.

ICT Advantages / Disadvantages

ICT presents more advantages than disadvantages. Speaking of advantages, Henry (2014) states that there are many reasons to use ICT in the EFL classes from motivating students to facilitating planning and organization of teaching process. Current students were born in the technological era; therefore, they develop their skills using technological tools and digital applications. In this sense, ICTs can influence students' motivation to

learn and increase their interest for the subject, moreover, the use of ICTs in the classroom ensures the students' engagement inside and outside the classroom (Azmi, 2017).

In the same way, technology offers several advantages for EFL teachers. ICTs help the educators to renew their methodology through learning resources that students enjoy. Thus, advocates of ICT integration argue that the technological tools can benefit teachers by improving their teaching skills, because the ICT pedagogical approaches are more student-centered than other modes of teaching (Tolani, McCormac, and Zimmermann, 2011).

In order to know the main ICT advantage, it is especially important to mention the virtual learning environments known as E-learning. According to Celebic and Ilija (2011), "E-learning consists of all forms of learning and/or knowledge transfer that are based on electronic technologies" (p.17). E-learning offers some advantages for students such as adaptive time, unlimited repetition of lectures, reduced cost of education, multimedia contents (audios, videos, texts). For teachers, the advantages are also several. For example, E-learning reduces the costs of conducting teaching (travel costs and accommodation, costs for classrooms, etc.). Likewise, once created, e-education allows teachers to take better advantage of time and resources. In addition, the virtual environments ease the distribution of contents and learning materials. Therefore, the most important ICT advantage is the distribution of information through the Web environments.

On the other hand, ICTs present disadvantages only when its tools are used for non-educative purposes. Some of these disadvantages could be the misuse of social media, cyber bulling and reliance on technology (All Answers, 2017). Speaking of reliance on technology, even teachers could become dependent on ICT within the classroom. Therefore, it is necessary to know what the teachers' role is regarding ICT and the teacher' competences to correctly use these resources.

Teachers and ICT use

Teachers' Role

The role is the set of attitudes that a person must show and develop in a particular profession. Regarding teaching, the teacher' role is not fixed, but adapts to the requirements of the time and place. For example, the role of the educator has changed with the integration of ICT in the curriculum. Azmi (2017) argues that the teachers' role has evolved from the role of a lecturer to a facilitator of learning. This means that teachers no longer have the role of instructing and transmitting knowledge, since today they must be guides to help students find knowledge for themselves using ICTs. In this sense, it can be said that currently "teachers assume the role of facilitators and skills developers" (Safiul and Alam, 2010, p. 99).

Additionally, the teachers' role as "facilitator" is important for understanding the relationship between teachers and ICT. In the age of the Internet, information is abundant. However, not all of the information on the Web is correct or appropriate for students. For this reason, the teacher must be a knowledge facilitator, that is, he must know where to find the right information and how to use this information. Consequently, Kourieos and Evripidou (2013) argue that an effective EFL teacher is not a directive and authoritarian person but one who takes into consideration the educational needs of their students.

On the other hand, ICT cannot replace teacher' role within the classroom because these tools are only a valuable help in the teaching process. The teacher is who designs learning environments using the appropriate ICT resources (Kourieos and Evripidou, 2013). Therefore, the success of ICT integration in the class depends on the teacher's planning regarding the contents and the time of use of these tools. For this reason, Saleh Mahdi and Al-Dera (2013) argue that teachers should strike a balance between ICT content and class time, teacher role and ICT role.

Teachers' Competences

Mastery of ICT resources requires certain competencies that teachers must obtain. The teachers' competences regarding ICT are a set of technology standards that define proficiency in using digital applications and computer technology inside and outside the classroom. Lawrence and Veena (2013) state the following three competencies: domain of basic technology operations, personal and professional use of technological tools, and application of technology in instruction.

Consequently, the skills to manage virtual learning environments are known as digital competences. Digital competences in teachers implies the reasoning and intuition that help learners to develop problem-solving strategies regarding the web contents (Hepp, Prats, and Holgado, 2015). Regarding this topic, Resta (2006) argues that four technological proficiencies are necessaries namely, manage, integrate, create and communicate. First, ICT managing implies the ability to collect information in digital environments and to organize this data for presenting it in class. Second, the ICT integrating implies the ability to interpret digital contents in order to share this information with the students. Third, ICT creating involves generating information by adapting or designing digital contents in learning environments. Finally, ICT Communicating implies the ability to communicate information properly in virtual environments inside and outside the classrooms.

On the other hand, the UNESCO (2015) recomends some competences for enhancing the relationship between teachers and ICT. On one hand, the teacher must have technology literacy in order to integrate basic tools and digital resources in his/her teaching process. On the other hand, the teacher must be able to create digital contents in order to encourage the students and improve their learning. To accomplish this goal, the educator must learn constantly news ways to manage ICT.

Teachers' Gender

Teachers' gender could be a factor that influences the use and integration of ICT. Nevertheless, the impact of gender in ICT is not yet clear. After analyzing some studies related ICT and teachers' gender, it is possible to indicate that gender gap is a controversial and inconsistent variable (Fan and Li, 2005; Kay, 2006; Wong and Hanafi, 2007). On the one hand, early studies present teachers' gender as an influential factor on ICT integration (Kay, 1992; Durndell and Thomson, 1997; Liaw, 2002). On the other hand, recent researches claim that gender gap regarding technology is not considered as a barrier on ICT use within the classes. These studies conclude that both male and female teachers exploit technological resources according to their needs and preferences (Poynton, 2005; Kay, 2006; Cooper, 2006). In the same way, the relationship between computer anxiety and teachers' gender is not a clear-cut one (Rahimi and Yadollahi, 2011).

Additionally, Connell (2002) argues that assuming teacher' gender as an important predictor of abilities, skills and interests is erroneous. Male teachers and female teachers have the same abilities for learning and using ICT, although the motivation and creativity to use these tools could be different depending of gender. For example, according to Darrin Wood (2012) male and female teachers have different attitudes when using ICT tools. Female teachers are supportive and open toward integrating the digital resources within the classrooms. Likewise, Bøgh Andersen (2011) concludes that female teachers see themselves as more efficient and are more satisfied than male teachers, especially in the use of digital contents. On the other hand, male teachers tended to exercise greater control when using ICT. In Morley's opinion (2011), male teachers appear to use ICT less in class than female teachers. In any case, programs and seminars for teachers may help them overcome rigid concepts of gender roles in their daily practice in order to use ICT not from a male or female perspective but from their role as educators (Islahi and Nasreen, 2013).

An interesting fact is the greater presence of female teachers in the educational field. According to data, there are approximately 8000 EFL teachers in Ecuador, and 70% of them are female teachers (Constante, 2016; Universia, 2016). Analyzing this information, it is possible to speak of a "feminization" of the teaching profession. According to Kelleher (2011), "the term 'feminization' has tended to apply to countries where women are a significant majority in the teaching workforce" (p. 1). However, although most EFL teachers are women, female teachers still have problems understanding the technical aspects of ICT. Consequently, the ICT integration programs should take into account the population of female teachers and the characteristics of this gender. Saleh Mahdi and Al-Dera (2013) suggest that female teachers need to receive more support and training by using ICT in their classrooms. In addition, ICT seminars and workshops on digital contents by female ICT experts should be provided for in-service female teachers.

Teachers' characteristics regarding ICT use

Psychological characteristics

Teachers' characteristics influence when ICTs are integrated in the classroom. Regarding psychological characteristics, it is important to take into account teachers' motivation, confidence and adaptability. In addition, anxiety should be considered as a negative psychological characteristic that prevents the use of ICT. When anxiety is related to technology, this is known as techno-anxiety (Rahimi and Yadollahi, 2011).

Regarding teachers' motivation, UNESCO (2014) argues that this characteristic can positively influenced on ICT integration into the classroom. Teachers' motivation by using ICT is varied; some believe that these tools encourage student learning, others state that ICTs renew the methodology and facilitate planning (Henry, 2014). However, the lack of motivation could be a barrier on ICT use.

The integration of ICT into education is frequently resisted by teachers

and their unions, particularly in countries with an aging, underpaid

teaching workforce, and where there has been inadequate training and

preparation. In these circumstances, a lack of motivation to learn new

skills and teaching and learning methodologies may occur (UNESCO,

2014, p. 34).

Additionally, confidence is an important teachers' psychological characteristic that favors the ICT use. Nowadays, teachers are familiar with technology and can use some ICT resource. They have achieved this confidence on ICT tools thanks to practice, for this reason they feel self-effective on ICT management when these tools are used in class. Sang, Valcke, van Braak, and Tondeur (2010) argue that the degree of self-efficacy and self-confidence of EFL teachers increases with frequent use of computers and web resources. Likewise, the teachers with self-confidence regarding ICT tools show less computer-anxiety.

Regarding self-efficacy, this concept refers to the confidence in one's ability to achieve the proposed objectives. The teachers' self-efficacy regarding ICT is positively related to digital tools and information literacy (Hatlevik, Throndsen, Loic, and Gudmundsdottir, 2018). Likewise, self-efficacy allows the educator to develop skills such as being self-taught, delving into web content, and creating better pedagogical resources. In other words, teachers with self-efficacy tend to take better advantage of ICT within their classrooms (Scherera, Siddiq, & Teo, 2014). However, as in the case of teachers' motivation, the lack of confidence could also be a barrier to the use of ICT, as some studies have shown (Morley, 2011; Fabre and Popova, 2017). Finally, Moradkhani and Haghi (2017) argue that unfavorable educational setting diminishes EFL teachers' self-efficacy and confidence on

ICT resources. For this reason, it is important to innovate the educational infrastructure with technological equipment and digital resources such as Internet, web applications among others.

Speaking of teachers' psychological characteristics, Intarapanicha (2013) believes that an ideal EFL teacher should have some ICT skills such as being active, friendly, caring, polite, and adaptable. However, most of these attitudes are not related to ICT but to the teacher-student relationship. The adaptability is the only psychological characteristic, which allows to accept the changes and challenges of the ICT integration.

The lack of motivation, confidence and adaptability could be techno-anxiety. According to Rahimi & Yadollahi (2011), techno-anxiety is the fear about working with ICT tools or even thinking about using computers. Techno-anxiety is related with the psychological characteristics, but also with teachers' gender and teachers' age. However, the relationship between these indicators is not well defined.

Educational characteristics

In this section, the educational characteristics of the teachers are presented. According to the literature review, teachers must be able to use digital pedagogy, incorporate technological tools into their methodology, and plan the curriculum considering ICT. Each of these educational skills are analyzed below.

First, digital pedagogy refers to the skills and attitudes necessary for teaching using digital contents and technological tools. According to UNESCO (2014), the lack of digital pedagogy could be an impediment to the educational development. These didactical barriers are present where teaching is inflexible and teachers lack the skills to facilitate ICT integration. Saleh Mahdi and Al-Dera (2013) argue that there are two factors influencing on ICT use namely, technical factors and pedagogical factors. On one hand, ICT factors refers the appropriateness of hardware and software, ease of the Internet accessibility, and

the location of the devices. On the other hand, pedagogical factors imply the teachers'
methods and skills for managing ICT. These authors suggest that pedagogical factors must
be considered as barriers because ICT tools have no benefits if teachers are not prepared to
use them. Consequently, ICT training for teachers is fundamental for successfully
integrating technology in education.

Second, the teacher should include ICT in his/her methodology in order to improve
students' learning. The use of appropriate technological resources in the methodology can
bring positive changes in the EFL teaching and turn the classrooms into "open digital
environments of learning" (Azmi, 2017, p. 117). Besides, students are more familiar with
technology and the ICT use in teaching creates an adequate confidence-atmosphere for
their learning. In addition, virtual environments allow teachers to take better advantage of
time and resources, because it is possible to create and share digital content such as videos,
audios, evaluation webpages and others (Celebic and Ilija, 2011).

Third, ICT resources enrich and update the curricular plan. For this reason, the
teacher must be able to include ICT in their annual planning. It is important to plan what
technological tools and digital content will be used in class, how to use them and when to
use them. Lack of ICT planning is considered a barrier in the ICT use. Regarding this
topic, Azmi (2017) states that lack of pedagogical planning undermines the ICT use in the
EFL classroom. Likewise, Hepp et al. (2015) argue that the most complex challenge for
teachers is determine "how to apply ICTs in a specific curricular area, in a particular
classroom context, and with a suitable pedagogical method" (p. 39).

Teaching with digital pedagogy, incorporating methodology using ICT, and
planning the curriculum considering ICT are not possible without adequate training. The
study of Cabero and Barroso (2016) shows that the lack of pedagogical and content
knowledge regarding ICT is the principal barrier for its integration. For this reasons, most

of authors recommended to implement ICT training courses and seminaries in order to get "a balance between the methodology, the linguistic content, and pedagogy" (Saleh Mahdi and Al-Dera, 2013, p. 58).

Professional characteristics

Professional characteristics refer to certain skills that a teacher must develop to work with technological tools. In this sense, the professional characteristics are related to the teachers' competences regarding ICT use. According to Kourieos and Evripidou (2013), teaching with technology in the EFL classes requires flexibility for using ICT, high level of language proficiency and certain level of technological literacy.

The use of computers, video projectors and web resources presents a new challenge of adaptation to teachers. For this reason, flexibility is very necessary for working with ICT within the classroom. Teachers' flexibility allows students greater autonomy and control over the teaching materials to be used (Kourieos and Evripidou, 2013). Besides, thanks to this characteristic, classrooms become open spaces for the exchange of ideas through the discussion on videos, audios, etc.

Additionally, the ICT use and integration require certain level of technological literacy. This feature has relation with teachers' competences regarding ICT. In order to teaching with ICT resources, it is necessary acquire digital competences. About these competences, Hepp et al., (2015) argues:

> Digital competence can be understood as the set of knowledge,
> strategies and skills that enable an individual to solve typical and
> emerging problems (i.e. those related to the future and to the new
> situations being produced) associated with the digital world in relation
> to communicating, selecting information and writing, etc., using a
> digital support (p. 38)

On the other hand, speaking of professional characteristics, Lawrence and Veena (2013) list five capabilities namely ICT productivity, research, managing, communication and presentation. First, the teacher is a good producer of ICT content; thus, he produces learning documents, analyze quantitative data, and organize information graphically. Second, the teacher is a clever information seeker; this is, he knows effective online search strategies, and compares online information and sources. Third, the teacher knows how to communicate using digital tools (email, social media) and how to encourage his/her students for collaborative e-learning. Fourth, the teacher manages the computers applications such as office tools, web resources and digital devices. Fifth, the teacher creates effective digital presentations and delivers digital multimedia presentations.

As in the case of educational characteristics, ICT training is also important to acquire and develop professional characteristics regarding technological resources. Governments must implement courses and seminars on ICT and its application in different educational environments. The objective of this training is to provide the teacher with the necessary skills and tools for teaching in the 21st century (Hepp et al., 2015).

Personal characteristics

The most important personal characteristics are gender, age, training and experience. These four characteristics influence the ICT integration in EFL classes. Regarding the teachers' gender, studies show that this is a variable still undetermined (Rahimi & Yadollahi, 2011). Additionally, gender could be a barrier for using ICT in countries where there is inequality between men and women. In any case, these questions about teachers' gender have already been analyzed previously.

Regarding teachers' age, it is evident that old teachers and young teachers present significant differences when using ICT. In developing countries, the integration of ICT in education dates back a decade and many of the current teachers studied their educational

career at a time when electronic devices and the internet were not usual. Consequently, ICTs are unfamiliar to many EFL teachers, especially for those who have not received adequate training in the use of these tools. For this reason, older teachers could be more technophobic than younger ones (Combs, 2005). Nevertheless, age is an imprecise variable. On the one hand, Scherera, Siddiq, and Teo (2014) concluded in their study that there are positive relations to teachers' self-efficacy and technological tools, but a negative relation to teachers' age and ICT use. On the other hand, Saleh Mahdi and Al-Dera (2013) found in their research that most of the teachers felt that the teachers' age had nothing to do with the ICT integration in the EFL classes. For these teachers, the most important characteristics is adaptability and good attitude towards the challenges and changes that ICT propose.

Additionally, the teaching experience is a personal characteristic that influences the ICT use. It is necessary to distinguish between teaching experience (in years) and teaching experience with ICT. Regarding the teacher experience (in years), this topic is discussed in terms of its relationship to performance. For example, Di Carlo (2010) argues that teachers with more experience have effective abilities to transmit knowledge in their class. However, the years of teaching are not related to the effective use of ICT. This is because many teachers who today have 15 or 20 years teaching experience did not learn to use technological tools in their early training as educators. According to the study of Rahimi and Yadollahi (2011), the teaching experience (in years) does not diminish the level of techno-anxiety, but rather the utilization of ICT in teaching procedure is negatively associated with teaching experience. This result may be due to lack of digital knowledge and technological skills, or lack of enough training for effective ICT integration in EFL teaching.

Regarding teaching experience with ICT, the studies shows positively results in the relationship between experience using ICT and less computer-anxiety. After a study, Morley (2011) argues that the teachers who frequently use ICT in their class know when computers can be best used for teaching and learning. Likewise, Teo (2008) found that the years of computer usage is positively correlated with level of computer confidence. In conclusion, the full integration of ICT within the class depends on the practice with technological tools and the positive attitude towards these technological innovations (Comia, Argentin, & Guis, 2016).

Finally, teachers' training could be considered as a factor that influences the ICT use into the classrooms. Some teachers have attended ICT training courses and, for this reason, they know how to manage technological resources. For example, a study of Malinina (2015) shows that the teachers with necessary knowledge and skills on ICT applications are quite optimistic about positive effect ICT have on teaching process.

However, the lack of training is the most frequent barrier on ICT integration. After a study, Olakanmi (2017) concludes that teachers require learning skills on software, web design software, and creating electronic resources for teaching. Additionally, this author recommends implementing ICT training programs in order to improve the teachers' methodology. Likewise, Pegalajar (2017) believes that education authorities should to invest more and promote professional recognition in the ICT training. On the other hand, the social media has become more common in the EFL classes. For this reason, Balöz (2016) recommends to implement training programs regarding how to employ social media for educational purposes in order to enhance the interaction and communication between teacher-student and student-student. Finally, it is necessary to recognize that financial barriers are the main factor for integrating ICT training courses (UNESCO, 2014).

Consequently, the responsibility of implementing these courses belongs to government and the educative authorities.

The literature review shows that the relationship between EFL teaching and ICTs is positive in many aspects. Technological resources are of great help for EFL teachers in areas such as methodology, students' learning and pedagogic innovation. However, it is necessary to know the teachers' opinion about ICT integration in order to continue improving foreign language teaching. In this sense, numerous scientific studies have been carried out in different places and have been published in journals related to education and technology. Six of these studies have been selected in order to know their objectives, methodology and results.

Aprianti (2017) carried out a study about EFL teachers and ICT use in their continuing professional development. The goal of her study was to investigate how EFL teachers perceive ICT in their professional development, what skills teachers develop through the ICT use, and what ICT tools they use during their professional practice. Regarding the methodology, the author used qualitative approach for determining the perceptions of 16 EFL teachers from five schools in West Java (Indonesia). The data were collected through interviews and questionnaires. The results showed that teachers use ICT for enhancing their professional development. Additionally, the study revealed that "teachers mainly use ITC tools to improve their understanding about the subject matter and also pedagogical knowledge of the subject" (p.12).

The study of Salinas et al., (2017) describes the level of adoption of ICT resources in EFL teaching in three Latin American countries. The objective was analyzing the factors that affect the process of ICT integration in classrooms. Regarding the instrument of methodology, these authors implement an online survey for 89 EFL teachers in order to know their opinions. The results reveal that most teachers have high levels of ICT

adoption. However, there are differences by country associated with the perceptions of the ICT contribution to teaching and the training that teachers have about technological tools. For this reason, the authors suggest a better understanding of the relationship between culture of countries, the various actors involved in education, and the degree to which teachers adopt technology in their EFL classes.

Solano, Cabrera, Ulehlova, and Espinoza (2017) carried out their study for exploring the use of educational technology in the EFL teaching. The main objetive was find the current state of ICT use in English classrooms in the south of Ecuador. Regarding the methodology, this research combines quantitative and qualitative methods. The instruments applied were the surveys and observation sheets. In particular, the observation in the EFL classes lasted 4 months. One hundred and fifty students and fifteen teachers participated in the development of the research. The results showed that the technology is not adequately applied. In many cases, technological tools are not often used for reasons of lack of training in appropriate teaching strategies with ICT in EFL classrooms.

The study of Maya Silviyanti and Qismullah Yusuf (2015) focused on determinate EFL teachers' perceptions on ICT. Regarding the methodology, closed-ended questionnaires and interviews were applied for gathering the information. Additionally, 42 EFL teachers from two state universities in Indonesia participated in this research. The results revealed that most teachers have a strong motivation to use ICT because these resources are important in teaching English. The teachers mentioned that learning and teaching using technological tools is entertaining, interesting and effective. However, there are barriers that hinder the use of ICT. These barriers are related to the lack of training and support in the work environment. The authors recommend that educational authorities must provide ICT training, because teachers must be prepared to face new challenges in education and technology.

Mozafari and Wray (2013) conducted a study for determining the relationship between English teachers and technology. This study aimed to explore the prospects of the practice of EFL teachers using ICT in their teaching in Iranian high schools. The researchers took into account the individual and sociocultural factors that have influenced the perceptions of teachers regarding the ICT integration. Regarding the methodology, the researchers used surveys, direct interviews and observation of technological infrastructures and EFL classes. Additionally, five English teachers working in five Iranian high schools in the city of Tehran (Iran) participated in the research. The results show that lack of training and poor infrastructure are barriers to the integration of ICT. The authors highlighted the importance of implementing ICT in the education system, since ICT integration can lead to improvements in EFL education and this is a potential benefit for society.

The research of Azmi (2013) focuses mainly on examining the knowledge, attitudes and perceptions of Turkish EFL teachers regarding the use of technological resources such as devices, software, applications, etc. The methodology was based on a background questionnaire and a survey to assess the degree of knowledge about ICT, the frequency of software use, teachers' attitudes, and confidence toward ICT tools. Additionally, 157 EFL teachers participated in this investigation. The results indicated that EFL teachers have limited skills in software use and inexperience in using devices and applications. In addition, they have lack technical support and instruction on technology use. However, most teachers have positive perceptions of ICT integration in English classes.

CHAPTER II

METHOD

This section presents the methodology used in the current research in order to know the teachers' perceptions on ICT use in their EFL classes. The components of the methodology are exposed in two subsections namely, settings and participants, and procedures.

Setting and participants.

This research was conducted in the Quito city. The chosen places were four high schools in the south and north of Quito city, two private high schools and two public high schools. In addition, twenty EFL teachers (10 male and 10 female) gave their opinions about ICT use through a survey with multiple-choice declarative statements. The range teacher's age oscillates from 53 to 27 years. Similarly, the range of teacher's experience varies between 2 and 20 years. All teachers have third level degrees related to the teaching of the foreign language. Most of them have B2 or C1 certificates in the English language domain. Likewise, all the teachers declared to know the meaning of the ICT acronym.

Procedures.

This research was planned following the scientific method. Thus, relevant information was consulted, summarized and presented in the literature review. With this objective, textbooks, magazines and web pages were the main sources of consultation. Likewise, it was necessary to consult journals specialized in technology and education in order to obtain six previous studies about the relationship between the EFL teachers and the ICT. The information collected allowed knowing the concept, importance, advantages and the disadvantages of the ICT tools. On the other hand, it was possible to know the characteristics of teachers regarding ICT, as well as the skills required to teach with these tools.

Regarding the methodology, a quantitative and qualitative method were taken into account, since it was important to know both the numerical data and the teachers'

motivation on the ICT use in EFL teaching. Two instruments …for data collection were developed namely, a survey and an interview.

On the one hand, the survey consisted of two questions with 18 and 17 declarative statements respectively. The first issue explores the barriers that prevent the ICT use in EFL classes. The second issue seeks to identify the factors that encourage the ICT integration. These statements have four parameters (strongly agree, agree, disagree, strongly disagree) to choose from. On the other hand, the interview contains eight open questions related to teachers' perceptions on ICT resources. It is necessary to emphasize that the interview was applied only to six of the 20 teachers.

After applying the survey and the interview, the data was tabulated using the Excel program. The frequency of the parameters was interpreted as a percentage, where $1 = 5\%$. Likewise, the data was classified by gender (male and female) using the same tabulation criteria. Four tables were obtained after the tabulation of results. The first table refers to the barriers on ICT use; the second table, to teachers' characteristics in the ICT use; the third table, to the barriers on ICT use by gender; and the fourth table, to the teachers' characteristics in ICT use by gender

The aspects considered for the analysis of results were the highest percentages, the answers of the interviews, and the information of the literature review. First, the highest percentages of each parameter were chosen in order to analyze only the most important data. Second, this information was analyzed and supported based on the answers obtained in the interviews. Third, these teachers' opinions were contrasted with the opinions of the different authors consulted for the literature review.

Finally, the information collected, tabulated and analyzed served to answer the three research questions from the current study:

Which aspects related to teachers' characteristics are considered by most of teachers as barriers to use ICT in their classroom?

Which factor regarding to teachers' characteristics does influence the most of on teachers to use ICT in their classrooms?

How is ICT perceived by EFL teachers in relation to their gender?

CHAPTER III: RESULTS AND DISCUSSION

DESCRIPTION, ANALYSIS, AND INTERPRETATION OF RESULTS

This chapter contains the interpretation and analysis of the results obtained in the field research through the survey and interviews applied. The objective of this study is to know the barriers on ICT use, the factors that influence the ICT use, and the teachers' perceptions on ICT by gender. For analyzing the data, it was necessary to select the highest percentages of each parameter. After, these percentages were analyzed using the responses from the interview, survey, and the information contained on the literature review.

Which aspects related to teachers' characteristics are considered by most of the EFL teachers as barriers to use ICT in their classroom?

Table 1. Teachers' characteristics considered by EFL teachers as barriers to use ICT in their classroom.

Nº	STATEMENT	STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE	NO ANSWER
		%	%	%	%	%
1	I feel insecure about my ability to use ICT as a resource to teach.	0	10	65	25	0
2	I do not think I would be able to learn how to use ICT in my classroom.	0	0	60	40	0
3	I am afraid that if I begin to use ICT, I will become dependent upon them.	0	5	40	55	0
4	I dislike working with machines that are smarter that I am.	0	15	50	35	0
5	I feel apprehensive about using ICT.	0	10	60	30	0
6	I have difficulty in understanding the technical aspects of ICT.	60	20	10	10	0

7	It scares me to think that could cause the computer to destroy a large amount of data by hitting the wrong key.	40	25	20	15	0
8	I hesitate the use of ICT for fear of making, mistakes that I cannot correct.	40	30	15	15	0
9	You have to be master to understand how to use ICT.	10	10	55	25	0
10	I have avoided ICT use because they are unfamiliar.	5	20	60	15	0
11	I have not attended some ICT training courses.	65	20	10	5	0
12	I have not attended some ICT training courses; however, I prefer not to use ICT because they somewhat intimidate me.	0	25	60	15	0
13	I am not interested in attending any ICT courses.	0	0	35	65	0
14	I do not know how to use any ICT Resources.	0	0	65	35	0
15	I do not use any ICT resource in class because I think that ICT is not necessary to teach English.	0	5	40	55	0
16	I prefer not to use ICT because my teaching experience is the most crucial factor in teaching process.	0	10	40	50	0
17	I think that age is factor that determines the ICT use in class.	30	60	10	0	0

| 18 | In my opinion, younger teachers are more skillful to use ICT than the older ones. | 25 | 60 | 10 | 5 | 0 |

N= 20

Author: Marilud Jirón
Source: Ecuadorian high school EFL teachers

Regarding the parameter "strongly agree", most of teachers strongly agree with the following statements: *I have difficulty in understanding the technical aspects of ICT* (60%); *It scares me to think that could cause the computer to destroy a large amount of data by hitting the wrong key* (40%); *I hesitate the use of ICT for fear of making, mistakes that I cannot correct* (40%); *I have not attended some ICT training courses* (65%). The results show that teachers have poor training about how to use technological resources. For this reason, they cannot understand the technical aspects of ICT tools. Consequently, most of teachers have fear of damaging or misusing the hardware and software of devices.

On the other hand, teachers affirm that there are not official courses in ICT use offered by the educational institution they work for. In the same line, an interviewed teacher stated that, "The government should implement ICT courses and seminaries, because it is difficult working with ICT without adequate training". As we can see, lack of training is considered as a barrier on the ICT integration. Consequently, the teachers need urgently acquire digital competences. According to Hepp et al. (2015), digital competences for teachers imply the reasoning and intuition that help to develop problem-solving strategies regarding the web contents and digital applications in education. The training in ICT field could help to enhance the confidence of teachers toward technical use of ICT resources.

Regarding the parameter "agree", 60% of teachers agree in these statements: *I think that age is factor that determines the ICT use in class*; *In my opinion, younger teachers are*

more skillful to use ICT than the older ones. The results clearly show that the teachers' age is an important factor on ICT use. The integration of technology in education is something recent and, in many countries, this integration is still in process. Undoubtedly, young teachers take better advantage of these resources in their EFL classes. On the other hand, older teachers are not familiar with ICT tools. In the interview, an old teacher said, "I studied my teaching career when ICTs were not part of the syllabus, so I do not have the necessary skills to handle these tools". For this reasons, older teachers could be more technophobic than younger ones (Combs, 2005). Consequently, the teachers' age are directly related with techno-anxiety. Rahimi and Yadollahi (2011) describe techno-anxiety as panic about working with ICT tools or even thinking about using computers. Therefore, teachers' age is considered as a barrier on the ICT integration in EFL teaching.

Regarding the parameter "disagree", most of teachers desagree with these statements: *I feel insecure about my ability to use ICT as a resource to teach* (65%); *I do not think I would be able to learn how to use ICT in my classroom* (60%); *I dislike working with machines that are smarter that I am* (50%); *I feel apprehensive about using ICT* (60%); *You have to be master to understand how to use ICT* (55%); *I have avoided ICT use because they are unfamiliar* (60%); *I have not attended some ICT training courses; however, I prefer not to use ICT because they somewhat intimidate me* (60%); *I do not know how to use any ICT Resources* (65%). If teachers disagree with these statements, it means that they have confidence and security when using ICT. In the parameter "strongly agree", teachers said that they not understand the "technical aspects" of ICT; it does not mean that they are not using ICT tools in their classrooms. In fact, most of teachers are teaching with ICT because these resources help to improve the methodology and encourage students' learning. Thus, a teacher interviewed stated, "ICTs are important in the EFL classes. I do not understand all of these resources; however, I use YouTube

videos, online pages of English and online evaluations". Other teacher affirmed, "It is not necessary be a master in ICT use, but rather teachers need basic training on the main aspects of ICT". As we can see, teachers are motivate to use ICT because these resources offer many advantages in EFL teaching.

Speaking of ICT advantages, Henry (2014) argues that there are many reasons to use ICT tools, from motivating students to facilitating planning and organization of teaching process. Likewise, advocates of ICT integration believe that the technological tools can benefit teachers by improving their teaching skills, because the ICT pedagogical approaches are more student-centered than other modes of teaching (Tolani, McCormac, & Zimmermann, 2011). All these advantages are motivating teachers for using ICT as valuable resource in their teaching process. Therefore, do not consider the following terms: insecurity, unfamiliarity, lack of confidence, fear and apprehension as ICT integration barriers.

Regarding the parameter "strongly disagree", most of teachers strongly disagree with the following statements: *I am afraid that if I begin to use ICTs, I will become dependent upon them* (55%); *I am not interested in attending any ICT courses* (65%); *I do not use any ICT resource in class because I think that ICT is not necessary to teach English* (55%); *I prefer not to use ICT because my teaching experience is the most crucial factor in teaching process* (40%). If teachers strongly desagree with these staments, it means that they want to attend ICT training courses because teaching experience is not enougth to teach in modern times. Regarding the teacher experience (in years), this topic is discussed in terms of its relationship to performance. For example, whether a teacher have more experience, his/her ability to transmit knowledge is more effective (Di Carlo, 2010). However, an interviewed teacher affirms, "the years of experience are important but we need adapt to new times teaching through new technological methodology". For this

reason, the years of teaching are not related to the effective use of ICT. This is because many teachers who today have 15 or 20 years teaching experience did not learn to use technological tools in their early training as educators. An old teacher said, "It is difficult to learn about computers for a teacher over 45 years". Speaking of years of experience, Rahimi & Yadollahi (2011) affirms that the teaching experience (in years) does not diminish the level of techno-anxiety, but rather the utilization of ICT in teaching procedure was negatively associated with teaching experience. This result may be due to lack of digital knowledge and technological skills, or lack of enough training for effective ICT integration in EFL teaching.

Finally, it is necessary to take consideration the thirteenth statement of the table 1. In fact, if 65% of teachers strongly disagree with the statement "*I am not interested in attending any ICT courses*", it means that teachers want to attend ICT training courses. The parameter "strongly agree" reveleted that lack of training is considered as a barrier in the ICT use. Consecuently, the educational authorities cannot overlook this need of teachers. The development of ICT skills and abilities will help teachers improve their teaching methodology for the benefit of students (UNESCO, 2014)

Which factor regarding to teachers' characteristics does influence the most on teachers to use ICT in their classroom?

Table 2. Teachers' characteristics that influence the most on teachers to use ICT in their classroom.

Nº	STATEMENT	STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DESAGREE	NO ANSWER
		%	%	%	%	%
1	The challenge of learning about ICT use is exciting.	35	50	15	0	0
2	I am confident that I can learn technological skills.	30	60	10	0	0

3	I feel motivated to use ICT in my class.	35	55	10	0	0
4	Learning to use ICT is like learning any new skills - the more you practice, the better you become.	25	60	15	0	0
5	I am sure that with time and practice I will be as comfortable working with ICT.	25	70	5	0	0
6	I feel that I will be able to keep up with the advances happening in the ICT field.	25	50	20	5	0
7	If given the opportunity, I would like to learn about ICT use.	60	40	0	0	0
8	I think that ICT are necessary tools in educational setting.	70	30	0	0	0
9	I like to use ICT because they help me to innovate my teaching methodology.	25	60	15	0	0
10	ICT help me to motivate my students to learn English.	20	65	10	5	0
11	If I had any technical problem with ICT during my class, I would continue doing the planned activities.	55	45	0	0	0
12	When I have technical problem with ICT, I do not feel frustrated.	60	40	0	0	0
13	Age is not an obstacle to learn about and use ICT in my classes.	5	10	55	30	0
14	I know a lot about ICT use because I have attended some ICT training courses.	0	0	35	65	0

15	I have learned to use ICT resources by myself.	25	50	15	10	0
16	I think ICT has a positive impact on teaching process.	65	35	0	0	0
17	ICT use has more advantages than disadvantages in EFL teaching.	50	45	5	0	0

N = 20

Author: Marilud Jirón
Source: Ecuadorian high school EFL teachers

Table 2 shows the results for knowing the teachers' characteristics that have influence on ICT use in EFL classes. Regarding the parameter "strongly agree", the results reveal high percentages in the following statements: *If given the opportunity, I would like to learn about ICT use* (60%); *I think that ICTs are necessary tools in educational setting* (70%); *If I had any technical problem with ICT during my class, I would continue doing the planned activities* (55%); *When I have technical problem with ICT, I do not feel frustrated* (60%); *I think ICT has a positive impact on teaching process* (65%); *ICT use has more advantages than disadvantages in EFL teaching* (50%). These statements are related with topics such as ICT training, teaching experience and ICT importance.

First, most of teachers want learn about ICT resources, because these tools are necessary in educational setting. A teacher interviewed affirms, "I would want to attend some training course on ICT in order to understand how to use devices and computers programs". As we can see, teachers do not have enougt knowing about the ICT because they have not attended training in this field. For this reason, Olakanmi (2017) recommends ICT training in order to learn skills on software, web design software, and creating electronic resources for teaching.

The second point refers to statement 11: *If I had any technical problem with ICT during my class, I would continue doing the planned activities (55%).* Teachers affirm that when ICT resources fail in classes, they have not any problem for continuing their teaching. The teachers' experience is considered important in this case. Regarding the teacher experience (in years), this topic is discussed in terms of its relationship to performance. For example, whether teachers have more experience, his/her ability to transmit knowledge is more effective (Di Carlo, 2010). However, the years of teaching are not related to the effective use of ICT.

Third, most of teachers recognized the advantages of ICT resources. A teacher interviewed states that, "ICT are important because its use is useful to teacher and students". According to Celebic & Ilija (2011), ICT tools offer some advantages for teachers on the field of methodology and students' learning. On the other hand, ICT present disadvantages only when its tools are used for non-educative purposes. Some of these disadvantages could be the misuse of social media, cyber bulling and reliance on technology (All Answers, 2017).

Regarding the parameter "agree" most of teachers agree with the statements: *The challenge of learning about ICT use is exciting* (50%); *I am confident that I can learn technological skills* (60%); *I feel motivated to use ICT in my class* (55%); *Learning to use ICT is like learning any new skills - the more you practice, the better you become* (60%); *I am sure that with time and practice I will be as comfortable working with ICT* (70%); *I feel that I will be able to keep up with the advances happening in the ICT field* (50%); *I like to use ICT because they help me to innovate my teaching methodology* (60%); *ICT help me to motivate my students to learn English* (65%); *I have learned to use ICT resources by myself* (50%). The results show that teachers are motivated for using ICT resources. Besides, these statements are related with the psychological characteristics. A teacher interviewed affirms, "I like work with ICT because my students and I enjoy the learning

through videos, movies and audios". Regard to motivation, UNESCO (2014) argues that this characteristic can positively influenced on ICT integration into the classroom. Teachers' motivation to use ICT is varied; some believe that these tools encourage student learning, others state that ICTs renew the methodology and facilitate planning (Henry, 2014). Likewise, ICTs can influence students' motivation to learn and can increase their interest for the subject and ensure the students' engagement inside and outside the classroom (Azmi, 2017).

On the other hand, teachers argue that they are able to learn ICT use through the practice in order to acquire digital competences. Digital competences in teachers implies the reasoning and intuition that help to develop problem-solving strategies regarding the web content (Hepp et al., 2015). Additionally, it is necessary ICT training for enhancing the digital knowledge. For this reason, some teachers interviewed argue that governments must implement courses and seminars on ICT and its application in different educational environments. The objective of this training is to provide the teacher with the necessary skills and tools for teaching in the 21st century (Hepp et al., 2015).

Regarding the statement "disagree", 55% of teachers disagree with the statement *Age is not an obstacle to learn about and use ICT in my classes*. This result confirms the result of the table 1: teachers' age is a barrier on the ICT use. Most of teachers affirm that old teachers have computer anxiety when using ICT tools related to devices and digital applications. In this sense, a teacher interviewed states, "the negative relation between old' teachers and ICT is because lack of training". On the other hand, Saleh Mahdi and Al-Dera (2013) found in their research that the teachers' age had nothing to do with the ICT integration in the EFL classes. According these authors, adaptability and good attitude towards ICT are the most important teachers' characteristics.

Finally, in the parameter "strongly disagree", 65% of teachers strongly disagree with the statement, *I know a lot about ICT use because I have attended some ICT training courses*. If teachers strongly disagree in this statement, it means that there is a serious problem of ICT training. A teacher interviewed argues, "We need training in the ICT field for managing these tools. It is impossible working with a digital tool without previous knowledge of its use". Regarding this topic, Lawrence and Veena (2013) list some teachers' competencies namely, domain of basic technology operations, personal and professional use of technological tools, and application of technology in instruction. However, it is necessary previous training for acquiring these competencies. Additionally, Cabero and Barroso (2016) argue that lack of pedagogy for teaching whit ICT is the principal barrier for its integration in the EFL classes. For this reasons, most of authors recommended to implement ICT training courses and seminaries in order to get "a balance between the methodology, the linguistic content, and pedagogy" (Saleh Mahdi and Al-Dera, 2013, p. 58).

How is ICT use perceived by EFL teachers in relation to their gender?

Table 3. Teachers' perceptions by gender in relation to the aspects that they consider as barriers to use ICT in their classroom.

Nº	STATEMENT	STRONGLY AGREE		AGREE		DISAGREE		STRONGLY DISAGREE		NO ANSWER	
		%		%		%		%		%	
		M	F	M	F	M	F	M	F	M	F
1	I feel insecure about my ability to use ICT as a resource to teach.	0	0	10	10	70	60	30	20	0	0
2	I do not think I would be able to learn how to use ICT in my classroom.	0	0	0	0	50	70	50	30	0	0

#	Statement										
3	I am afraid that if I begin to use ICT, I will become dependent upon them.	0	0	0	10	40	40	60	50	0	0
4	I dislike working with machines that are smarter that I am.	0	0	10	20	50	50	40	30	0	0
5	I feel apprehensive about using ICT.	0	0	10	10	50	70	40	20	0	0
6	I have difficulty in understanding the technical aspects of ICT.	50	70	20	20	10	10	20	0	0	0
7	It scares me to think that could cause the computer to destroy a large amount of data by hitting the wrong key.	40	40	20	30	20	20	20	10	0	0
8	I hesitate the use of ICT for fear of making, mistakes that I cannot correct.	40	40	20	40	10	20	30	0	0	0
9	You have to be master to understand how to use ICT.	10	10	10	10	50	60	30	20	0	0
10	I have avoided ICT use because they are unfamiliar.	0	10	20	20	50	70	30	0	0	0
11	I have not attended some ICT training courses.	60	70	20	20	20	0	0	10	0	0
12	I have not attended some ICT training courses; however, I prefer not to use ICT because they somewhat intimidate me.	0	0	20	30	60	60	20	10	0	0
13	I am not interested in attending any ICT courses.	0	0	0	0	40	30	60	70	0	0

14	I do not know how to use any ICT Resources.	0	0	0	0	60	70	40	30	0	0
15	I do not use any ICT resource in class because I think that ICT is not necessary to teach English.	0	0	0	10	40	40	60	50	0	0
16	I prefer not to use ICT because my teaching experience is the most crucial factor in teaching process.	0	0	10	10	30	50	60	40	0	0
17	I think that age is factor that determines the ICT use in class.	20	40	60	60	20	0	0	0	0	0
18	In my opinion, younger teachers are more skillful to use ICT than the older ones.	20	30	60	60	20	0	0	10	0	0

N = 20

Author: Marilud Jirón
Source: Ecuadorian high school EFL teachers

Table 3 aims to show the barriers on the ICT integration by making a comparison by gender (male, female). However, in this study no significant differences were found between the percentages of female and male teachers. Regarding the parameter "strongly agree", male and female teachers strongly agree with the following statements: *I have difficulty in understanding the technical aspects of ICT (50%M, 70%F)*; *It scares me to think that I could cause the computer to destroy a large amount of data by hitting the wrong key(40%M, 40%F)*; *I hesitate the use of ICT for fear of making, mistakes that I cannot correct (40%M, 40%F)*; *I have not attended some ICT training courses (60%M, 70%F)*;. As we can see, the range of variation between males and female teachers is not significant. However, it is necessary to insist that the lack of training constitutes the main barrier on ICT use for both genders.

On the other hand, in statement six of table 3, 70% of female teachers say they have difficulty understanding the technical aspects of ICT. This data is relevant because it shows that women need to receive special attention in the technical field of ICT. A female teacher interviewed states, "men understand better the mechanical or technical aspects of a device. However, female teachers also need to be trained in this field". According to Lawrence and Veena (2013), male and female teachers should have three basic competencies on ICT: domain of basic technology operations, personal and professional use of technological tools, and application of technology in instruction. The acquisition of these skills will only be possible with adequate training and knowledge of technological tools.

Regarding the parameter "agree", male and female teachers agree in these statements: *I think that age is factor that determines the ICT use in class (60%M, 60%F)*; *In my opinion, younger teachers are more skillful to use ICT than the older ones (60%M, 60%F)*. The data reveal that both genders agree that age is a barrier to teaching with ICT. A male teacher interviewed affirms that teachers of 40 years or more do not dominate technological resources. Even old teachers get to have techno anxiety when using ICT in their classes. According to Rahimi and Yadollahi (2011), techno-anxiety is a fear about working with ICT tools or even thinking about using computers. Techno-anxiety is related with teachers' gender and teachers' age. However, the relationship between these indicators is not well defined.

Regarding the parameter "disagree", male and female teachers desagree whit these statements: *I feel insecure about my ability to use ICT as a resource to teach (70%M, 60%F)*; *I do not think I would be able to learn how to use ICT in my classroom (50%M, 70%F)*; *I dislike working with machines that are smarter that I am (50%M, 50%F)*; *I feel apprehensive about using ICT (50%M, 60%F)*; *You have to be master to understand how to use ICT (50%M, 60%F)*; *I have avoided ICT use because they are unfamiliar (50%M,*

70%F); *I have not attended some ICT training courses; however, I prefer not to use ICT because they somewhat intimidate me(60%M, 60%F)*; *I do not know how to use any ICT Resources(60%M, 70%F)*. According to this data, male teachers have more "confidence" when using ICT in their classes. On the other hand, the main characteristic of female teachers is the "motivation" on ICT use.

Men and women have different abilities to perform the same activity. In the field of ICT, male teachers have greater confidence when working with electronic devices such as computers, video projectors or audio players. Therefore, it is possible to say that self-confidence is a factor that encourages the use of ICT resources in the teaching of EFL. Sang et al., (2010) argue that the degree of self-confidence of EFL teachers increases with frequent use of computers and web resources. Likewise, the teachers with self-confidence regarding ICT tools show less computer-anxiety.

On the other hand, female teachers feel motivated in the ICT use. For them, although ICT have technical aspects that are difficult to learn, these tools are necessary in the teaching of EFL to students, who "belong to a new technological generation", according to a female teacher interviewed. Regard to tachers' motivation, UNESCO (2014) states that this characteristic positively influences on ICT integration into the classroom. Teachers' motivation to use ICT is varied; some believe that these tools encourage student learning, others states that ICTs renew the methodology and facilitate curriculum planning (Henry, 2014).

Regarding the parameter "strongly disagree", male and female teachers strongly disagree with the following statements: *I am afraid that if I begin to use ICT, I will become dependent upon them(60%M, 50%F)*; *I am not interested in attending any ICT courses(60%M, 70%F)*; *I do not use any ICT resource in class because I think that ICT is not necessary to teach English(60%M, 50%F)*; *I prefer not to use ICT because my teaching*

experience is the most crucial factor in teaching process(60%M, 40%F). The data show

that male and female teachers are aware of the ICT importance in the field of education.

Male teachers and female teachers believe that the teaching experience is not

enough to meet the educational needs of students today. Especially, female teachers claim

that ICT us is a complement to their teaching experience. An interviewed teacher affirms,

"I believe that currently it is not possible to teach with traditional pedagogy, it is necessary

to acquire knowledge on how to teach with ICT". For this reason, the years of teaching are

not related to the effective use of ICT. According to the study of Rahimi & Yadollahi

(2011), the teaching experience (in years) does not diminish the level of techno-anxiety,

but rather the utilization of ICT in teaching procedure was negatively associated with

teaching experience. This result may be due to lack of digital knowledge and technological

skills, or lack of enough training for effective ICT integration in EFL teaching. Aditionally,

Pegalajar (2017) recommends that the education authority should to invest more and

promote professional recognition in the digital training for developing the teachers' skills

on ICT.

Table 4. Teachers' characteristics that influence the most on teachers to use ICT in their classroom.

Nº	STATEMENT	STRONGLY AGREE		AGREE		DISAGREE		STRONGLY DISAGREE		NO ANSWER	
		%		%		%		%		%	
		M	F	M	F	M	F	M	F	M	F
1	The challenge of learning about ICT use is exciting.	30	40	50	50	20	10	0	0	0	0
2	I am confident that I can learn technological skills.	40	20	50	70	10	10	0	0	0	0
3	I feel motivated to use ICT in my class.	30	40	60	50	10	10	0	0	0	0

4	Learning to use ICT is like learning any new skills - the more you practice, the better you become.	30	20	60	60	10	20	0	0	0	0
5	I am sure that with time and practice I will be as comfortable working with ICT.	20	30	80	60	0	10	0	0	0	0
6	I feel that I will be able to keep up with the advances happening in the ICT field.	30	20	40	60	30	10	0	10	0	0
7	If given the opportunity, I would like to learn about ICT use.	50	70	50	30	0	0	0	0	0	0
8	I think that ICT are necessary tools in educational setting.	80	60	20	40	0	0	0	0	0	0
9	I like to use ICT because they help me to innovate my teaching methodology.	30	20	60	60	10	20	0	0	0	0
10	ICT help me to motivate my students to learn English.	20	20	70	60	10	10	0	10	0	0
11	If I had any technical problem with ICT during my class, I would continue doing the planned activities.	50	60	50	40	0	0	0	0	0	0
12	When I have technical problem with ICT, I do not feel frustrated.	70	50	30	50	0	0	0	0	0	0
13	Age is not an obstacle to learn about and use ICT in my classes.	10	0	0	20	50	60	40	20	0	0
14	I know a lot about ICT use because I have attended some ICT training courses.	0	0	0	0	30	40	70	60	0	0

15	I have learned to use ICT resources by myself.	20	30	60	40	10	20	10	10	0	0
16	I think ICT has a positive impact on teaching process.	70	60	30	40	0	0	0	0	0	0
17	ICT use has more advantages than disadvantages in EFL teaching.	50	50	40	50	10	0	0	0	0	0

N = 20

Author: Marilud Jirón
Source: Ecuadorian high school EFL teachers

The table 4 shows the results for knowing the teachers' characteristics that have influence on ICT use by making a comparison by gender (male and female). Regarding the parameter "strongly agree", the results reveal high percentages, for both genders, in the following statements: *If given the opportunity, I would like to learn about ICT use(50%M, 70%F)*; *I think that ICT are necessary tools in educational setting(800%M, 60%F)*; *If I had any technical problem with ICT during my class, I would continue doing the planned activities(50%M, 60%F)*; *When I have technical problem with ICT, I do not feel frustrated(70%M, 50%F)*; *I think ICT has a positive impact on teaching process(70%M, 60%F)*; *ICT use has more advantages than disadvantages in EFL teaching(50%M, 50%F)*. The results show that male teachers have more security that female teachers when using ICT during the class development. However, female teachers have confidence and motivation for working whit ICT, especially because these tools have several advantages in EFL teaching. As we can see, psychological and educative characteristics are influencing the ICT use.

Additionally, it is necessary to consider the statement seven of table 4. In fact, 70% of female teachers agree with "*If given the opportunity, I would like to learn about ICT use*". The data reveal that female teachers want acquire technological literacy and digital

knowledge. When this study was carried out, it was possible to verify that there are more female EFL teachers in secondary education institutions. For this reason, it is important to pay special attention to the female population of teachers, in order to provide them with the necessary tools for their professional development. This observation is in line with the data provided by some studies. Thus, there are approximately 8000 EFL teachers in Ecuador, and 70% of them are female teachers (Constante, 2016; Universia, 2016). After to analyzing this information, it is possible to speak of a "feminization" of the teaching profession. According to Kelleher (2011), "the term 'feminization' has tended to apply to countries where women are a significant majority in the teaching workforce" (p. 1). Although most EFL teachers are women, female teachers still have problems understanding the technical aspects of ICT. Consequently, the ICT integration programs should take into account the population of female teachers and the characteristics of this gender (Saleh Mahdi and Al-Dera, 2013).

Regarding the parameter "agree", male and female teachers agree with the statements: *The challenge of learning about ICT use is exciting(60%M, 0%F)*; *I am confident that I can learn technological skills(50%M, 70%F)*; *I feel motivated to use ICT in my class(60%M, 50%F)*; *Learning to use ICT is like learning any new skills the more you practice, the better you become(60%M, 60%F)*; *I am sure that with time and practice I will be as comfortable working with ICT(80%M, 60%F)*; *I feel that I will be able to keep up with the advances happening in the ICT field(40%M, 60%F)*; *I like to use ICT because they help me to innovate my teaching methodology(60%M, 60%F)*; *ICT help me to motivate my students to learn English(0%M, 0%F)*; *I have learned to use ICT resources by myself(60%M, 40%F)*. After analyzing this data, it was possible determine two points for developing namely, the "adaptability" in male teachers and the "motivation" in female

teachers. Again, psychological and educational characteristics are relevant when teachers teach using ICT.

On the one hand, the male teachers understand that teachers' role has changed with the integration of ICT in the curriculum. Whit the advent of digital tools, teachers' role has evolved from the role of a lecturer to a facilitator of learning with ICT (Azmi, 2017). A teacher interviewed argues that, "teaching with ICT requires the teachers' adaptability". This means that teachers must be guides to help students to learn using the advantages of the computers, Internet and others devices and applications. In this sense, the teachers' adaptability toward ICT requires que "teachers assume the role of facilitators and skills developers" (Safiul and Alam, 2010, p. 99). On the other hand, female teachers are motivated to work with ICT. The advantages offered by these tools are the reason why female teachers like to teach with ICT resources in their EFL classes. In any case, motivation is also a characteristic that male teachers presented in this study.

Regarding the statement "disagree", male and female teachers disagree with the statement: *Age is not an obstacle to learn about and use ICT in my classes (50%M, 60%F).* As we can see, both genders have the same perceptions regarding the teachers' age as a barrier to the integration of ICT.

Regarding teachers' age, it is evident that old teachers and young teachers present significant differences when using ICT. In the developing countries, the integration of ICT in education dates back a decade and many of the current teachers studied their educational career at a time when electronic devices and the internet were not usual. Consequently, ICTs are unfamiliarity to many EFL teachers, especially for those who have not received adequate training in the use of these tools. For this reason, older teachers could be more technophobic than younger ones (Combs, 2005). Nevertheless, age is an imprecise variable. On the one hand, Scherera et al. (2014) conclude in their study that there are

positive relations to teachers' self-efficacy and technological tools, but a negative relation to teachers' age and ICT use. On the other hand, Saleh Mahdi and Al-Dera (2013) found in their research that most of the teachers felt that the teachers' age had nothing to do with the ICT integration in the EFL classrooms. For these teachers, the most important characteristics is adaptability and good attitude towards the challenges and changes that ICT propose.

Finally, in the parameter "strongly disagree", male and female teachers present similar percentages in the statement *I know a lot about ICT use because I have attended some ICT training courses (70%M, 60%F)*. After analyzing this data, it is possible to conclude again that teachers urgently need official training programs in the ICT field. A female teacher interviewed says, "If the Government wants a quality education, it must provide ICT training courses to teachers". Certainly, some teachers have attended ICT training courses and, for this reason, they know how to manage these resources in their teaching. Teachers with necessary knowledge and skills on ICT applications are quite optimistic about positive effect ICT have on teaching process (Malinina, 2015). However, the lack of training is the most frequent barrier on ICT integration. Most of teachers require learning skills on software, web design software, and creating electronic resources for effectively developing of their classes (Olakanmi (2017). On the other hand, teachers point out that training courses have high costs. For this reason, it is necessary to recognize that financial barriers are the main factor for integrating ICT training (UNESCO, 2014). Consequently, the responsibility of implementing these courses belongs to government and the educative authorities.

For concluding, Connell (2002) argues that assuming teacher' gender as an important predictor of abilities, skills and interests is erroneous. Male teachers and female teachers have the same abilities to learn and use ICT, but the motivation and creativity to use these

tools could be different depending of gender. In this study, it was possible to verify that there are no significant differences between the perceptions of male teachers and female teachers. However, as we have seen, men and women have different motivations for using ICT in their EFL classes. Thus, female teachers are supportive and open toward integrating the digital resources within the classrooms. Consequently, Bøgh Andersen (2011) concludes that female teachers see themselves as more efficient and are more satisfied than male teachers especially in the use of digital contents. On the other hand, male teachers have more confidence and believe are able to manage these resources without any problem. Finally, in Morley's opinion (2011), male teachers appear to use ICT less in class than female teachers, but in the current study, the assumption made by Morley was not verified.

CONCLUSIONS

The age of teachers is a barrier for using and integrating ICT resources in EFL classes. Old teachers (45 years old or older) are oblivious afraid to new technologies, and for this reason, they can even feel techno-anxiety when working with electronic devices or digital applications. On the other hand, young teachers tend to use technology with greater confidence and security to benefit their students' learning.

Lack of ICT training is considered a barrier on ICT use in EFL classes. Most teachers believe that it is impossible to teach using ICT if there is not adequate training. The skills necessary for using ICT can only be obtained through professional learning in courses taught by experts in the ICT field.

Teachers feel motivation and confidence towards ICT. This shows that psychological characteristics influence teachers to use technological and digital tools. Despite the difficulty in understanding the technical aspects of ICT, most teachers are willing to adapt to the new challenges and changes that ICT represent.

Teachers believe that ICT have many advantages in the educational field. Teachers mention that its use improves methodology and encourages student learning, among other pedagogical advantages. For most teachers, ICT resources facilities the planning, application and evaluation of contents within EFL classes.

It is determined that there are no significant gender differences in the perception of ICT. This is probably because gender inequality has gradually been reduced in the educational field. However, it is necessary to emphasize that female teachers have slightly more difficulty in understanding the technical aspects of ICT.

Finally, it has been proven that male and female teachers use ICT in different ways. On the one hand, female teachers feel more motivation and confidence towards ICT, since

these tools have improved their pedagogy within the classroom. On the other hand, the main characteristic of male teachers is their security to handle these tools during the development of their EFL classes.

RECOMMENDATIONS

It is recommended to provide old teachers with basic training courses in ICT tools. These courses could consider elementary topics such as managing a computer, surfing the Internet and using video projector. The expected results are to provide knowledge in ICT to decrease the techno-anxiety in old teachers.

It is recommended to implement seminars and courses to address the relationship between psychological characteristics and technology applied to the educational field. Its main goal is to reinforce EFL teachers' positive perception. Aditionally, the motivation and confidence acquired through this seminars can help to prevent thecno-anxiety.

It is recommended that Government through the Ministry of education provides training in the ICT field since most teachers cannot afford private courses. These training courses must be updated every year because the technology is constantly updated. The objective is to have continuous and free ICT training for the progress of education.

It is recommended that the educational centers renew and update ICT resources within classrooms, in order to provide appropriate tools to EFL teachers. The success of ICT integration in education depends on two factors namely, training and technological infrastructure.

REFERENCES

All Answers. (2017, August 14). *All Answer Limited*. Retrieved from https://www.ukessays.com/essays/information-systems/advantages-disadvantages-ict-social-9566.php

Aprianti, F. (2017). EFL Teachers' Perceptions on ICT use for continuing professional development. *English Language Teaching and Technology Journal, 1*(1), 12-21. Retrieved from http://ejournal.upi.edu/index.php/ELTTech/article/view/942

Aydin, S. (2012). Teachers' perceptions about the use of computers in EFL teaching and learning: the case of Turkey. *Computer Assisted Language Learning, 16*(3), 214-233.

Azmi, N. (2017). The Benefits of Using ICT in the EFL Classroom: From Perceived Utility to Potential Challenges . *Journal of Educational and Social Research*, 111-118.

Balöz, T. (2016). Pre-service EFL Teachers Attitudes towards Language Learning through Social Media. *Procedia - Social and Behavioral Sciences*, 430-438.

Bøgh Andersen , L. (2011, September 10). *Teacher diversity: Do male and female teachers have different self-efficacy and job satisfaction?* Retrieved from Paper prepared for the 33rd EGPA conference in Bucharest.: https://soc.kuleuven.be/io/egpa/HRM/bucharest/Andersen2011.pdf

Bradley, G. (2017). *The Good ICT Society: From Teories to Actions.* New York: Routledge.

Cabero, J., & Barroso, J. (2016). ICT teacher training: a view of the TPACK model. *Culture and Education*, 633-673.

Celebic, G., & Ilija, D. (2011). *Basic Concepts of Information and Communication Technology.* Open Society for Idea Exchange (ODRAZI): Zagreb.

Comia , S., Argentin, G., & Gui, M. (2016). Is it the way they use it? Teachers, ICT and student achievement. *Economics of Education Review*, 24-39.

54

Combs, N. G. (2005). The relationships between selected sources of computer anxiety experienced by beginning computer users and approaches to computer-based training. *Unpublished master's thesis. Portland: University of Oregon Applied Information Management Program.* 43-56

Connell, R. (2002). Gender: Short introductions. *Cambridge: Polity.*

Constante, S. (2016, september 20). *Ecuador is looking for English teachers.* Retrieved from EL PAIS:

https://elpais.com/internacional/2016/09/19/actualidad/1474312080_785677.html

Cooper, J. (2006). The digital divide: The special case of gender. Journal of Computer Assisted Learning. vol. 22, 320- 334

Darrin Wood, T. (2012). Teacher Perceptions of Gender-Based Differences among Elementary School Teachers, *International Electronic Journal of Elementary Education.* Vol 4(2), 317-345,

Di Carlo, M. (2010, november 18). *Albert Shanker Institute.* Retrieved from The Teaching Experience: http://www.shankerinstitute.org/blog/teaching-experience

Durndell, A. (1997). Gender and computing: A decade of change? *AEDS Journal.* vol. 19, 216-225.

Fabre, G., & Popova, I. (2017). Digital inclusion of secondary schools' subject teachers in Bolivia. *International Journal of Education and Development using Information and Communication Technology*, 41-56.

Fan, T. S., & Li, Y. C. (2005). Gender issues and computers: College computer science education in Taiwan. *Computers & Education*. Vol. 44, 285-300.

Hatlevik, O. E., Throndsen, I., Loic, M., & Gudmundsdottir, G. (2018). Students' ICT self-efficacy and computer and information literacy: Determinants and relationships. *Computers & Education*, 107-119.

Henry, M. (2014). Learning in the Digital Age. (S. Younie, M. Leask, & K. Burden, Eds.) *Teaching and Learning with ICT in the Primary School*, 10-20.

Hepp, P., Prats, M., & Holgado, J. (2015). Teacher training: technology helping to develop an innovative and reflective professional profile. *Universities and Knowledge Society Journal*, 30-43.

Inspectorate Evaluation Studies of Ireland. (2008). *ICT in Schools.* Dublin: Evaluation Support and Research Unit: Inspectorate: Department of Education and Science.

Intarapanicha, C. (2013). Teaching Methods, Approaches and Strategies Found in EFL . *Procedia, Social and Behavioral Sciences*, 306 – 311 .

Islahi, F., & Nasreen. (2013). Who Make Effective Teachers, Men or Women? An Indian Perspective. *Universal Journal of Educational Research*, 285-293.

Kelleher, F. (2011). *Women and the Teaching Profession: Exploring the Feminisation Debate.* Commonwealth Secretariat: London.

Kay, R. H. (2006). Addressing gender differences in computer ability, attitudes and use: The laptop effect. *Journal of Educational Computing Research*. vol. 32, 187-211.

Kay, R. H. (1992). An analysis of methods used to examine gender differences in computer related behavior. *Journal of Educational Computing Research*. vol. 8, 323-336.

Kourieos, S., & Evripidou, D. (2013). Students' Perceptions of Effective EFL Teachers in University Settings in Cyprus. *English Language Teaching*, 1-13.

Liaw, S. (2002). An internet survey for perceptions of computers and the World Wide Web: Relationship, prediction, and difference. *Computers in Human Behavior,* 18, 17-35.

Lawrence, A., & Veena, K. (2013). *Academia.edu.* Retrieved from ICT and Teachers competences:

http://www.academia.edu/1462066/ICT_AND_TEACHER_COMPETENCIES

Malinina, I. (2015). ICT Competencies of Foreign Languages Teachers. *Procedia - Social and Behavioral Sciences*, 75-80.

Maya Silviyanti, T., & Qismullah Yusuf , Y. (2015). EFL Teachers' Perceptions on Using ICT in their Teaching: To Use or to Reject? *Teaching English with Technology, 15*(4), 29-43. Retrieved from http://www.tewtjournal.org

Moradkhani, S., & Haghi, S. (2017). Context-based sources of EFL teachers' self-efficacy: Iranian public schools versus private institutes. *Teaching and Teacher Education*, 259-269.

Morley, G. (2011). Primary Teachers and ICT: Is gender, age or experience important? *Systemics, Cybernetics and Informatics* , 5-9.

Mozafari, P., & Wray , D. (2013). Iranian EFL Teachers' perspectives on their use of ICT in their Teaching practices: A multiple Case Study. *CEUR Workshop Proceedings.*, 57-64. Retrieved from http://ceur-ws.org/Vol-1093/paper9.pdf

Olakanmi, E. (2017). In-service secondary school teachers' technology integration needs in an ICT-enhanced classroom. *Turkish Online Journal of Educational Technology* , 78-86.

Pegalajar, C. (2017). Teacher training in the use of ICT for inclusion: differences between Early Childhood and Primary Education. *Procedia - Social and Behavioral Sciences*, 144-149.

Poynton, T.A. (2005). Computer literacy across the lifespan: A review with implications for educators. *Computers in Human Behavior.* vol. 21, 861-872.

Rahimi , M., & Yadollahi , S. (2011). Computer anxiety and ICT integration in English classes among Iranian EFL teachers. *Procedia Computer Science*, 203–209.

Rahman, L., & Kaiser, S. (2016). *Computer Fundamentals and ICT.* Dhaka: Daffodil International University Press.

Resta, P. (2006). Information and Communications Technology (ICT) Fluency: What Do All High School Students Need to Know? (S. Marcus, Ed.) *ICT fluency and high schools*, 86-89.

Safiul, S., & Alam , S. (2010). The Role of Information and Communication Technologies (ICTs) in Delivering Higher Education – A Case of Bangladesh. *International Education Studies, 3*, 97-106.

Saleh Mahdi, H., & Al-Dera, A. (2013). The Impact of Teachers' Age, Gender and Experience on the Use of Information and Communication Technology in EFL Teaching. *English Language Teaching*, 57-67.

Salinas, Á., Nussbaum, M., Herrera, M., Solarte, M., & Aldunate, R. (2017). Factors affecting the adoption of information and communication technologies in teaching. *Springer: Education and Information Technologies, 22*, 2175–2196.

Sang, G., Valcke, M., van Braak, J., & Tondeur, J. (2010). Student teachers' thinking processes and ICT integration: Predictors of prospective teaching behaviours with educational technology. Computers & Education. *Computers and Education*, 103-112.

Scherera, R., Siddiq, F., & Teo, T. (2014). Becoming more specific: Measuring and modeling teachers' perceived usefulness of ICT in the context of teaching and learning. *Computers & Education*, 202-214.

Solano, L., Cabrera, P., Ulehlova, E., & Espinoza, V. (2017). Exploring the Use of Educational Technology in EFL Teaching: A Case Study of Primary Education in the South Region of Ecuador. *Teaching English with Technology, 17*(2), 77-89. Retrieved from http://www.tewtjournal.org

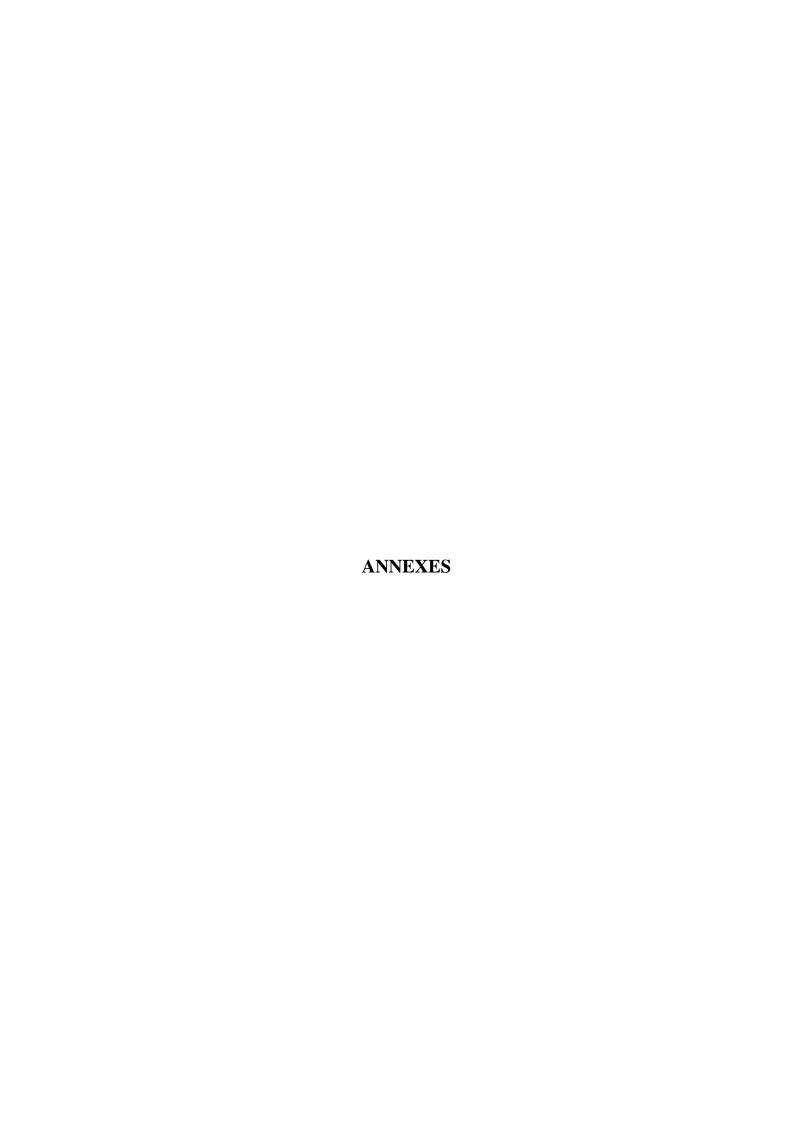Teo, T. (2008). Pre-service teachers' attitudes towards computer use: A Singapore survey. *Australian Journal of Educational Technology*, 24(4), 413-424.

Tolani, N., McCormac, M., & Zimmermann, R. (2011). An Analysis of the Research and Impact of ICT in Education in Developing Country Contexts. (J. Steyn, & G. Johanson, Eds.) *Information Science Reference*, 218-242.

UNESCO. (2014). *Information and Communication Technology (ICT) in Asia: A comparative analysis of ICT integration and e-readiness in schools across Asia.* Montreal, Quebec: UNESCO, Institute for Statistics.

UNESCO. (2014). *Model Policy for Inclusive ICTs in education for Persons with Disabilities.* Paris: United Nations Eduational, Scientific and Cultural Organization.

UNESCO. (2015). *ICT Competency Framework for Teachers.* France: United Nations Educational Scientifi c and Cultural Organization.

Universia. (2016, october 5). *Ecuador needs 3,000 English teachers*. Retrieved from Universia News:

 http://noticias.universia.es/practicas-empleo/noticia/2016/10/05/1144259/ecuador-necesita-3-000-profesores-ingles.html

Vrasidas, C., Zembylas, M., & Glass, G. (2009). *ICT for Educational, Development and Social Justice.* States Unites of America: Information Age Publishing, Inc.

Wong, S. L., & Hanafi, A. (2007). Gender differences in attitudes towards information technology among Malaysian student teachers: A case study at University Putra Malaysia. *Educational, Technology & Society*. vol. 10, 158-169.

ANNEXES

UNIVERSIDAD TÉCNICA PARTICULAR DE LOJA
La Universidad Católica de Loja

MODALIDAD ABIERTA Y DISTANCIA
TITULACIÓN DE INGLÉS
TEACHERS' SURVEY

Gender: M ( ) F ( )
Years of EFL teaching experience: ( )
Age: ( )

1. For each statement, decide whether you disagree or agree with the statement using the following five-point scales ranging from strongly disagree to strongly agree.

Nº	STATEMENT	STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DESAGREE	NO ANSWER
1	I feel insecure about my ability to use ICT as a resourse to teach.					
2	I do not think I would be able to learn how to use ICT in my classroom.					
3	I am afraid that if I begin to use ICT, I will become dependent upon them.					
4	I dislike working with machines that are smarter that I am.					
5	I feel apprehensive about using ICT.					
6	I have difficulty in understanding the technical aspects of ICT.					

7	It scares me to think that could cause the computer to destroy a large amount of data by hitting the wrong key.					
8	I hesitate the use of ICT for fear of making, mistakes that I cannot correct.					
9	You have to be master to understand how to use ICT.					
10	I have avoided ICT use because they are unfamiliar.					
11	I have not attended some ICT training courses.					
12	I have not attended some ICT training courses; however, I prefer not to use ICT because they somewhat intimidate me.					
13	I am not interested in attending any ICT courses.					
14	I do not how to use any ICT Resources.					
15	I do not use any ICT resource in class because I think that ICT is not necessary to teach English.					
16	I prefer not to use ICT because my teaching experience is the most crucial factor in teaching process.					
17	I think that age is factor that determines the ICT use in class.					
18	In my opinion, younger teachers are more skillful to use ICT than the older ones.					

2. For each statement, decide whether you disagree or agree with the statement using the following five-point scale ranging from strongly disagree to strongly agree.

Nº	STATEMENT	STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DESAGREE	NO ANSWER
1	The challenge of learning about ICT use is exciting.					
2	I am confident that I can learn technological skills.					
3	I feel motivated to use ICT in my class.					
4	Learning to use ICT is like learning any new skills - the more you practice, the better you become.					
5	I am sure that with time and practice I will be as confortable working with ICT.					
6	I feel that I will be able to keep up with the advances happening in the ICT field.					
7	If given the opportunity, I would like to learn about use ICT.					
8	I think that ICT are necessary tools in educational setting.					
9	I like to use ICT because they help me to innovate my teaching methodology.					
10	ICT help me to motivate my students to learn English.					
11	If I had any technical problem with ICT during my class, I would continue doing the planned activities.					
12	When I have technical problem with ICT, I do not feel frustrated.					
13	Age is not an obstacle to learn about and use ICT in my classes.					

14	I know a lot about ICT use because I have attended some ICT training courses.					
15	I have learned to use ICT resources by myself.					
16	I think ICT has a positive impact on teaching process.					
17	ICT use has more advantages than disadvantages in EFL teaching.					

Thanks for your collaboration

UNIVERSIDAD TÉCNICA PARTICULAR DE LOJA
La Universidad Católica de Loja

MODALIDAD ABIERTA Y DISTANCIA
TITULACIÓN DE INGLÉS
TEACHERS' INTERVIEW

Gender: M ( )   F ( )
Years of EFL teaching experience: (   )
Age: ( )

1. Do you think the use of ICT is important to teach English?

YES ( ) NO ( )
Why?
_____
_____
_____

2. Do you use ICT in your English classes?

YES ( ) NO ( )
Why?
_____

3. If your answer was affirmative in the previous question, how do you feel (afraid, nervous, relaxed, confident, etc.) when you use ICT? Why?
_____
_____
_____

4. Do you consider that factors such as psychological, personal, etc., which are related to your characteristics as a teacher, are barriers to use ICT in your classes? (If it is necessary, use some of the statements in the teachers' survey to explain these factors)

YES ( ) NO ( )
Why?
_____
_____
_____

5. Do you consider that factors such as psychological, personal, etc., which are related to your characteristics as a teacher, have a positive influence on you to use ICT in your classes? (If it is necessary, use some of the statements in the teachers' survey to explain these factors)

YES ( ) NO ( )
Why?
_____
_____
_____

6. Is there any advantage to use ICT in EFL teaching?

YES ( ) NO ( )
Why?
_____
_____
_____

7. Is there any disadvantage to use ICT in EFL teaching?

YES ( ) NO ( )
Why?
_____
_____
_____

8. According to your opinion, who uses more frequently ICT in EFL classes, male or female teachers?

Male ( ) Female ( )
Why?
_____
_____