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Analysis of EFL teachers' skills, attitudes, and use regarding ICT in Ecuadorian
High Schools

Autor (a): Calzada Estupiñán, Javier Lizandro

Director (a): Inga Ordóñez, Gabriela Cecibel

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Vargas Saritama Alba Bitalina, Mgtr.

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Dedication

This investigation is dedicated to my wife Sandra and my son Mathias. Their support has been important during my studies and their motivation has kept me focused. I also want to dedicate this to my friends and colleagues, whose experience and knowledge have provided a guide throughout this research. Lastly, I dedicate this to my loving parents Pelagia and Lizandro, who have always supported me in all ways they could and have shown me how to move forward and achieve my dreams.

-Javier

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-Javier

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Resumen

El tema de esta investigación es "Análisis de las habilidades, actitudes y uso de los docentes EFL con respecto a las TIC en las escuelas secundarias públicas ecuatorianas". El propósito de esta investigación fue examinar las habilidades y actitudes de los maestros con respecto a las TIC al implementarlas en el aula, mostrando cómo se relacionan estos tres parámetros. La investigación se llevó a cabo en la parte sur de Guayaquil en una escuela secundaria pública ecuatoriana, en la que se entrevistó a 10 EFL profesores entre maestros y maestras; Es importante mencionar que la experiencia de esos docentes es de entre 10 y 20 años de experiencia laboral y sus edades oscilan entre 35 y 50 años. Esta investigación utilizó un enfoque cuantitativo y cualitativo. En los datos que se obtuvieron de los encuestados y entrevistados a la muestra elegida. Los resultados indican que los profesores de EFL muestran una actitud positiva en el uso de las TIC. Además, los maestros acordaron que las TIC son necesarias y juegan un papel importante en las aulas de clases de EFL, sugiriendo un vínculo común entre las habilidades, el uso frecuente y la actitud mostrada por los educadores.

Palabras clave: Información, comunicación, tecnología, TIC, inglés, idioma extranjero, EFL, escuelas secundarias públicas, habilidades, actitudes.

Abstract

The topic of this investigation is “Analysis of EFL teachers’ skills, attitudes, and use regarding ICT in Ecuadorian public high schools”. The purpose of this research was to examine teachers’ skills and attitudes regarding ICT when implementing them in the classroom, showing how these three parameters are related. The research was conducted in the south part of Guayaquil in an Ecuadorian public high school, in which 10 EFL male and female teachers were interviewed; it is important to mention that those teachers’ experience is between 10 to 20 years and that they are between 35 to 50 years old. This research used a quantitative and qualitative approach. The data was obtained surveying and interviewing the chosen sample. The results indicate that EFL teachers show a positive attitude in the use of ICTs. In addition, teachers agreed that ICTs are necessary and play an important role in the EFL classroom, suggesting a common link between skills, frequency use and the attitude shown by educators.

Keywords: Information, Communication, Technology, ICT, English, Foreign Language, EFL, public high schools, skills, attitudes.

Introduction

Nowadays, Information and Communication Technology (ICT) is a term that integrates telecommunications and computers. The modern society has been built thanks to the ICT developments that have been incorporated in humans' daily life within a very short time. ICT or digital tools are any sorts of technology that provides integration between the teacher's methodology and learners through the use of it, for example, interactive boards, tablets, computers, educational software, educational websites, e-learning portals, electronic educational materials, platforms, and many others. It involves a variety of benefits such as the economic growth of countries based on technology, innovation, and knowledge, making governments have a special interest in ICT literacy and educational policies revolving around it (Balboni, Rovira, & Vergara, 2011).

ICT has become the core of education and a tool that is impacting cognitive skills and all the actors in the education environment should partake in it (Budiman & Ngadiso, 2018). (Franco Camargo & Camacho Vásquez, 2018) realized that we live in an era of rapid change, where accelerated and continuous adaptations are essential than ever, to not be left behind. That makes ICT the implementation and use essential in education.

In Ecuador, ICT is not a subject anymore but a transversal axis in the curriculum. (Marqués , 2000) considers that ICT is a transversal to any formative action because it exercises three functions: a tool to facilitate learning, a tool to process information, and as a digital competence. This view seems to support the fact that ICT implementation is necessary.

This research topic is "Analysis of EFL teachers' skills, attitudes, and use regarding ICT in Ecuadorian public schools" and had the objective of gathering and analyzing data to identify the current situation in which EFL teachers are: regarding the required skills, attitudes to adopt ICT techniques and the ability to use it. For that purpose three main questions have been established: 1) What are the EFL teachers' skills to use ICT in their

classrooms?, 2) How frequent do EFL teachers use ICT in their classroom?, and 3) What are the teacher's attitudes towards ICT use in their EFL classrooms?

This study was organized into three chapters: the literature review, method, and results and discussions. Chapter I: Literature Review, contains the scientific information and previous studies related to this study, which was organized into five sections: use of ICT in EFL teaching, the ten most used technological resources by high school EFL teachers, EFL teachers' skills to use ICT in teaching, EFL teachers' attitude towards ICT and previous studies concerning high school teachers' skills, attitudes, and ICT use in their EFL classes. Chapter II: Method, describes the setting and participants, the procedures that guided the path of this research, and includes methodological research limitations. Chapter III: Results and Discussion, contains the respective analysis and interpretation of the data based on the research questions and in the use, skills, and attitudes of the teachers. Finally, the research presents the conclusions and recommendations that provide closing generalizations and advice for further research.

To give scientific support to the present study, it is important to include some previous research about EFL teachers' skills, attitudes, and use regarding ICT.

The first study was done by (Al-Zaidiyeen, Mei , & Fook, 2010) in a school of Jordan. This study provided information regarding EFL teacher's use and attitudes regarding ICT. They found that from 460 teachers that answered the questionnaire, teachers hold positive attitudes towards the use of ICT, and a significant positive correlation between teachers' level of ICT use and their attitudes towards ICT was found. Moreover, that ICTs use for educational purposes should be given greater consideration than it currently receives.

The second study was done by (Buabeng-Andoh, 2012) who explored teachers' skills, perceptions, and practices about ICT in second-cycle institutions in Ghana. This study was interesting because the main result based on the answer of 234 teachers provide evidence that the introduction of ICT in teaching and learning has not brought any change in

the delivery of education in second-cycle schools in Ghana. That implied that teachers have not shifted from teacher-centered instruction to student-centered learning.

The third study was done by (Cahyani & Y. Cahyono, 2012) in Indonesia explored the use of technology either web-based or non-web-based to help learners learn the target language. From the 37 seven teachers, the study found the presence of technology in language classrooms is a prerequisite for interesting language instruction and success in language learning. However, teaching language using technology poses many challenges.

This research is relevant and beneficial for several people and institutions because the data obtained in it will help them to understand the importance of ICTs usage in the language learning process. It means that school benefit is an academic improvement, but it will also provide better service at a wider range in themes that have met the criteria in quality education.

The outcomes of this research compiled sufficient data-information that will contribute to future researchers' investigations of the topic; on the other hand, it will provide a variety of resources that will support students learning process in the Ecuadorian publics schools.

Lastly, the limitations encountered was the difficulty for teachers to complete the surveys and interviews, due to their lack of time and the excess of school paperwork.

Chapter one

Literature Review

This chapter covers the theoretical fundamentals and scientific information to support the present research study. Thus the most relevant topics to addresses are 1) Use of ICT in EFL teaching, 2) The 10 most used technological resources by high school EFL teachers, 3) EFL teachers' skills to use ICT in teaching, 4) EFL teachers' attitude towards ICT, and 5) previous studies in relation to high school teachers' skills attitudes, and ICT used in their EFL classes the use of ICT in EFL teaching, the 10 most used technological resources by high school EFL teachers, EFL teachers' skills to use ICT in teaching, EFL teachers' attitude towards ICT and previous studies related to EFL teachers' skills, attitudes, and use regarding ICT's. Finally, it should be noted that the information has been obtained from textbooks, scientific journals, and websites.

Use of ICT in EFL Teaching

Importance.

The use of ICT in EFL Teaching is very important for educators and students in the classroom. There is a growing necessity to use ICT in order to fully grasp a learner's attention and understanding, in order to create meaningful learning and having a fully productive teacher that can assist students in achieving meaningful learning (Makewa, Meremo, Role, & Role, 2013). According to (Assulaimani, 2019) ICT can provide students "an opportunity of transcending the borders of their classrooms".

In the same way, (Abbas & Elttayef, 2019) state that, apply ICT in EFL education can support the practice of language learning communicative skills. Moreover, ICT also help to improve the reading skill (Nikolopoulou, Akriotou, & Gialamas, 2019) and writing skills (John & Yunus, 2019).

ICT use in EFL teaching has a high importance in the perception of teachers and administrators. (Sahay & Dawson, 2019) mention that teachers see as a part of the future education use ICT in EFL teaching and even have a high perception that some update social

websites will function as a learning tool such as WhatsApp. Additionally, added that educators express a strong desire to increase the technological infrastructure along with specific technological English training programs to ensure teachers' knowledge and attitude, therefore, will be an exponential integration of ICT's in classrooms. (Makewa, Meremo, Role, & Role, 2013) also realized that both teachers and administrators saw the use and application of ICT in primary and secondary school as important as any college or university.

Implications.

The use of ICT in EFL Teaching implies that the education system is evolving with the ICT changing the dynamics of teaching. For students, this means that now they have the possibility to learn English based on ICT interactive games (Ratminingsih, Mahadewi, & Divayana, 2018). For teachers it implies that they need to increase their ICT knowledge which translates into increased demand on ICT courses making this ICT in EFL an integration to create more meaningful learning in the classroom (Budiman & Ngadiso, 2018). In the same way, the use of ICT in EFL Teaching implies that students are enjoying effective learning (Habibi, Razak, Yusop, & Mukminin, 2019).

The use of ICT in EFL Teaching suggests that there should be an overall change of mindset that affects different stakeholders. Vergara, Rovira, and Balboni (2011) study in Latin America showed that the use of ICT in EFL Teaching also incites knowledge creation, innovation activities and diffusion of technologies which are recognized as a great advance for these countries. (Wallet & Valdez, 2015) found that there are constantly new developments and emphasis to expand ICT use in education on a daily basis throughout that area of the continent, mentioned above. Additionally, mentioned that in South America, various countries have adopted the use of ICT transforming their educational systems.

Advantages

The use of ICT in EFL teaching brings an enormous advantage which allows access to an infinite amount of information. (Talebian, Mohammadi, & Rezyanfar, 2014) agree that

ICT in EFL Teaching eases access to information and resources for both students and educators. It supports also with a large number of educational resources from the internet or databases. Which involves a huge benefit to the teachers because now they have assistance in the teaching process. It also benefits students because it increases independence and self-research skills. In fact, students are more willing to use the internet and other resources to obtain information and apply what they have learned (Azmi, 2017).

Another advantage of the use of ICT in EFL Teaching is that it provides a vibrant learning process that enhances the motivation of the learners. Teacher learner collaboration is more fluid and dynamic as there can be interaction through chats, videos, blogs and other sorts of platforms to message, recommend or add information and activities (Talebian , Mohammadi, & Rezyanfar, 2014). The use of ICT in EFL Teaching increases the student's involvement and active participation in the learning process. After all, who does not want to have a student involve? (Mohanty, 2013)

Disadvantage

The previous studies presented the advantages of ICT use in EFL Teaching but are key to recognize that there are disadvantages too.

For some authors, there is a disadvantage related to teachers not being 100% available for technology support in class and the lack of this support can be translated into the frustration of students with the technology and the language itself. (Talebian , Mohammadi, & Rezyanfar, 2014).

Another disadvantage of the use of ICT in EFL Teaching is related to teacher previous background in the usage of it. Similar to students in different instances teachers might not comprehend or accept the use of ICT in their classroom, either because of conventional teaching methods, lack of understanding, or lack of experience (Mohanty, 2013; Silviyanti, T., & Yusuf, Y., 2015). There is fear from many teachers to use digital tools

as they are not well versed in how to apply them, objecting to diminish class time and providing more common teaching strategies.

One more disadvantage of the use of ICT in EFL Teaching is that it increases the costs for the schools. There are high costs associated with the implementation of ICT into educational systems such as the cost of computers, internet bandwidth, platforms, and wasted time during technical glitches or difficulties (Azmi, 2017) (Azmi, 2017; Mohanty, 2013; Talebian et al., 2014).

1.1 The 10 most Used Technological Resources by High School EFL Teachers

ICT is present in everyday life including education. There is a large variety of ICT in worldwide classrooms which is explained through the positive perception that school administrators, teachers, and students have about it (Makewa, Meremo, Role, & Role, 2013). Additionally, (Sahay & Dawson, 2019) argue that there is a strong desire by teachers and administrators to increase technological infrastructure.

(Bilyalova, 2017) mentions that the most common types of ICT are Multimedia Presentations, e-mail correspondence, virtual training programs, and the internet. Meanwhile, (Johnson , et al., 2016) mention that educational data platforms, game-based learning through online platforms or video games, cloud-based learning and finally “Bring Your Own Device” are the most common types of ICT.

So, following is a brief description of ten of the most used technological resources based on the perspectives of different researchers.

The use of Mobile technology in EFL teaching is defined as the use of personal electronic devices for teaching. (Xue , 2020) said that the use of personal electronic devices in education is grounded in theoretical frameworks and methodological principles that support EFL teaching and learning through learning across multiple contexts including a broader network of educators, peers, experts and learners.

On the other hand, (Bernacki, Greene, & Crompton , 2020) argue that the use of mobile technology affects the process of learning via interactions with other psychological constructs, brings new opportunities to directly influence learning process or outcomes, and collects data to understand the learning process.

Meanwhile, social networks have been commonly used to keep in touch with family and friends but these technological resources has proven its use for High School EFL Teachers. Facebook enhances students' interaction and critical thinking through feedback exchanges in writing (Saeed, Ghazali, Sahuri, & Abdulrab, 2018). Facebook as an EFL teaching tool has also contributed to engaging learners, improve the relationship learner-learner and learner-instructor as well the processes of information sharing, communicating and socializing with friends, and developing a sense of belonging (Razak, et al., 2013). Another social network like WhatsApp can be utilized as a useful medium for developing listening proficiency (Ghee, Terng, & Chui, 2019).

Online games are another technological resource that has brought a positive impact on EFL Teacher. This tool may include activities such as playing online games, visiting gaming sites, and completing instructional tasks. Some games used are: Beat the Keeper, ESL Crossword, Freerice, scrabble online, Call of duty and League of Legends. According to (Mcnaill, 2020), students exhibit language awareness in many ways including taking more central roles in gaming practices over time.

A pen-based tablet is a technological resource that is smaller than a notebook and larger than a smartphone. They are built with wireless and a variety of software applications, including business applications, Web browsers, and games. The pen-based tablet has been used by EFL Teachers benefiting their comprehension of the relationship between emotion-based pen pressure, student engagement and writing performance over the course of the learning process (Schrader & Kalyuga, 2020) giving their a stronger feedback. It has also allowed the implementation of drawing learning strategy which has increased both their learning motivation and memory retention (Kuo-Liang Ou , Tarnng , & Chen, 2020).

Clouds in computing refer to the servers that are accessed over the Internet which facilitate users and companies to not manage physical servers themselves or run software applications on their own machines. Some example of clouds are Google Drive, Dropbox, Microsoft cloud. The use of Clouds by High School EFL Teachers support their productivity, access variety of data and applications from any location to enhance their skills and knowledge (Harpreet kaur, Saini, & Jyoti, 2017).

(Johnson , et al., 2016) argue that cloud computing is widely used by teachers and recognized as a means of improving productivity and expanding collaboration in education through sharing information and having immediate access to it. Additionally, it makes it possible to develop student-centered learning, where their device acts as a personal medium to obtain and identify necessary information.

Google documents is an application from the Google Suite that as word document with the difference that is shared document where several people can join at the same time to edit the document, leave comments among other features. For (Woodrich & Fan, 2017) Google documents is beneficial, especially for students who are building their language abilities. The shared documents allow collaboration between learners and develop writing skills (Johnson , et al., 2016).

Wikis are hypertext tools to manage content easily and can be used to create static Websites. A study from (Franco, 2008) suggested that perceptions of wiki activity were positive, and the pre-/post-peer work indicated progress in language acquisition. In another study, it was highlighted the positive role of students' goal-setting and self-evaluation for explaining their attitude toward wiki-based collaborative learning (Su, Li, Chong Liang, & Chung Tsai, 2019).

Interactive whiteboards (IWBs) simulate traditional whiteboards with the difference that they are connected to a computer and projector and their board surface can be controlled with a pen or finger. (Klement, 2017) argues that the use of IWBs promotes a

more dynamic approach with students as it provides them with additional tools to view and complete tasks as well as develop information. IWBs' extensive interactivity technology has been perceived as the key to promoting student learning (ShingHsieh & YangLuo, 2016)

Interactive eBooks make the experience of reading using a sensory experience adding sound as well. (Hsieh & Huang, 2019) found that the combination of visual aids, such as images and captions, in the interactive eBooks are complemented by the listening supporting comprehension. In the use of interactive eBooks is important to note that depending on the familiarity of students with the cultural context of the contents the reading comprehension will also vary (Chang, Huang, & Liu, 2019).

A podcast is a digital medium consisting of an episodic series of audio that can be downloaded through web syndication or streamed online. For (Te Huia, 2019) the use of audio technology supports students' ability to audibly recognize. (Chaikovska, Zbaravska, & Bilyk, 2019) suggest that to make podcasts work the teacher should create a system of podcast-based tasks taking into constant repetition and imitation of speech patterns.

1.1.1 EFL Teachers' Skills to Use ICT in Teaching

Importance

(Starkey, 2019) considers that the integration of digital technologies into teaching programs is increasing making schools and teaching evolve as well the teacher set of skills needed.

ICT is indeed useful in an educational setting, important for the development of the language, and the necessary tools that teachers should use in the modern classroom. This will allow the teacher to create meaningful learning, with students showing confidence, fluency, understanding of complexity, and accuracy with the language. Moreover, teachers need ICT skills because they can inform teaching and policy decisions through analytics (Collins & Halverson, 2018)

Types of skills using ICT

As important as it is to recognize digital technologies is to recognize proper ICT skills needed by EFL teachers. Skills can be divided in soft skills and digital skills when dealing with the use of ICT in EFL teaching. Soft skills refers to personal attributes to deal with the ICT while Digital skills refer to not only to ICT but to information management, collaboration, communication and sharing, creation of content and knowledge, ethics and responsibility, evaluation and problem solving and technical operations (Ferrari, 2012; Van Laar, Van Deursen, Van Dijk, & De Haan, 2017).

For (Al Hosni, 2014) an important type of soft skill is "adaptability" when using ICT. Teachers must be adaptable and innovate with the materials they use to keep their classes engaging and meaningful. (Abdallah, 2015) adds that teacher's skill in adapting and seeing what works for students is necessary to combine ICT and language learning into an integrative model in order to develop learners' social capacity, improve in the new language, and provide a link from theory to practice. (González Otero, 2016) and Şahin Kızıl (2017) consider that teachers should be inquirers when using ICT because it could motivate the process of questioning and inquiring so language instruction is rich in different EFL ICT tools.

Teachers need to develop 21st century skills when using ICT such as creativity. Creative development requires structure and intentionality from teachers and students and can be learned through the disciplines (Robinson, 2001). Technology allows students to transfer skills to different contexts, so teachers should have the ability to make ICT relevant for students (Saavedra & Opfer, 2012).

Digital skills refer to handling the technology itself. (Aydin & Aytakin, 2018) establish that teachers should be able to handle current technology like computer writing or forming presentations as well as using spreadsheets and websites. For (Eshet, 2004), there is newly emerging concept of "digital literacy". It includes a broader panorama through the holistic

view that includes: photo-visual literacy; reproduction literacy; branching literacy; information literacy; and socio-emotional literacy. Some of the most commonly used and well-known ICT types among teachers are the Internet, e-mail and word processing (Tezci, 2009).

(Herrington, Ostashewski, Reid, & Flintoff, 2014) believe teachers should learn mobile technologies to keep up with students.

1.1.1.1. EFL Teachers' Attitude toward ICT

Importance

Fast changes in ICT are provoking changes in the education approaches besides the common day to day infrastructure which are creating bigger gaps among teachers. Adapting to those changes might be possible given the attitude of EFL teachers because they are central to the extent in which technology integration can be successful (Zamir and Thomas, 2019).

Despite the fact that teachers have a positive attitude towards ICT does not guarantee its integration. Nilson (2018) attributes it to the lack of quality concerning in-service teacher training, resulting in a majority of teachers learning ICT and digital learning tools on their own.

Types of attitude

There are positive and negative attitudes towards the use of ICT. According to (Mustafina, 2016), a positive predisposition from teachers and students to integrate ICT in the classroom can create an environment where their use is promoted and fully integrated. A positive attitude towards ICT adds value to their teaching for the integration to be successful (Hart & Laher, 2015). The teachers' positive attitude toward technology can increase students' motivation.

The negative attitude towards technology can be explained through a variety of factors affecting teacher's disposition towards the use of ICT. For (Semerci & Aydin, 2018) it depends on teachers' ICT anxiety and their ICT experience. (Kamilah & Anugerahwati,

2016) it has to do with their professional development and the degree of difficulty in the performed effective integration of ICT in the classroom depending on the ICT competence and/or pedagogical knowledge. The attitude also depends on teachers' predisposition, motivation, and confidence to transmit the language to students (Lal, 2014). (Wallet & Valdez , 2015) consider that teachers' attitudes towards ICT are greatly influenced by what authorities in those educational systems can provide. Seraji, Ziabari, & Rokni (2017) found that it is related to the experience level of teachers, age of teachers, and tenure of teachers.

Positive and negative attitudes can be classified into three elements: affect, cognition, and behavior (Albirina, 2006) which refer to the mental state, knowledge, and behavior.

There are some previous investigations in relation to high school teachers' skills, attitudes, and use regarding ICT in their EFL classes. A brief description of what they researched the methodology and conclusions they reach is presented below.

(Chen, Zhou, Meng, & Wu, 2019)'s article titled "How to promote Chinese primary and secondary school teachers to use ICT to develop high-quality teaching activities". It considered how ICT applications are affected by complex factors and thus needs to be systematically explored. This study surveyed 3730 primary and secondary school teachers in China to analyze the factors influencing teachers' usage of ICT to develop teaching activities and proposed a model of the influencing factors of ICT usage. The main conclusion was the application willingness, application frequency, and ITC directly affect ICT application in developing teaching activities.

Khany and Ghoreyshi (2013) wrote an article titled "Iranian EFL teachers' familiarity, attitudes and willingness towards different Internet tools and their applications". It identifies teachers' attitudes and use of ICT in Iranian high schools. Using quantitative methods, they found that teachers had a positive attitude towards using ICT in their classroom, finding them important to integrate for students to improve on their learning. Nevertheless, as has been

previously mentioned, different factors affect their implementation, and a lack of economic resources doesn't allow their full use in Iranian high schools.

In this same vein, another research has obtained similar findings about teacher attitudes. Sylviyanti and Yusuf (2015) wrote an article titled "EFL teachers' perceptions on using ICT in their teaching: to use or to reject?". Their study focused on identifying EFL teachers' perceptions on the use of ICT in their teaching. They applied a closed-ended questionnaire to 42 EFL teachers from two state universities in Indonesia. It also concluded that teachers tend to have a positive attitude when using ICT. In their research, equivalently using quantitative and qualitative methods, they found that teachers who have access to ICT use them regularly, however, access to them is not always immediate. Furthermore, they identify that teachers prefer to use ICT and hold them positively as useful and necessary in the classroom.

Mwila (2018) wrote an article titled "Assessing the Attitudes of Secondary School Teachers towards the Integration of ICT in the Teaching Process in Kilimanjaro, Tanzania". It consisted of a through quantitative analysis based on a cross-sectional survey design. The sample consisted of one hundred teachers from ten secondary schools. He found that integrating ICT in the classroom depends on teacher attitudes and their perceptions, where positive attitudes would lead to greater ICT use. Teacher experience and age can also affect how frequently ICT is used and how important a teacher views them in the learning process. He finally concluded that the "inadequacy" of ICT infrastructures such as hardware, software, limited internet access, sporadic electricity, and lack of teachers qualified in ICT are some of the factors preventing the integration of ICT into teaching and learning process in secondary schools."

Ifinedo, Rikala, and Hämäläinen (2020) wrote an article titled "actors affecting Nigerian teacher educators' technology integration: Considering characteristics, knowledge constructs, ICT practices and beliefs". The main objective of the study was to investigate the factors influencing Nigerian teacher educators' technology integration using a self-

completion survey administered. The study used a self-completion survey administered to Nigerian teacher educators from three schools in the southern region of Nigeria. The results showed that perceived technological knowledge, teachers' knowledge and perceived knowledge for integrating technology directly influenced the technology integration. Other factors changing technology integration are teaching experience and class size.

Yadollahi (2015) wrote an article titled "An overview of EFL teachers' individual differences in CALL. In *Handbook of research on individual differences in computer-assisted language learning*". The chapter reviews the research done on the role of these factors in language teachers' acceptance and use of technology in language classes. By using open-ended interviews, he established that various factors influence what teachers' results and attitudes towards ICT are: confidence, access, teaching experience, and age. It identified that teachers are willing to use ICT, however, there is not always immediate access to them.

Chapter two

Method

This chapter consists of two main sections: setting and participants, and procedure. The purpose of the setting and participants section is to describe the context of the school and the selected sample for this research. In the procedure section, there is a description of the research path taken.

Settings and Participants

This study “Analysis of EFL teachers’ skills, attitudes, and use regarding ICT in Ecuadorian public high schools” was carried out in public high school located in the city of Guayaquil, Guayas province in the Coast Region of Ecuador. The institution offers classes in the morning, afternoon and night to a total of 1903 students.

The participants for this study were ten English teachers; three men and seven women. Their age range was between 30 and 50 years. Their teaching experience was ranging from 10 and 20 years. It is important to mention that, eight of the participants have a bachelor’s degree in Education, two of the participants are still working in the process of getting a bachelor’s degree.

Procedures

To succeed this investigation, compilation of bibliographical data was the first step in the scientific procedure to collect information about themes and previous studies related to this research. Among the sources used to collect information there were open access articles from indexed journals, books and newspapers.

The methods applied in this research is a mixed approach, that is based on the collection of quantitative and qualitative data. The quantitative approach could provide the data to the three questions research established leading this research that can be statistically analyzed through the comparisons of frequencies and magnitude trends. On the other hand, the qualitative approach is focused a broader perspective on teacher perceptions through open-ended interviews.

The fieldwork included surveys and interviews as techniques. The teacher's survey collected quantitative data from 10 teachers through four sections. The first section had three questions related to gender, years of experience and age. The second section asked the EFL teachers about their skills using 21 ICT tools in their classroom. The third section asked the EFL teachers about the frequency of use of those 21 ICT tools in their classrooms. Finally, section four measured the EFL teacher's attitude. The teacher's attitude was measured by 17 items. The second instrument used for this research was an open-ended questionnaire that was applied in interviews to six teachers. From the ten questions: four targeted to inquire about the ICT skills, three the use of ICT, two the attitudes towards ICT in the classroom and one to learn about the available ICT resources in the school.

Once the data was collected, the description, analysis, and interpretation followed. The information collected from the surveys were tabulated using Microsoft Excel. The items were analyzed according to the frequency of response in Tables 1, 2 and 3. The frequency. Then it was expressed in percentages which were obtained by multiplying the frequency of responses times 100 and dividing by 10 which is the sample number. Table one was related to EFL teachers about their skills using 21 ICT tools in their classrooms. The EFL teachers could measure their skills by using a Likert scale proper of social studies. The scale was 1 to 4 where 1=I cannot use it, 2=I can use it to a small extent, 3=I can use it well and 4=I can use it very well. Table two asked the EFL teachers about the frequency of use of those 21 ICT tools in their classroom. The EFL teachers could measure the frequency using a Likert scale of 1 to 5 where: 1=Never, 2=Once or twice a semester, 3=Once or twice a month, 4=Once or twice a week and 5=Almost every day. Table three measured EFL teachers attitude Teacher attitude was measured by 17 items, with responses ranging in a 4 point scale from "Strongly Agree", "Agree" to "Disagree" and "Strongly Disagree." The second part of the analysis was based on the quantitative data from the surveys.

For the analysis, the highest and lowest of each parameter from the surveys were considered, then these percentages were compared and analyzed with the responses from

the interviews. After that, these results were reinforced with scientific information from the literature review.

Finally, the results obtained in the present investigation allow identifying the EFL teachers' skills, attitudes, and use regarding ICT and provide information that allows answering the research questions: What are EFL teachers' skills to use ICT in their classrooms? How frequent do EFL teachers use ICT in their classroom? What are the teachers' attitudes towards ICT use in their EFL classrooms?. The results of these research questions allowed establishing the respective conclusions and recommendations of this research.

Chapter three

Results and Discussion

Description, Analysis, and Interpretation of Results

This chapter presents the analysis of the results that were gotten from the teachers' survey, which are supported with the comments that the teachers gave through the interviews regarding to the EFL teachers' skills, attitudes, using ICT. It is organized in three sections that correspond to the three main questions that were previously established: 1) What are the EFL teachers' skills to use ICT in their classrooms? 2) How frequent do EFL teachers use ICT in their classroom? and 3) What are the teacher's attitudes towards ICT use in their EFL classrooms? For each section a table with the results is presented and further there is a discussion that includes the qualitative data.

What are the EFL teachers' skills to use ICT in their classrooms?

Table 1

EFL teachers' skills to use ICT in their classrooms

Type of ICT	1= I cannot use it	2= I can use it to a small extent	3= I can use it well	4= I can use it very well
Tape recorder	0	10	0	90
Educational CD ROM	0	0	20	80
Mail	0	0	20	80
Websites	0	0	10	90
Video Television	0	10	30	60
Weblog	10	40	20	30
Computer	0	0	20	80
Virtual Forum	0	40	20	40
Radio	20	0	10	70
MP3	20	0	0	80
Digital camera	0	20	10	70
Multimedia	0	0	20	80
Internet	0	0	10	90
WhatsApp	0	0	10	90
Twitter	30	30	0	40
Facebook	0	0	30	70
Word processor	10	0	10	80
Concept mapping	0	0	20	80

Games	0	0	20	80
Power Point presentation (PPT)	0	0	10	90
Other (Which one?)	N/A	N/A	N/A	N/A

In regards to the EFL teachers' skills to use ICT in their classroom presented in the survey, the results from the overall population reveal that 17 types of ICT present the highest percentages in the parameter '*I can use it very well*': tape recorder (90%), PowerPoint Presentations (90%), websites (90%), Internet (90%), WhatsApp (90%), Word processor (80%), MP3 (80%), multimedia (80%), concept mapping (80%), games (80%), educational CD Rom (80%), computer (80%), mail (80%), digital camera (70%), Radio (70%), Facebook (70%), and video television (60%).

In contrast to this parameter, the lowest percentages were: Weblog (30%), Virtual Forum (40%), and Twitter (40%). Even though there are a variety of ICT tools presented in the questionnaire, ranging from lower types of technology to more sophisticated, these data show that teachers have a broad scope of skills such as communication, teamwork, adaptability, problem solving, and creativity. That means that ICT can be potentially helpful in teaching and the end having an impact on student individual and professional character. This postulation is supported by (Ghasemi & Hashemi, 2011) who established that the possibilities of computer technology as a tool could include increasing language learners' (1) self-esteem, (2) vocational preparedness, (3) language proficiency and (4) overall academic skills.

The data obtained in the parameter '*I can use it very well*' is for Word processor (80%) and PowerPoint Presentations (90%). Two of the most common ICT tools by any teacher, it is not surprising they ranked higher. Most language teachers have traditionally used them to develop writing and oral skills. This statement is supported by (Alkash & Al-Dersi, 2013) who coincide that these tools functionalities such as images, colored texts,

tables, and graphs can be effective in grasping student's attention to developed language skills.

Moreover, all public EFL teachers interviewed agree that they have received support on ICT from the school to learn about Word processor and PowerPoint Presentations. This shows the emphasis on the training of the teachers given by the school and reflects the impact of factors such as economic, social, cultural, and technological dimensions when considering what ICT is used in the classroom (Aminah, 2016). It seems important to consider that there is a need for ICT training (Rodliyah, 2018), that in ICT training goal orientations are a key variable in several models of self-regulated learning (Benning, y otros, 2019) and that schools and government play an important role in teachers training through a model of inclusive school (Coelho, Blázquez, & Cubo, 2017).

Most of the teachers that agreed with the parameter '*I can use it very well*' used the Internet (90%), websites (90%), mail (80%), Facebook (70%), and WhatsApp (90%). This shows that these are commonly used tools in the daily life of teachers, that is why they ranked higher in the survey. This increases their likelihood to be used teachers in the search of innovation and increases the engagement of students. This postulation is supported by (González Otero, 2016) who indicated that common resources such as textbooks may fail to adapt to the needs but through innovations, with authentic ICT materials in the classroom it could improve students' oral skills.

Likewise, teachers also rated high their ability in the parameter '*I can use it very well*' pointed at ICT tools such as the tape recorder (90%), radio (70%), MP3 (80%), digital camera (70%), multimedia (80%), education CD ROM (80%), video television (60%), computer (80%) and games (80%). Teachers have gone through a technological process in which they have seen these tools evolving, they were first adopters of these ICT tools. As a result, their ability to use them has been influenced by their belief to use it very well and it

can almost guarantee that it is the first option to teach language since it is acquired expertise. According to Lam (2000) who found that the type of ICT use is related to the teacher's personal belief in technology. These results are important because if the teacher's belief that certain technology is essential, their skills would be developed and so their students in the language acquisition process (Hasibuan S. , 2013; Mustafina, 2016).

Similarly, it can be observed that a great quantity of the remaining teachers presented the parameter '*I can use it well*' for tools such as Facebook and video Television both with 30%. Similar to the previous parameter there is an overall agreement between the highest ICT tools consider that are used well are tools that are presented in teachers' daily life. These answers reflect that teachers felt confident with certain types of ICT tools when they were skilled in using ICT. This falls in line with (Bilyalova, 2017) who indicated that teacher confidence connects highly with their skills in using ICT.

On the other hand, the highest percentages for the parameter '*I can use to a small extent*' are weblog (40%), virtual forum (40%), and Twitter (30%). Likewise, the parameter '*I cannot use it*' twitter (30%). It can be implied that teachers do not feel comfortable using them given their poor level of skills to manage them. This postulation is supported by (Bilyalova, 2017), (Gajek, 2015) as well as (Kamilah & Anugerahwati, 2016) who indicated that skills with ICT relate to teacher confidence in using them and how they perceive their abilities with those tools to be. In the case of Weblog and twitter, teachers through the interviews mentioned that they cannot use them. The interview applied to EFL teachers showed that some factors determining teacher's perception of skill are the comparison with themselves and with fellow teachers, time available, and the need for change. These influence directly how comfortable teachers are using weblogs, virtual forums, and Twitter.

Nowadays, the knowledge society a variety of ICT can facilitate not only the delivery of instruction, but also the learning process itself, the promotion of international collaboration, and networking in education and professional development (Jung, 2005). However, there are some barriers to teacher's preparedness to use ICTs in the classroom

such as teacher education curriculum and other aspects of the formal preparation including attitude, motivation, and confidence, along with various social factors that are important (Gill & Dalgarno, 2008).

To sum up, as it can be observed in table 1, teachers are overall able to use different ICT and have the perceived skill to use them. While there appear to be some teachers who do not feel they are skillful with certain tools, the overall finding is indicative of confidence and ability in using most ICT tools presented. This perception of their skill of ICT is gained through their beliefs of continuing professional development (Aprianti, 2017) and, the correlation between years of usage and levels of confidence (Teo, 2008).

How frequent do EFL teachers use ICT in their classroom?

Table 2

Frequency of ICT use in EFL Classrooms.

<i>Type of ICT</i>	<i>Never</i>	<i>Once or twice a semester</i>	<i>Once or twice a month</i>	<i>Once or twice a week</i>	<i>Almost every day</i>
<i>Tape recorder</i>	30	10	0	50	10
<i>Educational CD ROM</i>	10	20	0	20	50
<i>Mail</i>	10	10	20	50	10
<i>Websites</i>	0	0	0	60	40
<i>Video Television</i>	0	10	10	60	30
<i>Weblog</i>	40	10	30	10	10
<i>Computer</i>	0	0	0	10	90
<i>Virtual Forum</i>	20	40	10	0	30
<i>Radio</i>	40	10	30	10	10
<i>MP3</i>	30	10	20	20	20
<i>Digital camera</i>	60	10	20	10	0
<i>Multimedia</i>	0	0	10	20	70
<i>Internet</i>	0	0	0	30	70
<i>WhatsApp</i>	50	0	0	10	40
<i>Twitter</i>	80	0	20	0	0
<i>Facebook</i>	70	0	0	10	30
<i>Word processor</i>	20	0	10	20	50
<i>Concept mapping</i>	10	10	20	40	20
<i>Games</i>	0	0	40	50	10

<i>Power Point presentation (PPT)</i>	0	0	20	20	60
<i>Other (Which one?)</i>	N/A	N/A	N/A	N/A	N/A

Table 2 summarizes the answers of the teachers about the frequency of use of the ICT tools presented in their EFL classrooms. Teachers indicated that the ICT tools that they used 'almost every day' were: Computer (90%), Multimedia (70%), Digital Camera (70%), PowerPoint Presentations (60%), Word processor (50%) and Educational CD ROM (50%). This coincides with the previous information gathered from table 1 in the parameter "I can use it very well" in which the teachers perceived themselves as able to use very well these tools, like Computer, Multimedia, Digital Camera, PowerPoint Presentations, Word processor, and Educational CD ROM. This makes sense because both data support each other: the fact that EFL teachers' skills to use Computer, Multimedia, Digital Camera, PowerPoint Presentations, Word processor, and Educational CD ROM in their classrooms connects to the high frequency that EFL teachers use this some ICT in their classroom. Chen (2008) states that teachers are aware that proper technological skills for a particular task increase with greater frequency of use.

Tools that were used the most by EFL teachers under the parameter of "Once or twice a week" were: Video Television (60%), Websites (60%), Mail (50%), Tape Recorder (50%), and Games (50%). All of these tools target specific language skills. In the case of video television and tape recorder the listening skills, the websites reading skills, mail targets writing skills, and games are great for vocabulary and grammar use. As stated by Leong and Ahmadi (2017) and Ökmen and Kılıç (2016) it is important to have ICT which develop ludic activities in classes and target specific language skills. However, the fact that they are only used "Once or twice a week" is influenced by access to them. Martinovic & Zhang (2012) also found that when considering what tools to use, they have to check on existing human and technological infrastructures. Moreover, the interviews applied to the EFL teachers

reinforced these previous statements by complaining about the lack of technological resources in the educative institution.

In the parameter of “Once or twice a month” the tools with the relatively highest percentages is games (40%). However, for games, there is also a 50% preference for use “Once or twice a week” and “Almost every day”. This reflects not only the use of games in the EFL classroom practices but its relevance. (Gozcu & Caganaga, 2016) determined that games should be employed in second language learning classrooms in terms of providing an atmosphere for EFL learners in which there is fun, motivation, and high learning performance.

For the parameter of “Once or twice a semester” the highest relative percentage was for the virtual forums (40%). This tool is rarely used compared to others. Only 30% of EFL teachers use it compared to 70% who use it “Once or twice a month”, “Once or twice a semester”, or never used it. This means that some factors are influencing the low use of virtual forums, which can be supported by (Espitia & Clavijo Olarte, 2011) who concluded that the use of the virtual forums will be affected by teacher’s perspective and how they develop communication, collaboration, and participation as central elements of learning.

The highest percentage of tools “Never” were Twitter (80%), Facebook (70%), Digital Camera (60%), and WhatsApp (50%). Analyzing this data, it seems that the tools that are hardly or never used by teachers are mainly related to a social media category. The attitude towards the use of social media in the classroom can be explained through the fact that teachers have to obey school authority orders regarding its use. This is supported by (Wallet & Valdez , 2015) who considered the influence of what authorities in educational systems set as a rule is important to teachers because their evaluations depend on following instructions. In the interviews applied to the ELF teachers, they commented that school authorities are very strict with the use of social media to avoid misunderstandings between teachers and

students and respect the privacy of each one of them. Another explanation related to the little use of social media is the age of the teachers. Seraji, Ziabari, & Rok

ni (2017) stated that the experience level of teachers, age of teachers, and tenure of teachers are conditional for the use of ICT that are related to social media. A third explanation can be a lack of training in social media as teaching tools. (Aydin & Aytekin, 2018) witness that training could determine teacher's expertise and frequency of usage so if they have not been trained on social media as teaching tools, they will not regard them as a possibility in the classroom.

Researchers found that there is a positive attitude towards the utilization of ICT in English teaching (Al-Munawwarah, 2015) because ICT has been proven to open the language teaching classroom onto newer horizons and that it needs to be integrated into the language classroom (Soussi, 2015).

It is important to establish the match and discrepancy in the results gotten from Tables 1 and 2. This comparison is given according to the parameters presented in table 2 "I can use it well" and "I can use it very well", in addition to the comparison of the parameters from Table 1 "Once or twice a week" and the table 2 "Almost every day". This effect portrays the results of identifying the agreement and disagreement in the habitual use of ICT in the classroom under the load of EFL teachers.

The agreement and disagreement from some of the different types of ICT tools presented in Tables 1 and 2 are analyzed in detail below.

In relation to Tape recorder "I can use it very well" with 90% of table 1, it maintains the mismatch with "Once or twice a week" in table 2 with 50%. Similarly, in "I can use it well" with 0% to 10% of "Almost every day" corresponding to table 2. It implies that the teachers, previous knowledge of the tool, but currently, as there are other complete means that are established this function is moderately used.

Educational CD ROM, in “I can use it very well” with 80% of table 1, it maintains the disagreement with 20% of “Once or twice a week” in table 2. Change this factor to agreement by keeping both “I can use it well” and “Almost every day” with 20% on both tables. Set an effective use factor for other purposes outside of the classroom.

Mail, “I can use it very well” with 80% of Table 1, it maintains the mismatch with 50% of “Once or twice a week” in Table 2. Similarly, it maintains the mismatch because in “I can use it well” in Table 1, it is maintained at 20%, and “Almost every day” in Table 2 is set at 10%, which implies that the teachers, the function of this tool by sporadic and non-recurring telecommunication.

Websites, “I can use it very well” with 60% of table 1, it maintains the agreement with 60% of “Once or twice a week” in table 2. It maintains the agreement in “I can use it well” and “Almost every day” with 30% in both tables. Of daily use for the multiple activities that the websites allow in their navigation, a situation that benefits teachers to improve their skills in the continuous learning process.

Video television, maintains agreement, as it is established both in “I can use it very well” in Table 1 and “Once or twice a week” in Table 2 with 60%. Similarly, “I can use it well” and “Almost every day” will use 30% in both tables. Audiovisual medium, used in the classroom and activities outside the educational institution.

Web blog, discordance is established, because there is 30% in “I can use it very well” to 10% of Table 2 in “Once or twice a week”, in the same way “I can use it well” with 20%, it maintains discordance with “Almost every day” with 10%. Teachers know about the tool, where they do not set up a blog search on specific topics and dedicate the use of this tool in emergencies.

In Computer, there is a discrepancy when setting 80% of table 1 in “I can use it very well” to 10% of “Once or twice a week” in table 2. Similarly, in “I can use it well” of Table 1 with 20% disagrees with the “Almost every day” of Table 2, with 90%. The current teacher

has established the use of the cell phone, where today presents many internal functions that replace the use of the usual computer constantly.

In Virtual forum, there is a discrepancy when setting 40% of table 1 in “I can use it very well” to 0.0% of “Once or twice a week” in table 2. Similarly, in “I can use it well” of Table 1 with 20% disagrees with 30% of “Almost every day” in Table 2. Teachers use other tools that generate greater ease and are coupled with the technological age that is constantly offering many activities to improve ICT use skills.

In Radio, there is a disagreement when establishing 70% of table 1 in “I can use it very well” to 10% of “Once or twice a week” in table 2. There is an agreement in keeping 10% of “I can use it well” from table 1 with 10% of “Almost every day” from table 2. Teachers listen to their usual radio for defined times, which leads to uncontrolled use, reflecting the discordance of the same.

In Mp3, there is a disagreement when setting 80% of table 1 in “I can use it very well” to 20% of “Once or twice a week” in table 2. Similarly, in “I can use it well” in table 1 with 0.0% disagrees with 20% of “Almost every day” in table 2. Teachers currently use the cell phone, where their applications replace the use of other technological tools.

In Digital Camera, there is a discrepancy when setting 70% of table 1 in “I can use it very well” to 10% of “Once or twice a week” in table 2. Similarly, in “I can use it well” of Table 1 with 20% disagrees with 30% of “Almost every day” in Table 2. Teachers replace this tool with the current cellular telephone that has many functions like this and others that facilitate work, personal, and familiar to the human being.

In Multimedia, there is a discrepancy when setting 80% of table 1 in “I can use it very well” to 20% of “Once or twice a week” in table 2. Similarly, in “I can use it well” in the table 1 with 20% disagrees with 70% of “Almost every day” in table 2. Multimedia media are being replaced by other multi-dynamic media.

In Internet, there is disagreement when establishing 90% of “I can use it very well” in Table 1, with 30% “Once or twice a week” in Table 2, in the same way, 10% in “I can use it good” in table 1, with 70% “almost every day” in table 2. Teachers have joined the effective use of voice tools in the search for information as Internet users, but have established confusion under these parameters.

In WhatsApp, there is disagreement when establishing 90% of “I can use it very well” in Table 1, with 10% “Once or twice a week” in Table 2, in the same way, 10% in “I can use it good” from table 1, with 0.0% “Almost every day” from table 2. The use of this tool, for teachers, becomes a chain distractor, for this reason, they do not allow the use of it, by maintaining discipline and control of what students can maintain as leisure in the classroom.

In Twitter, there is disagreement when establishing 40% of “I can use it very well” in Table 1, to 00% of “Once or twice a week” in Table 2. There is agreement of 0.0% of “I can use it well” of Table 1, with the “Almost every day” of Table 2. Many teachers are unaware of the term and much less use it.

In Facebook, there is disagreement when establishing 70% of “I can use it very well” in Table 1, with 10% “Once or twice a week” in Table 2, in the same way, 30% in “I can use it good” from table 1, with 20% “almost every day” from table 2. For teachers, time is short and the social network tool is a distraction for the limited time they have.

In Word process, there is disagreement when establishing 80% of “I can use it very well” in Table 1, with 20% “Once or twice a week” in Table 2, in the same way, 10% in “I can use it well” in Table 1, with 50% “Almost every day” in Table 2. There are many limitations on the use of this tool, as it is considered obsolete at present, due to ignorance of its use and its profitability.

In Concept mapping, there is disagreement when establishing 80% of “I can use it very well” in Table 1, with 40% “Once or twice a week” in Table 2. There is agreement

between “I can use it well” and “Almost every day” of both tables. The tool is not being used in the classroom, but for other matters outside the institution.

The relationship of concordance and discordance, between Tables 1 and 2, shown in the previous results, denotes shortcomings in the proper and correct use of various ICT tools, determined in video television, where only 60% approve, Weblogs, where they only contribute with knowledge in 30%, Virtual Forum with 40% and Twitter with 40%, this indicates that teachers are 80% focused on computer literacy, where ICT tools are used in educational use within the classroom compared to teachers with low computer literacy (Mantoro et al., 2017). Another reason to have this agreement is that schools are more likely to have this type of ICT tools and the age of teachers seems relevant for technologies that have a skill and preference of use, where disagreement prevails for several ICT tools.

The analysis also shows the mismatch between the skills of EFL teachers to use ICT in each classroom with the frequency of use of ICT in the Classroom of English as a foreign language. Even though teachers chose “I can use it very well” for ICT tools such as Recorder, CD ROM, Mail, WEB Sites, Computer, Mp3, Digital Camera, Multimedia, Internet, WhatsApp Word processes, Concept mapping, with the use of almost every day and to a lesser extent once or twice a week. The usage percentages show a mismatch by just using them well. It seems contradictory that, according to their ability, they can use it very well, but they are not implementing them in class. So, there are external reasons behind this, such as Internal and external management by the institution's authorities, political management. (Wallet and Melgar, 2015), the lack of management of technological resources for habilitation and use in classrooms (Mwila, 2018), lack of training in the management of technological tools for teaching the English language to teaching staff (Ifinedo, Rikala, and Hämäläinen, 2020).

As a conclusion of the results obtained from Table 2, the frequency of the use of ICT by EFL teachers in public high school classrooms shows a variety between 70 and 90% in the use of ICT presented in the survey and the use between 60 and 80%. For many

teachers, ICT tools, such as the computer, recorder, mail, weblog's, and the internet, were known from earlier times, and their use has led them to the constant learning of ICT, which denotes, within the study, greater knowledge and skills in using them. This is supported by (Budiman & Ngadiso, 2018), and (Sahay & Dawson, 2019) who established that this is due to the constant use or exposure that teachers have used these tools, being an ever-present need in the classroom and most the other environments. However, it also appears that some ICT tools are less frequently used because they are banned or outdated.

What are the teachers' attitudes towards ICT use in their EFL classrooms?

Table 3

EFL Teachers' Attitudes toward the Use of ICT in their Classrooms

Statements	Strongly Agree	Agree	Disagree	Strongly Disagree
1.EFL classroom should have various types of technology	50	40	10	0
2.EFL Teachers should have various types of technology in their classrooms	50	50	0	0
3.If EFL teachers should use various types of technology in their classrooms, students will learn better	40	40	20	0
4.Teaching English language skills (listening, speaking, reading and writing) will be effective with the use of technology	40	60	0	0
5.Teaching English language components (grammar, vocabulary, and pronunciation) will be effective with the use of technology.	60	40	0	0
6.Using ICT would help me organize my work.	50	40	10	0
7.Using ICT would make subject matter more interesting.	50	50	0	0
8.TIC saves time and effort	50	50	0	0
9.Using ICT is enjoyable.	50	50	0	0
10.ICT makes me much more productive.	40	60	0	0
11.Teaching with ICT offers real advantages.	60	30	10	0
12.I would rather do things by hand than with ICT.	10	20	30	40
13.ICT does not scare me at all.	50	40	0	10
14.I do not talk with others about ICT.	0	0	40	60
15.I like to use ICT in teaching.	60	40	0	0
16.I would like to learn more about ICT.	40	60	0	0

Table 3 provides data about EFL teachers' attitudes toward the use of ICT in their Classrooms. Teachers 'Strongly agree' that EFL classrooms should have various types of technology (50%) and EFL teachers should have various types of technologies in their classrooms (50%). Teachers also "Strongly agree" that if EFL teachers use various types of technology in their classrooms, students will learn better (40%) and they would like to learn more about ICT (40%). The first two statements show a positive attitude towards having and using technology in the classroom, with a willingness to learn more about it, to positively impact students learning process. This finding is sustained by (Buabeng-Andoh, 2012) who showed that teacher's perception of technology programs can help to fulfill their own needs or their students' needs because they will integrate the technology into teaching and learning.

In the same line of considering ICT in the classroom, 60% "Agree" that the use of ICT will be effective teaching English language skills and 60% "Strongly agree" in its effectiveness in teaching English language components. It means that teachers acknowledged the relevance of ICT tools for their classes. This is supported by a total of 60% who "Strongly agree" that teaching with ICT offers real advantages. Among the advantages, 50% "Strongly agree" that ICT helps them to organize their work and that ICT saves time and effort. Another 60% "Agree" that ICT helps them to be more productive and 50% "Strongly agree" that it would make the classes more interesting. These statements coincide with Hasibuan's (2013) affirmation that predisposition and motivation towards technology and the use of it are two important factors to consider when implementing and using ICT for learning.

In relation to the statement "if using ICT was enjoyable" 50% "Strongly agree" and, 60% "Strongly agree" to the statement "like to use ICT in teaching". This shows a concordance with the statement "ICT does not scare me at all" 50% "Strongly agree", and the statement "I do not like talking with others about ICT" 60% "Strongly agree". From the responses in the parameters "Strongly agree" and "Agree" it can be concluded that EFL

teachers enjoy using ICT tools. They consider them necessary and important elements to be used in the classroom (P., Álvarez A., 2018).

Other key ideas mentioned towards ICT is that they are innovative and have a significant impact on student learning. Additionally, all the teachers' interviews mentioned they feel relaxed and confident when using ICT, in this case, the ones they are most familiar with. In using these tools, they consider they are innovating and providing students a more sophisticated class that would not fall flat and monotonous were it to be done without using ICT. These previous statements lay the ground for the implication that teachers who feel confident and comfortable using ICT have positive attitudes towards them. Mahdi and Al-Dera (2013) supported these findings and concluded that teachers have a positive impact in acquiring knowledge of the integration of ICT in language teaching and learning.

For this reason, the percentage of the parameters "Strongly disagree" and "Disagree" were added because they were only two statements with relevant values. The two statements with the highest percentages following this logic were that EFL teachers would rather do things by hand (70%) and that they do not like to talk to others about ICT (100%).

As seen by all the data in table 3, there is a trend showing a positive teacher attitudes towards ICT use in their EFL classrooms. From the 16 statements, 14 were in the agreement of using ICT. The other 2 statements that belonged to the parameters in disagreement actually do not represent that teachers were against of ICT (Veckyer, 2019). These parameters were written in negative form representing going against ICT so the disagreement over them actually means have a positive attitude towards ICT (Svamsurizal, Y., 2018).

Finally, the general results on the attitudes, skills, and frequency of use of ICT by teachers in their EFL classrooms showed that ICT has great relevance in EFL education, guiding the student to learn the second language and to the teacher to update knowledge on the use of ICT. Accordingly, teachers are 80% on technological literacy through the use of

ICT, which denotes their level of effective knowledge. Within table 1, 80% according to results, teachers maintain knowledge and skills in the use of ICT. Its correlation with Table 2, denotes the continuous learning process that teachers establish for being more competitive in the current technological era, so that for them almost every day it maintains a relationship with social applications and every day the use of the computer, especially for the connection between managers, students, and colleagues when establishing planning, virtual meetings and coordination for the physical process in the classroom and the institution in general. This is further related to the analysis in Table 3, which examines teachers' attitudes towards ICT. Similar to the observations of Hasibuan (2013), teachers who are exposed daily to ICT tools, their ability is high. For their part, (Abbas & Elttayef, 2019), and Xplain that Ure's daily exhibitions reflect is a positive attitude towards the use of ICT in the classroom. This is directly related to the findings of these studies. All of this will benefit learning communities and improve classroom productivity.

Conclusions

It is concluded that the Analysis of EFL teachers' skills, attitudes, and use regarding ICT in Ecuadorian High Schools, determined in general that teachers could initially use different ICTs and have the skills to use them thanks to their beliefs and commitment to education. However, some of the teachers felt that they were not able to use the ICT tools according to results.

It is determined that the use of ICT in EFL teaching, is used for the teaching-learning process, and is maintained in the classroom, by the provisions issued by the institutional authority, in order to maintain a perspective of development and generation of skills according to the technological age in terms of the processes of communication, collaboration, participation in order to take advantage of the central elements of learning.

According to the most 10 used technology resources by high school EFL teaching. EFL teachers maintained, in terms of skills corresponding to the use of 13 ICTs, reducing their capacities in terms of the question of can I use it very well, where their average knowledge was based on 4 ICTs and reduced skills on 3 ICTs, taking advantage of the same by 65%

The relationship between agreement and disagreement, according to the final results, showed that teachers of English as a second language in secondary school maintain between 70 and 80% of knowledge and skills, in the use of ICT in the classroom, they do not fulfilled a specific order according to EFL teachers' skills to use ICT in teaching.

The frequency of use of ICT by EFL teachers, depending on their skills, in relation to the use of ICT tools, corresponds to the obligation they have established in modern times. Some teachers knew about ICT tools, but their use kept it at a basic level, a situation that hinders the teaching-learning process.

Based on the results of the question EFL teachers' attitudes towards ICT, the attitudes of EFL teachers are positive, according to the results, they correspond to the fact

that, within the classroom, several ICT tools must be maintained at the same time, in order to enriching the teaching-learning process of high school students.

Recommendations

The institution's board is recommended to analyze the educational parameters that the EFL teacher teaches in the high school classroom, since they maintain a positive attitude towards the use of ICT, but paralyze the process of updating knowledge. , incurring a moderately positive impact on the development of skills in the acquisition of second language knowledge by students.

It is suggested within the administrative process of the educational institution, that teachers must be constantly trained in the proper and complete use of ICT, especially social networks, the means used by students, where both share with their peers and generate tasks. Meet the academic requirements and the requirements that the current era maintains due to several constant innovation factors.

It is recommended that, in the continuous training and awareness process, the authorization and adaptation of technology be managed in the classrooms of the educational institution, which will benefit each student and allow the educational institution to raise their academic level, thus allowing be mostly attended by more students.

It is recommended to generate a selection process for teachers with greater and lesser capacity to understand the use of ICTs, to determine specifically what is the level of skills that teachers maintain in advance and updating knowledge, about which ones are resist such advances and establish an ideal process that is used by all in view of the type of training that the institution manages.

Teachers are recommended to establish greater interest in the use of ICT in a complementary way, being their basic level currently denoted as a lack of interest in improving the quality of education in the teaching-learning process that favors the high school student with important foundations for your higher academic life.

It is recommended to the authorities of the institution and the external investment means, to adapt and install audiovisual, technological and constant innovation means, where the classroom is an area of research and development of the language, thus determining

that the use of ICT, be under your tools the general base in the use of all your order for continuing education.

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Appendix

Appendix 1: Teachers' survey



UNIVERSIDAD TECNICA 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: (_____)

Dear teacher,

Read the following statements and mark your answer in the corresponding parameter.

EFL Teachers' Skills to Use ICT in their Classrooms

Type of ICT	I cannot use it	I can use it to a small extent	I can use it well	I can use it very well
Tape recorder				

Educational CD ROM				
Mail				
Websites				
Video Television				
Weblog				
Computer				
Virtual Forum				
Radio				
Mp3				
Digital camera				
Multimedia				
Internet				
WhatsApp				
Twitter				
Facebook				
Word process				
Concept mapping				
Games				
Power point presentation (ppt)				
Other (Which one?)				

Frequency of ICT use in EFL Classrooms

Type of ICT	Never	Once or twice a semester	Once or twice a month	Once or twice a week	Almost every day
Tape recorder					
Educational CD-ROM					

Mail					
Websites					
Video Television					
Weblog					
Computer					
Virtual Forum					
Radio					
Mp3					
Digital camera					
Multimedia					
Internet					
WhatsApp					
Twitter					
Facebook					
Word process					
Concept mapping					
Games					
Power point presentation (ppt)					
Other (Which one?)					

EFL Teachers' Attitudes toward the Use of ICT in their Classrooms

Statements	Strongly agree	Agree	Disagree	Strongly disagree
1.EFL classroom should have various types of technology				

2.EFL Teachers should have various types of technology in their classrooms.				
3.If EFL teachers should use various types of technology in their classrooms, students will learn better.				
4.Teaching English language skills (listening, speaking, reading and writing) will be effective with the use of technology .				
5.Teaching English language components (grammar, vocabulary, and pronunciation) will be effective with the use of technology.				
6.Using ICT would help me organize my work .				
7.Using ICT would make subject matter more interesting.				
8.TIC saves time and effort.				
9.Using ICT is enjoyable.				
10.ICT makes me much more productive.				
11.Teaching with ICT offers real advantages.				
12.I would rather do things by hand than with ICT.				
13.ICT does not scare me at all.				
14.I do not talk with others about ICT.				
15.I like to use ICT in teaching.				
16.I would like to learn more about ICT.				

Thanks for your collaboration

Appendix 2: Teachers' Interview



UNIVERSIDAD TÉCNICA PARTICULAR DE LOJA
La Universidad Católica de Loja

MODALIDAD ABIERTA Y A DISTANCIA
TITULACIÓN DE INGLÉS

TEACHERS' INTERVIEW

1. What is your opinion about ICT use in EFL teaching?

2. Do you like to use ICT in your EFL classrooms? Why? Or Why not?

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. How good are you at using ICT?

5. How often do you do research on ICT used in EFL teaching?

6. Have you attended any training course regarding ICT use? Why?

7. Have the high school authorities encourage or support you to take any course related to ICT use?

8. Does the high school, where you work, have any technological resource to be used by English teachers? Which one?

If so, do you use it/them? Why?

9. In which language skill (reading, writing, listening, or speaking) do you mostly use ICT? Why?

10. Is it important for you the frequency of ICT use in your classrooms? Why?

THANKS FOR YOUR COLLABORATION

Appendix 3: UTPL collaboration request letter

Loja, abril de 2019

Señor(a) Director(a)
Presente.

De mi consideración:


Reciba un cordial saludo desde la Universidad Técnica Particular de Loja -UTPL y desde la Coordinación Académica de la Titulación de Inglés a la vez que le expresamos nuestros deseos de éxitos en sus importantes funciones.

Durante varias décadas la UTPL viene ofreciendo la formación de docentes en el área de Inglés, quienes al finalizar sus estudios realizan un trabajo de investigación que les permite conocer la realidad educativa de nuestro país y de esta manera contribuir con alternativas de mejoramiento a la enseñanza-aprendizaje del Inglés. Para ello, como metodología de enseñanza aprendizaje, se desarrollan proyectos que integran la teoría, la práctica y la investigación los cuales permiten que el estudiante pueda desarrollar las competencias necesarias para poder desempeñarse profesionalmente de manera creativa e innovadora.

Por este motivo, solicitamos su permiso para que nuestros profesionales en formación puedan aplicar los instrumentos de investigación en la institución educativa que usted muy acertadamente representa, así mismo solicitamos que por su intermedio se solicite a los docentes de su institución para que colaboren y permitan realizar las observaciones sin ningún inconveniente, ya que esto contribuirá al enriquecimiento de nuestros profesionales en formación dando como resultado el mejoramiento en el proceso de enseñanza aprendizaje.

Agradecemos su valiosa colaboración que es muy importante para lograr los objetivos planteados en la investigación mencionada.

Atentamente,


Mgtr. Alba Bitallina Vargas Saritama

COORDINADOR DE LA TITULACIÓN DE INGLÉS



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