



UNIVERSIDAD TÉCNICA PARTICULAR DE LOJA

La Universidad Católica de Loja

AREA SOCIOHUMANÍSTICA

TITULO DE LICENCIADO EN CIENCIAS DE LA EDUCACIÓN

MENCIÓN INGLÉS

Ecuadorian High Schools Teachers' Perceptions on ICT Use

TRABAJO DE TITULACIÓN

AUTORA: Hidalgo Albuja, Martha Lucía

DIRECTORA: Solano Jaramillo, Lida Mercedes

CENTRO UNIVERSITARIO CAYAMBE

2018



Esta versión digital, ha sido acreditada bajo la licencia Creative Commons 4.0, CC BY-NC-SA: Reconocimiento-No comercial-Compartir igual; la cual permite copiar, distribuir y comunicar públicamente la obra, mientras se reconozca la autoría original, no se utilice con fines comerciales y se permiten obras derivadas, siempre que mantenga la misma licencia al ser divulgada. <http://creativecommons.org/licenses/by-nc-sa/4.0/deed.es>

Marzo del 2018

APROBACIÓN DEL DIRECTOR DEL TRABAJO DE TITULACIÓN

Magister.

Lida Mercedes Solano Jaramillo

DOCENTE DE TITULACIÓN

De mi consideración:

El presente trabajo de titulación Ecuadorian high school teachers' perceptions on ICT use, realizado por Hidalgo Albuja Martha Lucia ha sido orientado y revisado durante su ejecución, por lo tanto se aprueba la presentación del mismo.

Loja, abril de 2018

f).....

Mgtr. Lida Mercedes Solano Jaramillo

DECLARACIÓN DE AUTORÍA Y CESIÓN DE DERECHOS

“Yo, Hidalgo Albuja Martha Lucia declaro ser autora del presente trabajo de titulación: Ecuadorian high school teachers’ perceptions on ICT use, de la Titulación de Ciencias de la Educación mención Inglés, siendo Mgtr. Lida Mercedes Solano Jaramillo directora del presente trabajo y eximió expresamente a la Universidad Técnica Particular de Loja y sus representantes legales de posibles reclamos o acciones legales. Además, certifico que las ideas, conceptos, procedimientos y resultados vertidos 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 las 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: Martha Lucia Hidalgo Albuja

Cédula: 1704062718

DEDICATION

First, I want to thank God for everything he has given me to obtain this degree.

I want to dedicate this thesis to my dear children Maria Dolores and Esteban, who have been my inspiration and my strength, and above all the engine that has always given meaning to my life. Thank you for exist my beloved children.

I also want to dedicate this research to my husband Edgar for his unconditional help especially in those moments when the road had begun to get a little long.

Martha Lucia.

ACKNOWLEDGMENT

I would like to express my gratitude to Universidad Técnica Particular de Loja for the academic support I have received during my academic studies. In addition, I would like to express my sincere gratitude to my thesis director Mgtr. Lida Mercedes Solano Jaramillo for her support and motivation during the development of this research topic. I would also like to thank those teachers who were with me, with their invaluable help and direction during the years of study that took me to achieve this goal. And special thanks to Lcda. Patricia Ordoñez for being the person who was always there, ready to listen and help to solve any difficulty that appeared to me.

Martha Lucia.

CONTENTS

COVER	Error! Bookmark not defined.
APROBACIÓN DEL DIRECTOR DEL TRABAJO DE TITULACIÓN	ii
DECLARACIÓN DE AUTORÍA Y CESIÓN DE DERECHOS	iii
DEDICATION	iv
ACKNOWLEDGMENT	v
CONTENTS	vi
ABSTRACT	1
RESUMEN	1
INTRODUCTION	3
CHAPTER I: LITERATURE REVIEW	5
CHAPTER II: METHOD	19
CHAPTER III: DISCUSSION	23
Description, analysis, and interpretation of results	23
CONCLUSION	48
RECOMMENDATIONS	49
REFERENCES	50
ANNEXES	55

LIST OF TABLES

Table 1: TEACHERS´ CHARACTERISTICS CONSIDERED BY EFL TEACHERS AS BARRIERS TO USE IN ICT IN THEIR CLASSROOM	23
Table 2: TEACHER CHARACTERISTICS THAT INFLUENCE THE MOST OF THE TEACHERS TO USE ICT IN THEIR CLASSROOM.....	32
Table 3: TEACHERS´ PERCEPTIONS OF GENDER IN RELATION TO THE ASPECTS THAT THEY CONSIDER AS BARRIERS TO USE ICT IN THEIR CLASSROOM.....	41
Table 4: TEACHERS´ PERCEPTIONS OF GENDER IN RELATION TO THE MOST INFLUENTIAL TO USE ICT IN THEIR CLASSROOM.....	46

ABSTRACT

This study is aimed to investigate and analyze the EFL teacher's Perceptions regarding Information and Communication Technology, the barriers to the use of ICT in their classrooms, the factors that influence teachers the most to use ICT , and the perception by teachers of the use of ICT about their gender.

This research was done in the city of Cayambe, being the sample for the investigation 20 teachers from public and private high school, ten male and ten female. The instruments for data collection were teachers' surveys as well as teachers' interviews. This research mainly relied on a qualitative approach.

Furthermore, the answers were analyzed and the results from the current study, which indicate an indirect correlation between ICT use and an EFL teacher's age, gender, and length of teaching experience

The study has also established that the use of ICT is less prevalent among teachers in older age because they are less familiar with ICT tools. Thus anxiety becomes a barrier for them. The findings from the study also revealed that a gap still exists between ICT use and the general ICT curriculum which does not clearly guide teachers to integrate ICT effectively into the learning process.

Key words: Information and Communication Technology (ICT), English as a Foreign Language (EFL), attitudes, barriers, teachers' characteristics

RESUMEN

Este estudio tiene como objetivo investigar y analizar las Percepciones de los profesores de EFL sobre Tecnologías de la Información y la Comunicación, las barreras al uso de las TIC en sus aulas, los factores que más influyen en los docentes para utilizar las TIC y la percepción de los docentes del uso de las TIC en relación con su género.

Esta investigación se realizó en la ciudad de Cayambe, siendo la muestra para la investigación 20 docentes de escuelas secundarias públicas y privadas, 10 hombres y 10 mujeres. Los instrumentos para la recopilación de datos fueron las encuestas de los docentes y las entrevistas a los docentes. Esta investigación se basó principalmente en un enfoque cualitativo.

Además, las respuestas fueron analizadas y los resultados del presente estudio el cual indica una correlación indirecta entre el uso de las TIC y la edad, el sexo y la duración de la experiencia docente de un profesor de EFL.

El estudio también ha establecido que el uso de las TIC es menos frecuente entre los docentes en los grupos de mayor edad, porque ellos están menos familiarizados con las herramientas TIC, por lo que la ansiedad se convierte en una barrera.

Estos hallazgos del estudio revelan también que aún existe una brecha entre el uso de TIC y el currículo general de TIC que no guía claramente a los docentes a integrar las TIC de manera efectiva en el proceso de aprendizaje.

PALABRAS CLAVES: Tecnología de la información y la comunicación (TIC), inglés como lengua extranjera (EFL), actitudes, barreras, características de los docentes.

INTRODUCTION

The use of emerging technologies and tools for teaching and learning has raised questions regarding their effectiveness in this process. This has also created an urge among researchers to investigate on the same and particularly on ICT use. So far, the general agreement among researchers points to the fact that use of ICT could significantly improve the outcomes of EFL teaching and learning practices. However, knowledge obtained from previous studies has not articulated the relationship between teacher characteristics and ICT use. For this reason, the current study focuses on Ecuadorian high schools teachers' perceptions on ICT use.

The aim of the study involves investigating and analyzing the EFL teacher's perceptions regarding information and communication by giving responses to the questions indicated below:

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

What factor regarding teachers' characteristics influences teachers the most to use ICT in their classroom?

How is ICT used perceived by EFL teachers about their gender?

Some previous studies on this topic have been conducted to investigate teachers' perceptions on ICT use; one of them was carried out by Mollaei and Riasati (2013) in Iranian secondary and elementary schools and was aimed at investigating the age of teachers in the application of technology in teaching EFL. A sample of 50 teachers was selected and interview method was used to collect data. The data was analyzed using the t-test method. The study found that young teachers readily embrace the use of technology in the classrooms, unlike their aged counterparts.

Rahimi and Yadollahi (2011) also conducted an insightful study on this topic. Their study aimed at investigating the impact of teachers' genders on the use of Technology-Enhanced Language Learning (TELL) tools in a language course. The study was carried out in two universities in Iran, and the method for collecting data was the questionnaire. The research indicated that females have limited access to technologies, innovations, and skills emerging in the society hence they do not readily embrace the use of ICT in the teaching and learning of EFL lessons.

Al-Busaidi and Al-Shihi (2012) also carried out a study that aimed at investigating the teaching experience on the use of ICT in the classrooms. A sample of 35 teachers was selected and questionnaires used to collect data. The data was analyzed using the t-test method. After the data analysis, the study found that the more experienced, and consequently the more years a teacher is exposed to ICT and its integration in practice, the more qualified they are in using the same technologies in future. This means that the quality of lesson preparation and delivery is greatly tied

It is hoped that the various stakeholders in the education sector will use this research work as a tool to ensure that the incorporation of ICT into the teaching and learning process is effective and efficient. These stakeholders include the ministry of education, EFL teachers, and students. In carrying out this research, many challenges were experienced. Among these challenges included getting some of the institutions to participate in the research. Most of the schools claimed to be quite busy with the students' examinations and therefore could not allow their teachers to participate in the research. Due to this reason, it was quite hard to select schools for the research. In spite of the challenges, the research was conclusively done using other willing schools and respondents.

Chapter I: Literature Review

This chapter summarizes information from other researchers who had carried out their research in the same sphere of teachers' characteristics considered by EFL teachers as barriers to use in ICT framework. The information obtained from different authors was obtained from array number of sources which includes internet sources, text books and from university repository system. Besides, this chapter takes into account some scientific studies concerning the topics described below.

ICT Use in EFL Teaching

Definition.

ICT use in EFL teaching can be defined as a learning process aided by the use of ICT that involves three different forms of tools: the output tools, input tools, and other support tools. The input tools include the use of student response system, visualizer, document camera, computer, and application software together with tablet or slate (Mollaei & Riasati, 2013). Output tools include the display monitor, projector and interactive whiteboard. The other support tools may include, but not limited to a digital camera, switcher, and digital recorder (Golshan & Tafazoli, 2014).

The use of ICT in classroom is so synonymous with increased student exposure to relevant education technology enhancing student comprehension, knowledge, practical skills, and presentation skills. It also improves student learning as well as better teaching methods where instructors can utilize ICT in preparing teaching plan and daily instructional delivery for different classes (Buabeng-Andoh, 2012).

Advantages and Disadvantages

The use of ICT in the classroom improves the retention memory of learners through the use of imaging technology and other visuals that students easily recall the lesson. ICT use also makes it possible for teachers to explain and deliver complex instructions without much struggle, thereby, boosting students' comprehension on complex topics when they can follow what is displayed either on the whiteboard or the monitor. Additionally, ICT enables teachers to create and sustain interactive classes thus making classes more enjoyable, consequently improving student concentration and attendance (Capan, 2012).

However, the use of ICT in the classroom for improving teaching process also has some challenges such as high cost of acquiring input tools, output, and other support tools which make it one of the most expensive investments in improving education technology. Another challenge regards setting up the devices which are tiresome and consumes much time. Furthermore, the use of computer-related technologies requires specialized skills and experiences among teachers which many teachers lack thus impeding the successful integration of ICT use in the teaching process.

According to Capan (2012), the use of ICT encompasses the utilization of the different types of computers and computing devices, the internet and their combination in the instructional process and delivery of content. However, and in more specific terms, it involves the diverse utilization of technology by educators for purposes such as lesson and instructional preparation; content or instructional delivery; and the different ways information technology used in education.

While analyzing the development history of ICT and classroom practices, Afshari et al. (2009) observe that ICT has been used as a teaching and learning tool by educational practitioners for a long time. The authors assert that use of ICT may be in its earliest form conceptualized in what is commonly known as Computer-Assisted Language Learning (CALL), which has been existent for as early as the invention of computers. Buabeng-Andoh (2012) also observes that ICT is actively and extensively used in the teaching of language as the basis of most CALL programs. However, both

researchers fail to point out the key areas where ICT is used by EFL teachers to enhance teaching and learning.

Gilakjani (2012) asserts that EFL teachers use ICT resources for purposes of lesson preparation, and more so while planning for materials and learning activities that are used for teaching learners' ways to pronounce English words. Golshan and Tafazoli (2014) extend this scope to the teaching of vocabulary, listening skills, speaking skills, and communication, whereby, EFL teachers use ICT tools in the planning of such lessons and also in the delivery of content. According to the authors, ICT is featured in the form gadgets and devices like PCs, desktops, laptops, and telephones, which are increasingly being featured in modern learning environments and especially in lessons where learners are being taught a new language.

According to Isisag (2012), ICT is also used by teachers and commercial entities to generate materials and applications that are meant for teaching purposes, examples of these include; computer-programmed tasks, task tutorials and basic to complex drills that help teachers improve the outcomes from collaborative learning. He also points out that EFL teachers are increasingly using Computer-Mediated-Communication (CMC) and related software for enhanced and authentic communication in their lessons.

The use of ICT has also been featured greatly in studies that have focused on CALL in the past. Oz (2015) points out the fact that CALL programs have been existent ever since the invention of computers. Findings from most research seem to affirm Oz's (2015) observation, providing indications that language teachers have always had the privilege to test emergent technology and innovative tools in general. Similarly, Sinche and Alejandra (2016) argue that the use of computer technology can be an excellent way for teachers to improve the learning of first and second languages. According to Isisag (2012), ICT is used by teachers and commercial entities to generate materials and applications that are meant for teaching purposes, examples of these include; computer-programmed

tasks, task tutorials and basic to complex drills that help teachers improve the outcomes from collaborative learning. He also points out that EFL teachers are increasingly using Computer-Mediated-Communication (CMC) and related software for enhanced and authentic communication in their lessons.

Additionally, Mollaei and Riasati (2013) reveal that instructors in EFL classes have been using ICT resources for the preparation of teaching aids and activities for English instruction as a foreign language. Such use of ICT in the classroom involves a combination of PCs and audio-visual display technologies like projectors, and CPU Monitors enables them to teach students new words, how to identify grammatical errors, and how to read and write in a foreign language. Lin et al. (2013) argue that the use of such technologies do not end there. Teachers also use it in EFL classes and teachers in the developed parts of the world for instructional delivery, where it has been able to guarantee teachers' high level of effectiveness and retention of content taught among learners. Rahimi and Yadollahi (2011) also note that ICT has been featured greatly in modern EFL classes where it provides teachers with solutions for communication problems. The authors identify computer-mediated-software as an example of the widely used software that has been helping EFL teachers improve communication by making it appear more original and meaningful.

The use of ICT has also been featured greatly in studies that have focused on CALL in the past. Oz (2015) points out the fact that CALL programs have been existent ever since the invention of computers. Findings from most research seem to affirm Oz's (2015) observation, providing indications that language teachers have always had the privilege to test emergent technology and innovative tools in general.

Teacher's perception and attitude plays a vital role in their assessment and teaching activities in the classroom. Research conducted by Golsha and Tafazoli (2014) sought to find out whether there is significant relationship that exists between tutor (gender) perception of self-efficiency, and

technology adoption. The authors have pointed out conflicting perception of teacher's gender towards effectiveness of ICT. There are those who believed that ICT adoption has helped while majority stated that ICT benefit were not visible. A study by Lin et al. (2013) show that understanding of ICT teaching tools and positive attitude towards modern technology will improve learning outcome.

Teachers and ICT Use

Teachers' role.

The invention of new technologies has greatly contributed to the creation of many opportunities in facilitating language learning at various educational levels in Ecuador. Considering the critical role, the English language has played in the global platform, the Ministry of Education in Ecuador introduced new educational policies in 2016, which makes English a compulsory discipline in the curriculum of all private and public secondary schools (Asiri, 2012). The objective of this initiative was to foster the teaching of EFL (English as a Foreign Language) in schools. Particularly, the integration of information and technologies (ICTs) in education facilitates learning of foreign language in EFL classrooms. Different technological applications are utilized to help students improve their communication and reading skills. Such tools include CD-players, Computer Assisted Learning applications, video-clips, and electronic dictionaries as email messaging and chatting programs (Aydin, 2014).

The effectiveness of this technology greatly depends on the teacher's perception. The readiness to adopt and integrate technology into EFL classes to achieve educational goals displays high school teachers in Ecuador as technologically competent professionals. Majority of high school teachers in Ecuador can integrate the ICT in the EFL classrooms (Herrera, 2013). However; there exist several factors such as teachers' attitude, experience, and age among others that determine the

teachers' use of the information and communication technology in the teaching process. For example, teachers with positive perception can align the learning process towards technological changes with the aim of updating the teaching objectives. Tezci (2009) argues that a majority of teachers believe that technology results in high levels of innovation that facilitates content acquisition. Furthermore, it helps in the development of critical thinking skills among the EFL learners through the use of imaging technology (Mollaei & Riassati, 2013). However, some aged teachers in Ecuador have a negative perception towards the use of technology in EFL classes.

Majority of old-age teachers are resistant to change and perceive technology as a threat to the teaching profession. Such teachers lack necessary knowledge and skills in the ICT. For instance, most old-age teachers are computer illiterate, which is a great barrier to use technology in the EFL teaching-learning process (Liet et al. 2013). Also, challenges such as lack of adequate computers, financial support, and training, influence the Ecuadorian high school teacher's perception of the adoption of technology in EFL learning.

However, despite the many benefits of ICT use in the classroom, the instructor's role remains central and it is also crucial in the utilization of any form of technology for learning and training. As noted by Mahmoudikia et al. (2014), both the teacher and technology have key roles to play in creating a conducive and enabling environment for tutoring and erudition. The authors also note that the effectiveness with which ICT is integrated is affected by the interplay of some factors. These factors include the teacher's age (Tezci, 2009), experience and gender (Firmin & Anenesi, 2013). Many studies have also found that human factors, and in this case, teachers' characteristics, play a significant task in the incorporation of ICT in lessons and learning practices. For instance, Davidson et al. (2015) identify a strong correlation between a tutor's rank of experience in using ICT and their confidence in using the same for teaching purposes. This means that prolonged exposure to technologies and

sustained use in professional practice by teachers could facilitate the preparation and delivery of language instruction.

Additionally, Al-Busaidi and Al-Shihi (2012) indicate that successful integration of ICT in learning depends on crucial frameworks that touch on schools, policies and most importantly, teachers. According to the authors, the more experienced, and consequently the more years (age) a teacher is exposed to ICT and its integration in practice, the more qualified they are in using the same technologies in future. This means that the quality of lesson preparation and delivery is greatly tied to the quality of the teacher and not in the technology and tools he or she uses. A keen look at the findings from these studies reveals that: the quality of a teacher and the role they play is crucial in the preparation and structuring of the training and edification process, and also in the evaluation and selection of ICT resources for integration.

Studies meant to investigate the ICT application among teachers and EFL trainers, in particular, have also tended to identify the impact of gender on such practices. However, most studies that have dedicated resources to understand more about the gender gap and why fewer females use ICT have been inconclusive. In contrast, Rahimi and Yadollahi (2011) relate this scenario to the possible fact that females have limited access to technologies, innovations, and skills emerging in the society.

Nevertheless, studies have not been able to establish gaps in as far as the quality and effectiveness of ICT use in class is concerned. Aside from the issues of the gender gap, a study by Quezada-Sarmiento et al. (2017) attempts to identify the extent to which a teacher's attitude affects their capability and readiness to utilize ICT in class. In their study, the authors assume that teachers with a positive attitude are more willing and motivated to use computer technologies for instructional delivery in class. Findings from similar studies have been able to strongly indicate that the successful implementation of ICT and innovative technologies is dependent on a positive attitude among those

intended to use it. The implication of this for EFL teachers is that they need to develop constructive outlooks toward novel technologies, and also have the willingness to learn on its use to effectively employ it in the classroom. Successful use of ICT in EFL classes is therefore tied to the teacher characteristics.

Teachers' Characteristics Regarding ICT Use

Psychological.

Psychological characteristics that influence teachers in ICT use include teacher's attitude and anxiety. Computer-illiterate teachers have a negative attitude towards ICT use in classrooms and they rarely integrate technology in EFL classrooms. Lack of experience and familiarity with ICT infrastructures such as computers and internet are the main cause of technological-related anxiety among Ecuadorian teachers (Tyner,2014,pg.11).

Similarly, Rahimi and Yadollahi (2011) explain that the use of ICT is greatly affected by computer anxiety, clarifying that computer anxiety is fear, disagreement, and poor assumption about the results of the use of the ICT in their classes.

c. In addition, Rahimi and Yadollahi (2011) also affirm that through the integration of ICT in schools, teachers themselves can increase their knowledge base in terms of learning English. Through this, they will be able to give their students as much information as possible. When they improve their teaching skills, they also strengthen their students. Despite this, other teachers prefer to maintain their traditional role due to the lack of knowledge and training on the use of ICT.

However, the authors note that some teachers have positive attitudes toward the use of ICT to improve the teaching process.

Educational.

Educational traits refer to the behavior that teachers are expected to demonstrate for enhanced delivery of services to learners. Such traits include hard work, honesty and diligence. Teachers who exhibit such traits have the willingness of integrating technology in EFL classrooms. In addition, teachers who adhere to pedagogical knowledge as well as computer skills, make optimum use of ICT in EFL classes (Player-Koro,2012)

ICT has several applications for learning English. Capan (2012) grouped the applications into three main groups; the learning resource, which includes the online and video resources and the educational software, the instructional organization of learning, which consists of the technology tools used for lecturing in a classroom, and finally, the computer-based testing which entails the email system. These groups play an important role in regards to teaching. When they are all integrated, they will help the teacher achieve maximum results in their classes.

Furthermore, Capan (2012) mentioned the Intelligent Searching, which enhances the searching, organizing, and retrieval of data efficiently, lastly, he talked about the Educational gaming, which entails simulation and games that will enable the students to learn by thinking critically.

According to Player-Koro (2012), ICT enables teachers to guide their students through learning English effectively. When students have a positive attitude towards the subject, the teacher will also be motivated to be better their skills.

Similarly, Al-Furaydi (2013) explains that the integration of technology has changed the traditional educational system, including its techniques and methodologies.

Professional.

Professional training helps teachers to acquire the knowledge and skills on ICT use, however, training needs to take into account the environment of teachers, school, teachers' attitudes, time.

Quezada-Sarmiento et al. (2017) studied the beliefs of teachers in regards to the use of technology and how they integrate technology into the classes. From the research, the writers found that there was an inconsistency in the beliefs of teachers and how they practice on the integration.

According to research conducted by Aydin (2014) on secondary and elementary teachers, it was identified that there are two categories of beliefs based on technology. One is the transmission-oriented, whereby the computers are used to present information for teaching purposes, give support, and track the progress of students. The other one is constructivist-view, where the machines are involved in collecting, analyzing, and presenting information. The two depend on how an individual teacher will choose to integrate technology into their classrooms and the two categories will have a different impact on how their students will perceive technology in the educational sector. Technology has become part of the professional and personal profile of teachers, ICT need to be connected with the professional development, with the curriculum, and with the teaching practices to ensure the success of ICT use, otherwise if teachers are not aware of its benefits and if their support and training are not good, the success of ICT use will fail; therefore, it is necessary an adequate training to improve the quality of their professionalism (Sabzian & Gilakjani, 2013).

Rahimi and Yadollahi (2011) also contributed to the benefits of using ICT in learning English. They asserted that ICT helps teachers to improve their teaching skills and practices. They can always browse through the internet to come up with different methods they can employ while teaching that will ensure that the subject becomes interesting to their students as compared to the traditional techniques of following what has been stipulated by the school's administration.

Besides, Rahimi and Yadollahi (2011) also state that through ICT integration in the schools, the teachers themselves can be able to increase their knowledge base in regards to learning English. Through this, they will be able to give their students as much information as possible. When they improve their teaching skills, they also strengthen their students. The authors also noted that the teachers could be able to increase their technical skills and knowledge through the Integration.

ICT Integration also builds on the career development of the teachers. The teachers can enroll in certification courses that are done online, and upon successful completion, one gets a certificate which they can include in their Curriculum Vitae (Player-Koro, 2012).

Personal Characteristics.

Personal characteristics refer to the personal attributes of teachers greatly influence their utilization of ICT in learning EFL, where teachers can be distinguished according their emotions, behavior, attitudes and so on. For instance, hardworking teachers use ICT in teaching more frequently than other ones that have a negative attitude towards technology. Hardworking teachers perceive technology as a tool that they can utilize to optimize their skills, knowledge and experience while delivering content to the learners (Buabeng-Andoh,2012). The effectiveness of ICT in learning EFL depends on the teacher's willing to embrace and incorporate technology in English lessons.

Player-Koro (2012), identifies anxiety as one of the key limitations that teachers face. Similar to findings from most related studies, the study by Player-Koro (2012) relates teacher-computer related anxiety to the lack of familiarity with the devices and related technologies. As noted by Quezada-Sarmiento et al. (2017), trainers who lack fundamental information and skills regarding ICT and computers are less willing to try them out.

The author's further points at the absence of guiding pedagogical knowledge and skills as a key contributor to anxiety among teachers in both public and private schools in Ecuador, which eventually limits them from embracing emerging technologies. Quezada-Sarmiento et al. (2017) and Player-Koro (2012) effectively articulate that anxiety and attitudes have a way of blocking certain teachers out as the use of ICT is increasingly becoming a necessity and agenda for schools around the world.

It is evident that much of the literature material reviewed in this case touches on studies that have been conducted among teachers of languages and other subjects; focus on the integration of ICT by EFL teachers has however received less attention. It is also worth noting that most of the studies included in this section had been guided by a wider scope, in which case, the authors had consciously concentrated on the ICT utilization in teaching while focusing on multiple contexts and subjects. In the study by Player-Koro (2012) and Quezada-Sarmiento et al. (2017); for instance, the authors focus on ICT application in different subjects and not just in EFL classes. Thus, future researchers would still need to emphasize on the practical utilities and barriers of ICT use in EFL classes.

Some previous studies on this topic have been conducted around the world in assessing ICT use in teaching process and integration into the curriculum. Some of these studies include conducted by Gilakjani (2012) that investigated 591 university students in China on how frequent they use ICT in learning English and how they perceived ICT applications when studying the subject. This author found out that most of the students spend 3-10 hours on a weekly basis in regards to ICT use. They used devices such as PDAs, computers, digital cameras, electronic music devices, and excluding the cell phones; 95% of the use was browsing for pleasure, 93.3% was downloading videos and music, 83.4% was for emailing, 74.8% instant messaging, and 60% in playing computer games (Gilakjani, 2012). It was noted that about 40% of the students spent less than one hour on ICT for learning English (Gilakjani, 2012). It was also found that most of the students used technology for leisure with a small

percentage understanding the benefits of using ICT to learn English. As a result, their reading, writing, and grammar skills were significantly affected. The chief attribute towards this occurrence was the lack of emphasis on the importance of the use of ICT in learning English. 21 teachers were sampled and interrogated on their view on ICT as a tool for learning English, and 91% of them displayed lack of confidence in the integration of ICT as a teaching tool (Gilakjani, 2012).

Another study is the one conducted by Oz (2015), whose purpose was to investigate the preserves English as foreign language teachers' perception about mobile assisted language learning (MALL) and establish whether their perception differed by grade level, grade point average (GPA) and gender. A total of 201 participants participated, and both qualitative and quantitative research methods were used. The findings were not different from that of the Chinese students. It was established that students spend more of their time in leisure activities as compared to the learning activities. When some of the teachers were asked for their views, they stated that they were more confident in using the traditional educational system of blackboard than ICT because most of the students were easily distracted with the social media platforms, shifting their focus while in class. However, the utilization of ICT tools becomes significant when Ecuadorian high school teachers perceive that technology to be worthwhile. These teachers will be open to embracing technology and any novel changes if they are motivated and encouraged that a given tool will result in innovation like improved critical thinking on the acquiring of language abilities. Moreover, if the educators find a particular technology or software to provide apprentices with the knowledge to manipulate language and have direct interactions with the machines, they are likely to depict a positive perception to that software.

Tezci (2009) also performed research on the university students in the Czech Republic to ascertain their attitudes about ICT. The aimed at determining teacher's influence in the use of ICT at schools. Both quantitative and qualitative research methods were used, and 1540 teachers participated.

It was found that teachers' attitude varies with years of experience and level of knowledge. He chose a different approach in his assessment. He decided to base it on a student's age, grade and residence. The results of the research showed that male, second-year, and town student had a positive attitude than the others. This is because some teachers tend to view technology as being male-oriented discouraging the female students.

Kavanoz et al. (2015), researched on both Swedish teachers and students in regards to their perception in using ICT while learning English, and the students portrayed a more positive attitude than their teachers, and they were comfortable to adopt technology in their classrooms. The study also established that there are no significant gender and years of experience observed. The study involved 120 EFL pre-service teachers and 80 students, and the authors employed the use of qualitative and quantitative research methodology. Tezci (2009) conducted a study to find out if teachers adopted ICT in the classrooms. His research utilized the survey research design. Teachers and student were involved. And two different survey questionnaires were designed for them with the aim of finding their ICT usage both at school setting and daily lives. The survey questionnaire comprises of three parts; academic, non-academic and beliefs regarding the use of ICT in academic settings.

The information was gathered from schools. The second intention of this research was to identify how students and teachers use ICT in the classroom. The ICT devices restricted in class and the teacher gave an assignment in class which they had to present using PowerPoint. The finding supported previously conducted researches by Gilaklani (2012) which found congruent response between learners and tutors. The learners said that their instructor provided no opportunity in class for them to use technology. The research also stated the need for having ICT related programs in the learning institution. Most teachers highlighted the need for availability of ICT device and proper training on how to use the gadget. In conclusion, most schools did not involve teachers while procuring gadget or training them on their use hence tutors did not use them frequently hence they

preferred tradition method of teaching to ICT mode. As a result, the most of the students draw their perception of ICT integration from their teachers.

Player-Koro (2012) focused his study to identify obstacles encountered by instructors in their school setting as they are planning and implementing ICT mode in the classroom. Only teachers were involved in sampling. Teachers were provided with survey questionnaires to fill about their skills and impact of ICT on performance. The responses of teachers showed that they struggle to use ICT in classrooms because of their poor ability to use ICT as a teaching tool. The schools approached for this study did not have an ICT program to support teachers to use. However, they believed that ICT is the useful tools in helping a learner improve their performance.

From such studies, it is clear that most teachers get anxious when they think of ICT integration in their classrooms, especially when they have to train on how to use and teach a given technology. The utilization of ICT in class has been found to contain several significant benefits in the classrooms as highlighted from the literature review. However, for such technology to work efficiently, the instructors must exhibit positive perceptions toward such tools.

Chapter II: Method

Setting and Participants

This research was conducted in public and private high schools from the city of Cayambe. The sample selected to participate in this study were twenty EFL teachers; ten from public and ten for private high schools, fifty percent males and fifty percent females aged between 25 and 54.

With respect to the teachers' experience, all teachers have obtained a university degree to work as EFL teachers and they have received training in ICT use.

Procedure

The first step involved gathering literature information on ICT use in EFL teaching where advantages and disadvantages, as well as the importance of ICT in the classroom, were looked into and adequate information sourced from multiple scholarly databases. The next step was to group information obtained in order of relevance to the research topic and come up with appropriate interview and survey questions that would solicit the much-needed response from the Ecuadorian high school EFL teachers. This was followed by a determination of population sample size, and a sample of 20 teachers arrived based on a random sampling method where ten male, and ten female teachers selected to participate in the survey and interview. The responses were then recorded and additional explanation attached to each question to be used in the research data analysis.

This study was carried out by using a mixed method approach that involves both quantitative and qualitative procedures. The qualitative method was used to describe and examine the information given in the surveys, as well as analyze the teacher's' perceptions. The quantitative method was used for numerical data, which evaluated the EFL teachers' perception of the use of ICT.

The study mainly relied on a qualitative approach in which the analysis of secondary sources was done for collection of information to aid in the study. As such, selection of materials for inclusion was mainly based on availability and relevance to the objectives of the current study. To ensure that only relevant sources were selected, the research relied on a powerful search engine to access multiple databases with a collection of findings from previous research on ICT use by EFL teachers. The following topics guided both the primary and secondary data collection: Which aspects related to teachers' characteristics are considered by most of the EFL teachers as barriers to ICT use in their classroom? Which factor refers to teachers' characteristics does it influence the most on teachers to ICT use in their classroom? How is ICT used perceived by EFL teachers in relation to their gender?

Given the wide range of research conducted on similar topics, selection of resources for inclusion also sought to have the most recent materials included in the analysis, as such, only sources that had been peer-reviewed and published within a span of the past six years had been included. Once the selection of resources was complete, the resources were read through to identify key themes, arguments, and inferences regarding the subject matter of the current study. Comparison of contrast of main and minor argument categories was also done from the transcripts in the order of relevance, after which similar categories were merged and broken down into sub-categories where merging was not possible. Information was then collected from the different categories using multiple regression analysis, correlation tests and also concerning how best it provided answers to the current research's questions. The instruments applied in this study were questionnaires for teachers and interviews for six of them. The questionnaire consisted of 37 questions designed to obtain information about the use of ICT. And the interviews consisted of 8 questions with the same objective.

Analysis of results was based on the parameters of either strongly agree or agree and strongly disagree and disagree. The answers were computer in percentages based on the response under each parameter to determine the popular response in coming up with the analysis under each parameter.

Also, in the interview responses, keywords guided the analysis for all the eight answers where only keywords affiliated with the study were picked and analyzed in all the twenty responses to come up with a popular stand among the teachers interviewed. For example, in investigating their perception of whether they think male or female teachers use computer technologies the most in the classroom, the keywords picked for analysis was either a mention of male or female. These were later computed as percentages while those who did not respond, a suitable explanation was arrived at based on literature materials gathered and observation made during the interview and research process. Finally, conclusions and recommendations from the results gathered were stated.

Chapter III: Discussion

Description, Analysis, and Interpretation of Results

This chapter discusses the findings of the study. It employs the use of tables, and interviews in order to explain the teacher characteristics and the use of ICT in the classroom. It begins by analyzing teacher characteristics considered by most of the EFL teachers as barriers to ICT use in the classroom. It also discusses teachers' characteristics that influence the use of ICT in the classroom. Next, it discusses and analyses how ICT use is perceived by EFL teachers about their gender. Once the discussion and analysis of results were done, some conclusions were stated. Finally, the chapter explores some of the recommendations that will enhance ICT use in Ecuadorian high schools in teaching EFL lessons. In this way all data collected helps to answer the data described below.

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	0	65	35	0
2	I do not think I would be able to learn how to use ICT in my classroom.	0	0	45	55	0
3	I am afraid that if I begin to use ICT, I will become dependent upon them.	0	0	55	45	0
4	I dislike working with machines that are smarter than I am	0	0	50	50	0

5	I feel apprehensive about using ICT.	10	15	50	25	0
6	I have difficulty in understanding the technical aspects of ICT.	0	5	70	25	0
7	It scares me to think that I could cause the computer to destroy a large amount of data by hitting the wrong key.	0	0	60	40	0
8	I hesitate to use ICT for fear of making mistakes that I cannot correct.	0	5	70	25	0
9	You have to be master to understand how to use ICT	0	5	65	30	0
10	I have avoided ICT use because they are unfamiliar.	0	10	60	30	0
11	I have not attended any ICT training courses	0	15	60	25	0
12	I have attended some ICT training courses; however, I prefer not to use ICT because they somewhat intimidate to me.	0	0	60	40	0
13	I am not interested in attending any ICT course	0	0	55	45	0
14	I do not know how to use any ICT resource	0	0	65	35	0
15	I do not use any ICT resource in class because I think that ICT are not necessary to teach English	0	25	25	50	0
16	I prefer not to use ICT because my teaching experience is the most crucial factor in teaching process.	0	20	45	35	0
17	I think that age is factor that determine the ICT use in class	0	25	40	35	0
18	In my opinion, younger teachers are more skillful to use ICT than the older ones.	0	5	60	35	0

Author: Martha Lucía Hidalgo

Source: Ecuadorian high school EFL teachers

With regards to this research question, it has been detected that most of teachers do not consider the aspects of Table 1 as barriers to use ICT. The parameter “strongly agree” shows that only 10% of EFL teachers selected this option and strongly agree with the statement *I feel apprehensive about using ICT*.

This result reveals that two out of twenty EFL teachers considered this aspect as barrier to use ICT in their classes. This means that most teachers do not feel that they need to be masters to understand how to use ICT. On the other hand, lack of experience and familiarity with ICT infrastructures such as computers and internet are the main cause of technological-related anxiety among teachers (Tyner,2014. P,11).

Besides, the statement previously described has relation with psychological characteristics, some teachers avoid using ICT due to their apprehensiveness, insecurity, lack of knowledge on ICT use. Consequently, some teachers prefer to stay in the traditional way of teaching which is not enough to reach the aims that modern education requires. Furthermore, Azmi (2017) states that the use of technology in classrooms generates positive attitudes in students, however, the author explains that the integration of ICT must have a good training and pedagogical and appropriate planning to use ICT in a correct way.

Regarding the parameter “agree”, it reveals that 25% of EFL teachers agree with the statements *I do not use any ICT resource in class because I think that ICT are not necessary to teach English, I think that age is a factor that determines the ICT use in class*. Also, 20% of EFL teachers agree with the statement *I prefer not to use ICT because my teaching experience is the most crucial factor in teaching* and 15% of EFL teachers agree with the statements *I feel apprehensive about using ICT, I have not attended any ICT training courses*, these aspects are also considered as barriers by some EFL teachers. If the percentages are added to the parameter “strongly agree”, the statement *I feel*

apprehensive about using ICT reaches 25% as I do not use any ICT resource in class because I think that ICT are not necessary to teach English and I think that age is a factor that determines the ICT use in class.

Based on results, teacher experience is established as one of the barriers to ICT integration in EFL lesson delivery. In addition, the second and third statement are related to psychological and educational characteristics of teachers. On the other hand, teachers who adhere to pedagogical knowledge as well as computer skills, make optimum use of ICT in EFL classes (Player-Koro,2012, p.100). With respect to beliefs, Gilakjani and Branch (2012) explain that beliefs, are acquired during the formation of teachers and their experiences and these helps to create their own beliefs, that is why teachers' knowledge plays an important role in their decisions.

From the interview, the majority of respondents with over five years of experience demonstrated knowing the benefit of integrating ICT in enhancing student outcome. This can be best explained by the fact that teachers who have stayed long in their profession continue to research and borrow from their counterparts from other counties and regions that have fully integrated ICT use in the classroom. They have been able to assess the benefit of using ICT in improving student performance and improving quality of education in the 21st century where every aspect of life is technology-oriented.

With regards to this study, it is important to mention that the data collected shows high percentages in the parameters "disagree" and "strongly disagree"- The likely reason that can be attribute to this high percentage is that most EFL teachers now understand how to apply ICT due to the increase in the use of technology. Concerning the parameter "disagree" and "strongly disagree" The highest percentage in regard to the statements *I have difficulty in understanding the technical aspects of ICT, I hesitate to use ICT for fear of making mistakes that I cannot correct, It scares me to think that I*

could cause the computer to destroy a large amount of data by hitting the wrong key, was seen in EFL teachers who selected the option disagree. In fact, 70% in the first and second statements and 60% in the third one, EFL teachers selected this option indicating that this was not a viable reason. Also, 65% of EFL teachers disagree with the statements *I feel insecure about my ability to use ICT as a resource to teach, You have to be master to understand how to use ICT, I do not know how to use any ICT resource*. It is evident that teacher attitude towards the use of ICT in the classroom is a major barrier. From the study, 65% of teachers disagreed that an EFL teacher must have a mastery on ICT to be able to use it in the classroom. Most of the teachers interviewed believe that learning the basic computer skills together with having the right attitude enables them to prepare lesson content. A majority of the teachers are confident that once they learned the basic computer skills needed to teach EFL, they can get help from their colleagues who have a better understanding of computer use and related technologies in enhancing student performance. This result is corroborated by Quezada-Sarmiento et al. (2017), who stated that the success of ICT uses in the classroom, especially, in teaching process depends on the teachers' attitude. Their research ranked teachers with a positive attitude are best when it comes to achieving EFL lesson objectives. From the table, teachers with a negative attitude towards technology use are less likely to integrate ICT into lesson delivery. Additionally, teachers with a negative attitude are less likely to approach their colleagues who are more knowledgeable on ICT use in lesson delivery.

Based on the results *I have avoided ICT use because they are unfamiliar, In my opinion, younger teachers are more skillful to use ICT than the older ones, I have not attended any ICT training courses, and I have attended some ICT training courses; however, I prefer not to use ICT because they somewhat intimidate to me*, most of the EFL teachers 60% chose the option disagree.

On the aspect of *I am afraid that if I begin to use ICT, I will become dependent upon them, I am not interested in attending any ICT course*, a highest percentage selected the option disagree. The

probable reason for the number of teachers disagreeing with the statement is because most technologies are easy to apply once one is provided with a guide.

From the study, 55% of the teachers disagreed that by using technology, they will over depend on them for every aspect of lesson delivery. Most EFL teachers, 55% of them, chose this option probably because the use of technology has been indicated to make people depend on it as well as other sources of information where they are available. *I prefer not to use ICT because my teaching experience is the most crucial factor in teaching* where 45% chose disagree. Furthermore, in the case of the statement *I think that age is a factor that determines the ICT use in class*, 40% selected disagree and it was the highest. The probable reason for the highest number of teachers going by this opinion is because technology can be used by all regardless of their age. Besides, the use of ICT in EFL classes has a positive influence (Isisag, 2012). Also, motivation helps teachers to face challenges about ICT use.

With respect to the parameter strongly disagree”, regarding the aspect *I dislike working with machines that are smarter than I am* 50% of EFL teachers voted equally for the option disagree and strongly disagree. The likely reason for teachers selecting these options is because people love information and they are not afraid to get knowledge from any source regardless of how they will be perceived. Most variability was in the statement *I feel apprehensive about using ICT*. Highest percentage 50% was seen in EFL teachers who selected the option disagree. The reason for the variability in this statement shows that teachers have variations in the manner they see the use of ICT as being apprehensive.

Concerning the statement *Not sure if I will learn how to use ICT*, the highest percentage 55% of EFL teachers selected the option strongly disagree. Thus, the highest indicated that they do not agree with the statement. In regards to the statement. In regards to the proposition, which was a similar case for the statement In regards to the statement *I do not use any ICT resource in class because I*

think that ICT are not necessary to teach English, half of the teachers 50% selected the option Strongly Disagree.

In addition, teachers with a positive attitude towards ICT use in classroom strongly disagree that they will not be able to learn how to use emerging technology in enhancing lesson delivery and improving students' outcome. Furthermore, the current study revealed that teachers with a positive attitude towards technology do not see ICT use in the classroom as a threat to their profession. Rather, they appreciate the role of ICT in making their work easier in preparing instructional content to meet lesson objectives. According to Sinche and Alejandra (2016), positive attitude is necessary for the efficient utilization and combination of ICT in learning.

The study indicates that 40% of the EFL teachers interviewed disagree with the fact that age is a limiting factor in the use of ICT in EFL lesson delivery while another 35% of the teachers interviewed strongly disagree that age is a barrier to ICT integration. Among the respondents, many have over ten years of teaching experience, and they are enthusiastic about ICT integration in EFL teaching process. They have learned the benefits of using Computer-Assisted Language Learning (CALL) in improving student outcome. In this regard, Isisag (2012) states that, EFL teachers are using computer technologies and related software to enhance student performance.

Furthermore, if those percentages are added to the parameter "disagree" the results of the statements reach high percentages. Thus, seven statements previously described reach 100%. As a consequence, almost all EFL teachers absolutely disagree with those aspects as barriers to use ICT in their classes, also the other statements of this Table reach high percentages.

Moreover, EFL teachers' attitude towards computer use in the classroom continues to increase despite their age. Previous studies had indicated that age is a barrier to ICT use. The findings refute Tezci (2009), who argued that the effectiveness with which ICT is integrated into EFL lesson delivery is affected by age. One of the teachers interviewed, with over 17 years of experience in teaching

practice, lauded the benefits of ICT use in the classroom and mentioned that it helps in improving lesson outcome. Most probably, the teacher began her career before the widespread use of ICT in lesson delivery but has gained profound interest in adapting to technology use despite her age which best explains his enthusiasm regarding computer use in the classroom.

Teacher experience is established as one of the barriers to ICT integration in EFL lesson delivery. From the interview, the majority of respondents with over five years of experience demonstrated knowing the benefit of integrating ICT in enhancing student outcome. This can be best explained by the fact that teachers who have stayed long in their profession continue to research and borrow from their counterparts from other counties and regions that have fully integrated ICT use in the classroom. They have been able to assess the benefit of using ICT in improving student performance and improving quality of education in the 21st century where every aspect of life is technology-oriented.

From the study, 55% of the teachers disagreed that by using technology, they will over depend on them for every aspect of lesson delivery. Another 45% of the teachers strongly disagree that the use of ICT breeds over-dependence on technology use in teaching. Evidently, these teachers acknowledge the role of technology in enhancing teaching process. Their many years of experience informs their decision to maximize technology use up to the extent with which it improves outcome and does not lead to overdependence which may render their past teaching experience obsolete.

It is also argued that EFL high school teachers lack experience in ICT use in the classroom hinders its integration in EFL teaching process (Tezci, 2009; Davidson, Suarez, Naffi, Arabuli, & Desjardin, 2015); for this reason, they are likely to be reluctant in employing the use of ICT in enhancing student outcome. They first need to establish teacher-student contact and learn their strengths and weaknesses before they can effectively employ the use of computer technologies in

aiding lesson delivery and improving student outcomes based on the student needs and industry requirement.

Furthermore, another barrier to effective use of ICT in the classroom to enhance lesson delivery and improve student performance is gender. From the interview, when a question was asked about the gender they think maximizes the use of technology in the classroom based on their knowledge, a majority of the teachers interviewed chose not to answer while those who did answer say male teachers use ICT in classroom more than female teachers. Although gender inequality in all spheres of life remains a thorny issue which the society struggles to deal with, it is evident that gender remains a barrier to ICT use in the classroom to enhance EFL teaching process and improving student outcomes. The sensitivity regarding gender-related issues best explains why the majority of the EFL teachers interviewed chose not to answer the question. This might have been out of fear of being labeled as gender biased. However, those who were bold enough to give their honest opinion cited male dominance in ICT integration in the classroom.

On the contrary, the research outcome contradicts Rahimi and Yadollahi (2011) perception that the society has made a milestone in ensuring gender equity in all spheres of life hence they did not find gender as a barrier to ICT integration in the classroom. On the other hand, the study results are in line with Tezci (2009) findings that established that human characteristics such as gender made it difficult for effective use of ICT integration and computer-related technologies in enhancing student performance.

Most of the female teachers are not utilizing ICT in the classroom may be because many of them are still learning how best to employ such computer technologies in lesson delivery (Herrera, 2013). Furthermore, the use of other complex technologies that may require specialized training can best explain why only a small percentage of female teachers are using technology. Additionally, the recent call by the Ecuadorian government encouraging teachers to enroll for supportive ICT courses

and training explains why only a few female teachers have integrated ICT use in the classroom with a majority of them still undergoing various training. Lastly, male teachers cited by teachers interviewed as heavy users of ICT technology integration in the classroom may be because they are putting into practice what they learn on a daily basis in lesson delivery and are still in the learning process as their female counterparts.

Which factor refers to teachers’ characteristics does it 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 DISAGREE	NO ANSWER
		%	%	%	%	%
1	The challenge of learning about ICT use is exciting.	30	40	5	25	0
2	I am confident that I can learn technological skills.	35	60	5	0	0
3	I feel motivated to use ICT in my class.	25	60	15	0	0
4	Learning to use ICT is like learning any new skill – the more you practice, the better you become.	30	60	10	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.	35	55	10	0	0
7	If given the opportunity, I would like to learn about and use ICT..	35	60	5	0	0
8	I think that ICT are necessary tools in educational settings.	40	55	5	0	0

9	I like to use ICT because they help me to innovate my teaching methodology.	45	45	10	0	0
10	ICT help me to motivate my students to learn English.	40	50	10	30	0
11	If I had any technical problem with ICT during my class, I would continue doing the planned activities.	35	55	10	0	0
12	When I have any technical problem with ICT, I do not feel frustrated.	50	35	15	0	0
13	Age is not an obstacle to learn about and use ICT in my classes.	40	55	5	0	0
14	I know a lot about ICT use because I have attended some ICT training courses	20	45	30	5	0
15	I have learned to use ICT resources by myself	20	75	5	0	0
16	I think ICT has a positive impact on teaching process	30	60	10	0	0
17	ICT use has more advantages than disadvantages in EFL teaching.	40	50	10	0	0

Author: Martha Lucía Hidalgo

Source: Ecuadorian high school EFL teachers

In regards to this question, in the parameters “strongly agree” and “agree” it was find out that on the following statements: *I am confident that I can learn technological skills, I feel motivated to use ICT in my class, Learning to use ICT is like learning any new skill – the more you practice, the better you become, If given the opportunity, I would like to learn about and use ICT, I think that ICT are necessary tools in educational settings, and I think ICT has a positive impact on teaching process*, 60% of the teachers chose the option Agree. This means that most of the teachers support these statements in relation to the factors that influence the use of ICT in class. In regards to the statement *The challenge of learning about ICT use is exciting*, the highest number of teachers (40%) selected

the option agree while 30% selected the option strongly agree, which indicates that the challenge of learning on the use of ICT is an exciting aspect. With regard to *I am sure that with time and practice I will be as comfortable working with ICT*, the highest number of teachers 70% chose the option agree; also, 75% of teachers agree with *I feel that I will be able to keep up with the advances happening in the ICT field* and *If I had any technical problem with ICT during my class, I would continue doing the planned activities*, 55% selected the option Agree.

Besides, for the statements *I like to use ICT because they help me to innovate my teaching methodology*, *Age is not an obstacle to learn about and use ICT in my classes*, and *I know a lot about ICT use because I have attended some ICT training courses* highest number of teachers 45% selected the option agree. This means that they support the statements in regards the application of ICT in class. In the statement, *I am sure that with time and practice I will be comfortable working with ICT*, 70% selected the option agree which was the same case in the statement *I have learned to use ICT resources by myself*. Furthermore, in regards to the statement *When I have any technical problem with ICT, I do not feel frustrated*, 50% of the teachers chose the option strongly agree, which was the highest.

With respect to the teachers' characteristics, the statements described above are related to educational and professional features. With respect to educational characteristics, modern English needs the integration and application of all types of technologies in the teaching and learning process (Rahimi, 2015) Technology cannot be separated from the success of teaching and learning activities. With respect to professional features, Al-Madani and Allaafiajiy (2014) explain that training is necessary to develop the teacher' skills on ICT use.

In addition, the affirmation that ICT is part of English classes agree with Sabzian and Gilakjani (2013) who mention that technology is part of the professional profile of teachers, and also ICT need to be integrated into the curriculum.

Regarding professional characteristics, most of the EFL teachers feel prepared to use ICT in their classes. In this way, Abuhmaid (2011) states that training courses help to acquire the knowledge and develop their skills on ICT use in the classroom. Besides, most of the EFL interviewed teachers who participated in this research are aware about of the positive influence and the benefits that they can obtain in the classroom.

With respect to personal attributes, the results show that most of the EFL teachers have positive attitudes with respect to ICT use in the classroom, which agree with Ndibalema (2014) and Gilakjani and Leong (2012) who mention that the positive attitudes of teachers are really important in the integration of ICT. In fact, the teacher's attitudes give useful ways to integrate, accept, and use ICT in classrooms (Gilakjani & Leong, 2012) where EFL teachers can be characterized according to their, behavior, emotions attitudes, skills etc. The effectiveness of ICT in learning EFL depends on the teacher's willing to embrace and incorporate technology in English lessons.

On the other hand, it has been revealed that over 60% of teachers interviewed agree that lack of adequate knowledge and experience makes it difficult to integrate ICT and related technologies into the curriculum successfully. Teachers' characteristics such as age, gender and experience have been the subject of this study. In the interview, the Ecuadorian high school teachers expressed their desire to gain knowledge on how they can integrate the use of computer and related technologies in the classroom to improve student performance. For instance, teachers argued that they feel confident since they are sure that can learn more about technology, 35% strongly agreed while another 60% of the teachers agree with the statement. Such data reveal the deepest desire of EFL high school teachers in Ecuador to gain the much-needed skills in meeting EFL lesson objectives in technology-oriented society. It also points out the existing technology skills gap that continues to derail the amalgamation of ICT in teaching curriculum.

Robertson and Al-Zahrani (2012) state that the lack of adequate knowledge and experience among teachers are barriers to integrate computer technologies effectively and at the same time manage the learning environment efficiently. When teachers lack knowledge and experience, it remains a tall order to see the successful implementation of ICT use in the classroom to improve student outcome. This was further corroborated in an interview feedback when one of the teachers admitted that although she was not experiencing difficulty in using computer-related technology in teaching the English language, she always witnessed her colleagues struggle when asked to use technology in class. Evidently, the disparity between the teacher and a group of teachers facing challenges in ICT use in the classroom can best be attributed to the level of know-how in use computer-related technology in the classroom (Golshan & Tafazoli, 2014).

It is believed that the lack of experience as teachers' characteristics in the use of these technologies among interviewed teachers remains a barrier to successful integration of ICT technologies in the classroom. A teacher at the school admitted his desire to offer modern materials for his students by using computer-related technologies but it complained of the lack of skills and resources to make such dream a reality in an era where technology plays a central role in every aspect of life. This issue is confirmed by Sarfraz, Mansoor and Tariq (2015) who points out that the lack of technical know-how among teachers impedes the successful integration of technology in the classroom.

Furthermore, other teachers' characteristics that influence teachers to use ICT in the classroom include anxiety. Among the EFL high school teachers interviewed, an average of 60% of them showed anxiety in ICT use in the classroom. Teachers interviewed revealed that they find it interesting in learning some of the much-needed computer technologies to use in improving classroom outcome. When a teacher is anxious about technology use in the classroom, it becomes evident that they are likely to miss on some of the lesson objectives (Capan, 2012).

However, teachers who are relaxed and confident about technologies use in the classroom can achieve lesson objectives. When a question was directed to some of the teachers who affirmed using computer-related technology in the classroom whether they feel relaxed, confident, afraid or nervous among others, teachers who have worked for more than five years revealed that they feel relaxed and confident in using a computer and related technologies in the classroom. According to Player-Koro (2012), anxiety is one of the key limitations that teachers face in successfully integrating technology use into teaching curriculum. This author also states that anxiety results from teachers' lack of familiarity with computer devices and related technologies needed to facilitate effective learning in the classroom.

Such patterns and trends among Ecuadorian High school teachers can explain the Ecuadorian Ministry for education directive on the need for teachers to learn and maximize technology use in the classroom. Most of the teachers interviewed lack the much-needed familiarity to successfully delivery on EFL lesson objective using computer technologies and devices. This was evident when 70% of the teachers interviewed agree that *I am sure that I with time and practice, I will be as comfortable working with ICT* (Table 2). The teachers' lack of familiarity with these devices and technology builds anxiety. This makes it difficult for them to focus on lesson objective. Furthermore, it destroys their quest to enhance classroom learning with the use of computer-related technologies. According to Buabeng-Andoh (2012), the teachers spend most of their time familiarizing themselves with these devices with the hope of learning more with increased usage.

From Table 2, a great percentage of the Ecuadorian high school teachers are hopeful that they are going to learn more about the adoption of computer-related technologies in the classroom. They further exude confidence that any challenge they face will not deter them but act as a learning point towards becoming better technology-oriented EFL teachers. Such feelings reveal a high level of anxiety among the Ecuadorian high school teachers, and this significantly affects their teaching

process as a result of lack of exposure and composure with the students who are equally anxious to learn new things.

Also, teachers' beliefs came out as another teacher characteristic that influences the teacher to use ICT in the classroom. In line with this, Gilakjani (2012) claims that a teacher's belief determines the full incorporation of the computer in the teaching curriculum. When the teachers were asked whether they think ICT use is important to teach English, most of them affirmed the importance of the ICT in organizing their lesson preparation, introducing new themes or just using it for listening activities among others. Aydin (2014) established that technology use in learning could be classified as transmission-oriented. This is when it is used to present information for teaching purpose, give support and track student progress just as Ecuadorian high school teachers are utilizing existing technology. They further confirmed that the use of ICT enhances student participation in class and this is in line with Kavanoz, Yuksel, and Ozcan (2015) who posited student portrayed a more positive attitude than their teachers. Their eagerness to learn new things makes them extremely inquisitive in the classroom. The teachers pointed out that when they use ICT and computer-related technologies during lesson delivery, they feel the class is interactive and they can use different resources in teaching the same subject, especially, when connected to the internet. However, some of the teachers pointed out that the use of ICT in the classroom has some negative impact such as making students copy from their colleagues making it difficult to assess the effectiveness of the use of ICT in the classroom.

From the current study, the traditional perception can be attributed to teachers' lack of knowledge on emerging education technologies. It is normal for people to be skeptical about new things and the traditional beliefs label in the current research is associated with the teacher groups that are slowly learning how to familiarize themselves with ICT technologies.

From the interviews conducted, many Ecuadorian high school teachers are reluctant to embrace computer technologies use in the classroom fully. They believe that it is important for them

to get used to the new technologies and evaluate benefits in enhancing student performance before they fully incorporate ICT technologies in EFL lessons. Beliefs, therefore, delay the successful integration of ICT in the classroom. The teachers desire to master how the different technology works and exude a high level of confidence in specific technology use before implementing computer use in classroom fully. These findings are corroborated by Firmin and Genesi (2013), who claim that teachers develop their beliefs through their career courses and in some cases, personal experiences shape their ideas. Such revelations best explain why some of the teachers interviewed could pinpoint demerits of ICT use in the classroom while a majority lauded the success of ICT in improving EFL lesson delivery and enhancing student participation.

Furthermore, teachers who had a positive attitude towards ICT integration were enthusiastic about employing contemporary education technologies in improving student outcomes. Sabzian and Gilakjani (2013) highlighted that positive attitude helps in reducing teacher's resistance to using computer technology use during lessons. The findings are also in line with Quezada-Sarmiento et al. (2017) since they claim that attitude held by a teacher towards technology use in the classroom and its integration in teaching play a critical role in determining lesson outcomes.

However, the study disputes Lin, Tsai, chai, and lee (2013) and Asiri (2012) findings on gender as teacher characteristics that influence ICT integration in the classroom. The research also validates Bauer and Kenton (2005) findings which find no correlation between ICT use and gender. In their past studies, Lin et al. (2013) argued that female teachers record low levels of ICT integration in their language lessons compared to male teachers. They further explained that such disparity is as a result of female teachers declining interest in technology use in the classroom. From the interviews with the twenty Ecuadorian high school teachers, it was evident that both male and female teachers are passionate about technology use. They pointed out that any teacher whether male or female who

has access to a computer and knows how to use it together with relevant education technologies will use it.

The outcome of the study agrees with Mollaei and Riasati (2013) findings that instructors in EFL classes have been using ICT resources for the preparation of teaching aids and activities. It further reaffirms Guerrero Abad (2014) research findings that teachers with experience in using computers were able to integrate ICT in EFL classes. Furthermore, the use of computer and related technologies is a matter of regulatory concern in Ecuador, and all teachers regardless who have been trained and have access to technology are expected to make good use of such emerging education technologies in improving student performance. Evidently, Liet et al. (2013) and Asiri (2012) findings might have been influenced by the general technology use outside the classroom.

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	0	0	40	25	10	25	0	0
2	I do not think I would be able to learn how to use ICT in my classroom.	0	0	0	0	25	20	25	30	0	0
3	I am afraid that if I begin to use ICT, I will become dependent upon them.	0	0	0	0	20	35	30	15	0	0
4	I dislike working with machines that at smarter than I am.	0	0	0	0	25	25	25	25	0	0
5	I feel apprehensive about using ICT.	0	10	5	10	30	20	15	10	0	0
6	I have difficulty in understanding the technical aspects of ICT.	0	0	5	0	35	35	10	15	0	0
7	It scares me to think that I could cause the computer to destroy a large amount of data by hitting the wrong key.	0	0	0	0	30	30	20	20	0	0
8	I hesitate to use ICT for fear of making mistake that I cannot correct.	0	0	5	0	35	35	10	15	0	0
9	You have to be master to understand how to use ICT.	0	0	5	0	30	35	15	15	0	0

10	I have avoided ICT use because they are unfamiliar.	0	0	0	10	40	20	10	20	0	0
11	I have not attended any ICT training courses.	0	0	10	5	35	25	5	20	0	0
12	I have attended some ICT training courses; however, I prefer not to use ICT because they someone intimidate to me	0	0	0	0	20	40	30	10	0	0
13	I am not interested in attending any ICT course.	0	0	0	0	30	25	20	25	0	0
14	I do not how to use any ICT resource	0	0	0	0	30	35	20	15	0	0
15	I do not use any ICT resource in class because I think that ICT are not necessary to teach English.	0	0	10	15	10	15	30	20	0	0
16	I prefer not to use ICT because my teaching experience is most crucial factor in teaching process.	0	0	5	15	25	20	20	15	0	0
17	I think that age is factor that determine the ICT use in class.	0	0	5	20	25	15	20	15	0	0
18	In my opinion, younger teachers are more skillful to use ICT than the older ones	0	0	5	0	30	30	15	20	0	0

Author: Martha Lucía Hidalgo

Source: Ecuadorian high school EFL teachers

From table 3 above, barriers to ICT use in the classroom, under the parameters of strongly agree and agree; 10% of females strongly agree that *I feel apprehensive about using ICT* while another 10% agreeing. Also, 20% of the females agree that *I think that age is a factor that determines the ICT use in class*. Another 15% of the female teachers interviewed agree that *I prefer not to use ICT because my teaching experience is the most crucial factor in the teaching process*. Using these two parameters, female teacher's characteristics that informed their responses include anxiety, experience, and age as barriers to ICT use in the classroom. Feeling apprehensive about using ICT in the classroom can be attributed to female teachers' limited access to ICT. According to Lin et al. (2013), female teachers record low levels of ICT integration in language classes. This fact was further affirmed by OZ (2015), who argued that female teachers are less interested in the subject and this can explain why 15% agree not to use ICT because their teaching experience is the most crucial factor in the teaching process. Such feelings can only be explained by the fact that most of the high schools in Ecuador have not

fully implemented the use of ICT in the classroom and those who decide to do so are doing out of their effort to enhance lesson delivery. When such scenario exists, those who do not integrate ICT use in classroom defend what they have at hand, their teaching experience.

Male teachers, based on table 3 data, do not show an agreement to any of the questions asked. However, three of the top questions, which they show significant level of agreement, include the feeling that they do not use ICT in class because they think it is not necessary for teaching English, affirmed by 10% of males. Another 10% of male teachers interviewed agree that *I have not attended any ICT training courses* while another 5% males believe that *you have to be a master to understand how to use ICT*.

From these two parameters, strongly agree and agree the dominant male teacher's characteristics that come into play are attitude and beliefs as the barriers to ICT use in the classroom. Male teachers' attitude and belief that it is not necessary to teach English language using ICT explains why integration of ICT in the classroom in teaching EFL lesson remains a big challenge. According to Van-Manen (2016), men tend to value sciences and mathematics more than languages. This explains why they appear not bothered by failing to use ICT in teaching English when they think their experience is more than enough towards achieving the same objective. Male teachers' beliefs such as being a master to understand how to use ICT impede its integration into the classroom. Although a few of the male teachers interviewed expressed satisfaction about ICT use in class, they use technology in learning new things from the internet and not relying on educational technologies in lesson delivery. This is different from their female counterparts who seem composed and well-versed regarding the use of ICT in different ways such as preparing instructional content and organizing classroom presentations among others.

On the other two parameters of strongly disagree and disagree, 40% female teachers strongly disagree that *I have attended some ICT training courses; however, I prefer not to use ICT because*

they somewhat intimidate with another 10% of the teachers disagreeing. Similarly, 35% female teachers strongly disagree that they are afraid to begin using ICT since they will become dependent upon them while another 15% of teachers interviewed disagreeing. Also, 35% female teachers strongly disagree that they do not know how to use any ICT resources and at the same time another 15% disagree with the statement. In these two parameters, the dominant female teachers' characteristic that informs their strong dissent is the attitude. Female teachers have a positive attitude towards ICT use in teaching EFL lesson.

With regards of the study, under the two parameters of strongly disagree and disagree from table 3 above, 40% of male teachers strongly disagree that they feel insecure about their ability to use ICT as a resource in teaching EFL while another 10% disagreeing with the statement. Also, 40% male teachers strongly disagree that *they have avoided ICT use because they are unfamiliar* and 10% disagreeing with the statement. Lastly, 35% male teachers strongly disagree that they hesitate to use ICT for fear of making mistakes that they cannot correct while 10% of the teachers interviewed disagree with the statement. Under these two parameters, the dominant male teachers' characteristic that comes into play is an experience. Their level of experience has made them realize what they can do, and how they go about challenges relating to ICT use. The level of experience assists male teachers in dealing with barriers to ICT integration in the classroom.

Although table 3 shows distinct male and female teachers' characteristics leading to the gender-based barrier to ICT use, table 4 which shows the teachers perception and how they influence ICT use reveals an interesting pattern of both male and female teachers' characteristics most influential to ICT use in the classroom. Examining the parameters of strongly agree and agree, 5% female teachers strongly agree that *I have learned to use ICT resources by myself* while another 40% agree with this statement. Also, 20% of teachers strongly agree and 20% agree that age is not an

obstacle to learn about ICT use in the classroom. In addition, 10% of interviewed female strongly agree and 35% agree that *I think ICT are necessary tools in an educational setting*.

In comparison, 10% male teachers strongly agree and 40% agree that they are confident that they can learn technological skills. Also, 25% of the male teachers strongly agree and 25% agree with the fact that learning ICT is like learning any new skills the more you practice, the better you become. Furthermore, 30% male teachers strongly agree and 20% of them agree that ICT are necessary tools in an educational setting. Based on the strongly agree and agree on parameters, it is evident that the most influential teacher characteristics for both male and female about ICT use is the attitude. Both male and female teachers exhibit positive attitude towards ICT use in the classroom and their desire to continually learn more about emerging technologies in improving classroom outcome.

Regarding the parameters of strongly disagree and agree in influencing ICT use in the classroom, 25% female disagree and 5% strongly disagree that they know a lot about ICT use because they have attended some ICT training courses. Next, 5% of females disagree and 15% strongly disagree that the challenge of learning ICT use is exciting. Also, 15% of females disagree that they feel motivated to use ICT in the classroom.

On the contrary, 10% males disagree and 5% strongly disagree that when they have any technical problem with ICT, they do not feel frustrated. Moreover, 10% male teachers disagree that the challenges of learning about ICT use are exciting. Additionally, 5% males disagree that they know a lot about ICT use because they have attended some ICT training courses. Anxiety and experience remain top female teachers' characteristics cause a barrier to ICT integration. Ifenthaler and Schweinbenz (2013) argued that a majority of female teachers are not enthusiastic about technology use in class. For this reason, they tend to rely on their skills in delivering lesson objectives. Additionally, these authors also argued that female teachers think their experience is more important

in teaching English compared to ICT use. Anxiety among female teachers remains a top barrier to ICT use in the classroom.

According to Teo (2014), female teachers are anxious to learn new things, and such behavior denies them the opportunity to compose themselves during lesson delivery. Consequently, they cannot meet lesson objectives they are perpetually on the learning curve. Male teachers face two teacher characteristics that compromise ICT integration in teaching curriculum. Attitude and beliefs top their list of barriers to ICT integration in EFL lesson delivery. Such characteristics are brought about by lack of rationality in different subjects taught in school from male teachers' point of view who continue to glorify technical subjects (Sipila, 2014).

Table 4: Teachers' perceptions by gender in relation to the factors that they consider the most influential 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.	10	20	30	10	0	5	10	25	0	0
2	I am confident that I can learn technological skills.	10	25	40	20	0	5	0	0	0	0
3	I feel motivated to use ICT in my class.	15	10	35	25	0	15	0	0	0	0
4	Learning to use ICT is like learning any new skill – the more you practice, the better you become.	25	5	25	35	0	10	0	0	0	0
5	I am sure that with time and practice I will be as comfortable working with ICT.	15	10	35	35	0	5	0	0	0	0
6	I feel that I will be able to keep up with the advances happening in the ICT field.	20	15	30	25	0	10	0	0	0	0
7	If given the opportunity, I would like to learn about and use ICT.	25	10	25	35	0	5	0	0	0	0
8	I think that ICT are necessary tools in educational settings.	30	10	20	35	0	5	0	0	0	0
9	I like to use ICT because they help me to innovate my teaching methodology.	30	15	20	25	0	10	0	0	0	0
10	ICT help me to motivate my students to learn English.	25	15	25	25	0	10	0	0	0	0

11	If I had any technical problem with ICT during my class, I would continue doing the planned activities.	15	20	30	25	5	5	0	0	0	0
12	When I have any technical problem with ICT, I do not feel frustrated.	0	5	35	15	10	25	5	10	0	0
13	Age is not an obstacle to learn about and use ICT in my classes.	20	20	30	25	0	5	0	0	0	0
14	I know a lot about ICT use because I have attended some ICT training courses	5	15	40	5	5	25	0	5	0	0
15	I have learned to use ICT resources by myself	15	5	35	40	0	5	0	0	0	0
16	I think ICT has a positive impact on teaching process	20	10	30	30	0	10	0	0	0	0
17	ICT use has more advantages than disadvantages in EFL teaching.	25	15	25	25	0	10	0	0	0	0

Author: Martha Lucía Hidalgo

Source: Ecuadorian high school EFL teachers

From table 4, it is evident that attitude as teachers' characteristics for both genders influences ICT use in the classroom. From the data, it is clear that a majority of the teachers have learned ICT use as a personal initiative and not based on any concrete training. The positive attitude they have and the trust in ICT use in improving classroom outcome remain a great source of influence in integrating ICT in teaching curriculum.

To conclude this study, it is important to emphasize that ICT is mainly used by Ecuadorian EFL teachers for teaching listening skills as compared to others like speaking, pronunciation, vocabulary, writing, grammar, and reading. The findings also indicate that EFL teachers use ICT selectively depending on the content they wish to deliver and the type of activities involved (Kavanoz et al., 2015). EFL teachers tend to use portable gadgets and ICT devices to teaching areas of the curriculum that are straightforward in as far as use of ICT is concerned. One key barrier identified to the use of ICT in EFL classes is the fact that certain areas of the EFL curriculum recommend for the use of inappropriate material with a little emphasis on integration of ICT (Aydin, 2014). The findings

also indicate that CD players, search engines, email services, computer software, word processors, educational websites, and printers were the most featured in instances where Ecuadorian EFL teachers used ICT tools in their lessons (Herrera, 2013).

Conclusion

It can be concluded that attitude remains a major barrier to ICT integration in the teaching of EFL lessons. Teachers who have a negative attitude towards technology use in the classroom are less likely to adopt computer-related technologies to meeting lesson objectives.

It is concluded that teachers' belief as another characteristic that impedes technology use in classroom undermines effective integration of ICT in the classroom. This is because most teachers believe that their experience is enough in teaching English lesson and there is no need for technology use in guiding the teaching and delivery of English.

It can also be concluded that age affects the use of technology in the classroom. It was found that elderly teachers tend to avoid the use of technology in the teaching and learning of EFL lessons. They find it very interesting but with many difficulties to compete with young people who belong to this era, so they prefer to stay in what they really know.

Anxiety hinders ICT use in the classroom as found in the research. This is because it breeds confusion making the teacher lose concentration as they contemplate what will happen next when they are fully using technology in lesson delivery.

Based on this project it could be possible to evidence that experience is a barrier to computer-related technology use since most teachers who are not skilled in this field were found to dislike the implementation of ICT in the teaching and learning process.

Regarding gender, it was concluded that there was not much difference between male and female. Most teachers have learned on their own initiative with a positive attitude helping themselves to improve their knowledge in ICT use in the classroom as a great source of influence to obtain better results with the students in the teaching-learning process.

Recommendations

Ecuadorian high school teachers should at all time develop a positive attitude towards technology use in the classroom. They can do this by learning about some of the benefits of technology use in improving student outcome. They can read research findings on the subject and also watch some educational videos.

Both male and female teachers should change their mind about beliefs that impede integration and subsequent use of technology in delivering EFL lessons. For example, the belief that experience is enough in teaching and learning EFL and that the use of ICT in the classroom is insignificant should be eliminated.

Educational directors should from time to time offer updated ICT courses to elderly teachers who are avoiding the use of technology use at an advanced stage in their lives. This will prevent them from implementation of the use of technology in their classrooms.

Additionally, the Ministry of Education should lower teachers' anxiety in the use of technology in classrooms. Besides, the provision of technological resources will help teachers to maintain practicing in order to improve their skills and to create new materials for their classes.

The teachers should be informed that they will be provided with adequate knowledge and necessaire skills on the use of ICT in teaching EFL lessons hence in order to lower the anxiety.

Furthermore, the ICT training courses and support should be given to all the teachers regardless of their skills and experience in the field of ICT. This will ensure that all the teachers are treated equally and those who are not experienced in ICT know that they have equal chances of retaining their jobs just like the ICT- expert teachers.

Finally, teacher's characteristics, psychological, professional, and personal, have to be taken into account during the integration of ICT to get better results in the teaching and learning process.

References

- Afshari, M., Bakar, K. A., Luan, W. S., Samah, B. A., & Fooi, F. S. (2009). Factors affecting teachers' use of information and communication technology. *Online Submission*, 2(1), 77-104.
- Asiri, M. J. S. (2012). Factors influencing the use of learning management system in Saudi Arabian Higher Education: A theoretical framework. *Higher Education Studies*, 2(2), 125-137.
- Aydin, S. (2014). Foreign language learners' interactions with their teachers on Facebook. *System*, 42, 155-163
- Azmi, N. (2017, January). Retrieved from <http://www.mcser.org/journal/index.php/jesr/article/viewFile/9732/9370>
- Bauer, J., & Kenton, J. (2005). Toward technology integration in the schools: Why it isn't Happening. *Journal of technology and teacher education*, 13(4), 519.
- Buabeng-Andoh, C. (2012). An Exploration of Teachers' Skills, Perceptions and Practices of ICT in Teaching and Learning in the Ghanaian Second-Cycle Schools. *Contemporary Educational Technology*, 3(1), 27-35.
- Capan, S. A. (2012). Teacher attitudes towards computer use in EFL classrooms. *Frontiers of Language and Teaching*, 3, 248-254.
- Davidson, A. L., Suarez, W., Naffi, N., Arabuli, N., & Desjardins, F. (2015, June). A Case Study about the Implementation of Problem-Based Learning and Mobile Technologies in Ecuador, Universidad Técnica de Ambato. In *EdMedia: World Conference on Educational Media and Technology*, 1049-1056,
- Firmin, M. W., & Genesi, D. J. (2013). History and implementation of classroom

technology. *Procedia-Social and Behavioral Sciences*, 93, 1603-1617.

Gilakjani, A. P. (2012). EFL teachers' beliefs toward using computer technology in English language teaching. *Journal of Studies in Education*, 2(2), 62-80.

Golshan, N., & Tafazoli, D. (2014). Technology-enhanced language learning tools in Iranian EFL context: Frequencies, attitudes, and challenges. *Procedia-Social and Behavioral Sciences*, 136, 114-118.

Guerrero Abad, K. A. (2014). *Perceptions of English teachers on the use of blogs as a strategy to enhance reflective and metacognitive learning* (Master's thesis, Universidad Casa Grande).

Retrieved from:

<http://dspace.casagrande.edu.ec:8080/bitstream/ucasagrande/417/1/Tesis708GUEp.pdf>

Herrera, S. A. (2013). *Developing e-literacy in Ecuadorian secondary school English language teachers: applying TPACK to in-service course design* (Master's thesis, Manchester:

Universidad de Manchester). Retrieved from:

<http://repositorio.educacionsuperior.gob.ec/bitstream/28000/1413/1/T-SENESCYT-00564.pdf>

Ifenthaler, D., & Schweinbenz, V. (2013). The acceptance of Tablet-PCs in classroom instruction: The teachers' perspectives. *Computers in Human Behavior*, 29(3), 525-534.

Kavanoz, S., Yüksel, H. G., & Ozcan, E. (2015). Pre-service teachers' self-efficacy perceptions on Web Pedagogical Content Knowledge. *Computers & Education*, 85, 94-101.

Isisag, K. U. (2012, November). The positive effects of integrating ICT in foreign language teaching. Paper presented at International Conference of ICT for Language Learning. Gazi University (Turkey).

- Lin, T. C., Tsai, C. C., Chai, C. S., & Lee, M. H. (2013). Identifying science teachers' perceptions of technological pedagogical and content knowledge (TPACK). *Journal of Science Education and Technology*, 22(3), 325-336.
- Mahmoudikia, M., Hoomanfar, M. H., & Izadpanah, M. A. (2014). Teacher factors affecting ICT use in Iranian classes: A literature review. *International journal of language learning and applied linguistics world (IJLALW)*, 6(1), 203-214.
- Mollaei, F., & Riasati, M. J. (2013). Teachers' perceptions of using technology in teaching EFL. *International Journal of Applied Linguistics and English Literature*, 2(1), 13-22
- Ndibalema, P. (2014). Teachers' Attitudes towards the Use of Information Communication Technology (ICT) as a Pedagogical Tool in Secondary Schools in Tanzania
- Oz, H. (2015). An investigation of preservice English teachers' perceptions of mobile assisted language learning. *English Language Teaching*, 8(2), 22
- Player-Koro, C. (2012). Factors influencing teachers' use of ICT in education. *Education Inquiry*, 3(1), 93-108
- Quezada-Sarmiento, P. A., Zúñiga, A., Toro, V., Camacho, G., Pinza, E., Benítez, C., & Morocho, E. (2017, June). Teachers' factors that influence the English language teaching-learning process in Ecuadorian high schools in the context of e-Education and society. *Information Systems and Technologies (CISTI), 2017 12th Iberian Conference on* (pp. 1-7). IEEE.
- Rafiee, S. J., & Purfallah, S. A. (2014). Perceptions of junior high school teachers toward computer-assisted language learning (CALL) within the context of Azarbayjan provinces. *Procedia-Social and Behavioral Sciences*, 98, 1445-1453.

- Rahimi, M., & Yadollahi, S. (2011). ICT use in EFL classes: A focus on EFL teachers' Characteristics. *World Journal of English Language, 1*(2), 17.
- Sipila K. (2014). Educational use of information and communications technology: teachers' perspective. *Technology, Pedagogy, and Education, 23*(2), 225-241.
- Sabzian, F., & Gilakjani, A. P. (2013). Teachers' attitudes about computer technology training, professional development, integration, experience, anxiety, and literacy in English language teaching and learning. *International Journal of Applied Science and Technology, 3*(1), 67-93.
- Sarfraz, S., Mansoor, Z., & Tariq, R. (2015). Teachers' and Students' Perceptions of the Communicative Language Teaching Methodology in the CALL Environment: A Case Study. *Procedia-Social and Behavioral Sciences, 199*, 730-736.
- Sinche, M., & Alejandra, P. (2016). *Flipped classroom resources in the EFL classroom improves the learning process.*
- Teo, T. (2014). Unpacking teachers' acceptance of technology: Tests of measurement invariance and latent mean differences. *Computers & Education, 75*, 127-135.
- Tezci, E. (2009). Teacher effect on ICT use in education: The Turkey sample. *Procedia-Social and Behavioral Sciences, 1*(1), 1285-1294
- Van Manen, M. (2016). *The tone of teaching: The language of pedagogy.* London. Routledge.
- Yadav, P., & Mehta, P. (2014). Importance of ICT in Education. *International Journal of Research in Social Sciences and Humanities, 2*(5), 1-9. Retrieved from [http://www-ijrssh.com/images/short_pdf/Jan 2014 Prem%20Yadav.pdf](http://www-ijrssh.com/images/short_pdf/Jan%2014%20Prem%20Yadav.pdf)

ANNEX 1



UNIVERSIDAD TÉCNICA PARTICULAR DE LOJA
La Universidad Católica de Loja

MODALIDAD ABIERTA Y A 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 scale ranging from strongly disagree to strongly agree.

N°	STATEMENT	STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE
1	I feel insecure about my ability to use ICT as a resource 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 than 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 I could cause the computer to destroy a large amount of data by hitting the wrong key.				

8	I hesitate to use 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 any ICT training courses				
12	I have attended some ICT training courses; however, I prefer not to use ICT because they somewhat intimidate to me.				
13	I am not interested in attending any ICT course				
14	I do not know how to use any ICT resource				
15	I do not use any ICT resource in class because I think that ICT are 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 determine 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.

N°	STATEMENT	STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE
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 skill – the more you practice, the better you become.				
5	I am sure that with time and practice I will be as comfortable 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 and use ICT.				
8	I think that ICT are necessary tools in educational settings.				
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 any 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 you collaboration

ANEXO 2



(Azmi, 2017) UNIVERSIDAD TÉCNICA PARTICULAR DE LOJA

La Universidad Católica de Loja

MODALIDAD ABIERTA Y A DISTANCIA

TITULACIÓN DE INGLÉS

TEACHER'S INTERVIEW

Gender: M () F ()

Years of EFL teaching experience: _____

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?
