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Benefits and Constraints that Teachers Face When Using ICT in Teaching EFL

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Autoras:

Jenny Magaly García Morquecho

CI: 0106914344

Correo electrónico: magaly1@gmail.com

Michelle Estefania Morocho Bernal

CI: 0104904768

Correo electrónico: michellemb22@gmail.com

Tutora:

Dr. Tammy Mercedes Fajardo Dack, PhD

CI: 0102971843

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Resumen:

Esta síntesis de investigación examina los beneficios, las limitaciones y las percepciones positivas y negativas de los docentes con respecto al uso de las TIC en las aulas de inglés como lengua extranjera. Esta investigación exploratoria de 28 estudios empíricos presenta cómo la implementación de las TIC influye en el proceso educativo en las clases de inglés como lengua extranjera. Los resultados del análisis revelaron que los educadores deberían implementar equipos/software de TIC para mejorar el rendimiento de los alumnos no solo dentro del aula sino también en sus actividades de la vida cotidiana. Además, los resultados mostraron que la falta de capacitación de los instructores y la falta de recursos tecnológicos son las principales limitaciones que deben enfrentar los docentes al integrar la tecnología en sus clases. Así mismo, los resultados muestran que el principal punto de vista positivo de los educadores sobre el uso de las TIC es el avance de las metodologías EFL que se adaptan a las necesidades de los estudiantes. Además, los resultados mostraron que los educadores mayores tienen más probabilidades de sufrir ansiedad informática que sus contrapartes más jóvenes, ya que no nacieron en una era tecnológica y están acostumbrados a utilizar métodos de enseñanza tradicionales. De la misma manera, los resultados revelaron que las computadoras, los proyectores e Internet son los equipos/software TIC más utilizados por los docentes, ya que estos recursos son accesibles. Finalmente, se brindan algunas recomendaciones para futuras investigaciones.

Palabras clave: Recursos TIC. Percepciones de los docentes. Aulas de inglés. Lengua extranjera. Metodologías. Enseñanza del inglés.

Abstract:

This research synthesis examines the benefits, constraints, and positive and negative teachers' perceptions regarding ICT usage in EFL classrooms. This exploratory research of 28 empirical studies presents how ICT implementation influences the educational process in EFL classes. The results revealed that educators should implement ICT equipment/software to improve learners' performance inside the classroom and in their daily life activities. Additionally, the findings showed that lack of instructors' training and lack of technological resources are the main constraints teachers have to deal with while integrating technology in their classes. Besides, the findings portrayed that the educators' main positive viewpoint about ICT usage is the EFL methodologies breakthrough that fit students' needs. Furthermore, the results showed that older educators are more likely to suffer computer anxiety than their younger counterparts since they were not born in a technological era and are accustomed to using traditional teaching methods. In addition, the findings revealed that computers, overhead projectors, and the internet are the most used ICT equipment/software employed by teachers since these resources are accessible. Finally, some recommendations are provided for future research.

Keywords: ICT resources. Teachers' perceptions. Classrooms. EFL. Methodologies. Teaching English.

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Cuenca, 29 de julio de 2022

Michelle Morocho B.

Michelle Estefanía Morocho Bernal

0104904768

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0106914344

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Cuenca, 29 de julio de 2022

Michelle Morocho B

Michelle Estefanía Morocho Bernal

0104904768

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Dedication

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INTRODUCTION

ICT plays an essential role in the EFL educational process by helping teachers innovate their methodologies and improve students' knowledge acquisition (Samuel & Bakar, 2006). Hence, most educators are constantly searching for different ways to implement technology in their classes by developing their activities dynamically and guiding their students to use ICT equipment/software properly.

Ghavifekr et al. (2016) asserted that many teachers prefer to use traditional methods that focus on grammar, vocabulary, and translation rather than employing technological resources. Despite ICT's benefits such as enhancing students' autonomous learning, running the teaching-learning process effectively and efficiently, and helping learners solve complex problems using their cognitive skills; instructors have to face many constraints such as lack of support from educational authorities, lack of time, lack of teachers' training, and lack of technological resources.

To better understand teachers' situation in regards to using technology, some studies were analyzed to find the benefits, constraints, and positive and negative teachers' perceptions of ICT integration in EFL classrooms. For this research synthesis, the following research questions were addressed.

1. What are the reported benefits of using ICT within EFL classrooms?
2. What are the reported constraints that teachers face by implementing ICT within EFL classes?
3. What are teachers' perceptions about implementing ICT in their EFL classrooms?

This document is organized in six chapters. The first chapter presents background information about the research topic, including the statement of the problem, the rationale, the research questions, and the objectives. The second chapter is the theoretical framework which presents relevant concepts and definitions that provide a supporting background to the

study. Chapter three reviews existing published studies on the current status of the research topic. In addition, chapter four which is the methodology sets out the criteria to select the research papers. Chapter five covers the analysis of the data to answer the established research questions. The research synthesis finishes with conclusions and recommendations for practical application and for further research.

CHAPTER I

1. Description of the research

1.1 Background

According to Blurton (2002), Information and Communication Technology (ICT) refers to “the diverse set of technological tools and resources used to communicate, create, disseminate, store, and manage information” (as cited in Tinio, 2003. p 4). As a result, ICT is used in several areas of today’s world. For instance, science, religion, economy, education, and others. Samuel and Bakar (2006) have stated that ICT has played a significant role in the educational process of English as a Foreign Language (EFL). It can be evidenced by the students’ higher level of motivation and the increase in their engagement with language learning. Another example in the field of education is that ICT is a helpful tool that allows teachers to encourage students to live new experiences and relate them with higher-order thinking skills to enhance the teaching-learning process innovatively (Yang, 2008; Schoepp, 2005; & Merç, 2015). As a result, many educators feel motivated to integrate ICT to innovate their methodologies and fit students’ needs.

Furthermore, as stated by Ghavifekr et al. (2016), instructors are aware that the employment of ICT has become an opportunity to renew traditional teaching methods; however, factors such as lack of support from educational authorities, lack of training, and lack of technological resources are the principal limitations for instructors to use ICT in EFL classrooms.

Throughout the years, many different technological tools have been created to make people’s lives easier in every single aspect: getting information, buying things, communicating all over the world, learning new languages, and so on. For this reason, as mentioned by Raman and Tamat (2014), many educational institutions have incorporated ICT

in EFL classrooms to have better results in the teaching-learning process. Studies by Al-Munawwarah (2014) and Gobbo and Girardi (2001) have reported that ICT usage has mainly focused on teachers' perceptions about its implementation. According to pundits (Schiller, 2003; Al-Munawwarah, 2014), ICT should be incorporated within educational establishments so that instructors could vary their classes to enhance pupils' autonomous learning and guide them to use these tools wisely.

There are many benefits of using ICT in education, and it also has been relevant in the vastness of education; however, some aspects need to be considered before using ICT. Ghavifekr et al. (2016) have mentioned that ICT can be a problem for those educators who do not know how to use technology since they have to deal with students who are part of the technological era. Moreover, as Habibu et al. (2012) have mentioned, the most common constraint teachers face while implementing ICT is lack of time because they have to fulfill the EFL syllabus in a specific period as a mandatory task established by the Ministry of Education. The development of activities through ICT is another issue that educators have to deal with since they do not know how to implement this equipment/software in their classes and prefer to handle traditional methods (focus on teaching grammar, vocabulary, and translation). Also, the lack of resources in EFL classrooms plays an essential role in implementing ICT to teach EFL students (Schoepp, 2005; Mollaei & Riasati, 2013). Educational authorities only provide a few technological resources to schools and high schools and do not create programs where teachers can learn about ICT usage from and with their peers (Samuel & Bakar, 2006).

1.2 Statement of the problem

Currently, ICT is the most used resource to enhance learners' language learning. Many educators use it voluntarily; however, others are forced to implement it in EFL classrooms since the educational authorities in different countries consider that meaningful learning can

only be achieved through technology usage (Aminullah et al., 2019). Additionally, Hismanoglu (2012) remarked that ICT is crucial to innovate old teaching methods. ICT integration allows educators to help pupils acquire the English language differently, causing students to improve their long-term memory (Yang & Huang, 2008).

Teachers who use ICT within their EFL classes are likely to obtain better performance results from their students; conversely, instructors who are reluctant to use technology act out a bad example for learners because they will lead their students to avoid ICT usage (Schiller, 2003). Thus, the employment of ICT in EFL learning settings is crucial because educators are models for the next generation of teachers, helping them identify the benefits and constraints that ICT implementation involves. At the same time, ICT provides a new perspective based on instructors' reality behind the use of technology. Lastly, even though ICT is a strategic resource for many aspects of daily-life activities, it presents considerable constraints for teachers when implementing it as a part of their teaching methodologies; even some educators are forced by the educational authorities to implement technology within their syllabus. In addition, little research has been developed about instructors' perspectives, preventing them from overcoming the issues that ICT implementation involves. Even though educators work in institutions equipped with ICT resources, educational institutions do not provide instructors with a technological implementation plan in which they can manage it accurately according to their curriculum.

1.3 Rationale

The teaching-learning process throughout the years has been evolving because ICT implementation is changing the world into a technological era. Nonetheless, there are many difficulties in integrating ICT in EFL classrooms. It is because ICT involves both educators' work and support from all the members of educational institutions. Additionally, most teachers use only traditional methods to develop their classes since they are afraid of using

technology (Schiller, 2003). Similarly, the educational authorities ought to equip educational establishments with primary technological resources to enhance the educational process.

Many researchers have studied that technology integration within educational institutions can have many advantages (Gobbo & Girardi, 2001; Samuel & Bakar, 2006). For instance, Azmi (2017) mentioned that instructors who incorporate ICT in EFL classes have the opportunity to “help learners acquire linguistic skills, establish contact and interaction with other language users and broaden their minds about different cultural practices, values, and contemporary lifestyles in countries where English is used as a mother tongue or as a second language” (p. 112). On the other hand, Al-Maini (2013) stated that educators who have between 5-10 years of teaching experience are reluctant to forsake the traditional method causing their students to fail with their learning/practice of the four English skills. Additionally, ICT is a vital resource to teach learners because technology captures students' attention through the use of different apps or websites like Voki, Kahoot, social media, among others. In addition, instructors' perceptions play an important role in ICT usage in EFL classrooms. Mahdi and Al-Dera (2013) claimed that society wrongly believes that factors such as age, gender, and experience of an EFL teacher determine whether educators use ICT in their classes or not. Nevertheless, what is particularly important is that teachers desire to use technology to develop their teaching activities; the final decision is up to educators. Hu and McGrath (2011) asserted that the pros and cons of ICT integration generate doubt about its implementation. It caused conflicting opinions among instructors and educational authorities that led them to think about the employment of technology in EFL classrooms or avoid its use while reflecting on whether it is worth taking the risk or not.

Based on what has been presented in this section, analyzing the benefits and constraints that educators face while integrating ICT in EFL classrooms, teachers ought to keep in mind aspects like time, training, and ICT equipment/software to transmit their

knowledge and encourage learners to give every technological resources a good use.

Therefore, this research synthesis is relevant for educators since via this study, they can identify the benefits, constraints, and different perspectives that ICT implementation involves, focusing on positive or negative effects and at the same time taking into consideration the students' environment and knowing if the integration of ICT will or will not benefit learners.

1.4 Research Questions

What are the reported benefits of using ICT within EFL classrooms?

What are the reported constraints that teachers face by implementing ICT within EFL classes?

What are teachers' perceptions about implementing ICT in their EFL classrooms?

1.5. Research objectives.

General Objective:

To analyze the benefits, constraints, and perceptions that teachers have through ICT implementation in EFL classroom.

Specific Objectives:

To identify the main benefits that teachers experience by using ICT within EFL classrooms.

To identify the main constraints that teachers face by implementing ICT in EFL classes.

To identify the main perceptions that educators have about ICT implementation in EFL classrooms.

CHAPTER II

2. Theoretical framework

To understand the topic, it is necessary to review relevant concepts and definitions that will provide a supporting background to the study. Information regarding ICT, ICT in language learning, ICT incorporation in EFL teaching methodologies, and ICT implementation effects in EFL classrooms is presented in this chapter.

2.1 Definition of Information and Communication Technology

ICT is defined by Burton (2002) as “a diverse set of technological tools and resources used to communicate, and to create, disseminate, store, and manage information” (p.1). Besides, Tinio (2003) sustained that “these technologies include computers, the Internet, broadcasting technologies (radio and television), and telephony” (p. 4). In the same vein, Doong and Ho (2012) mentioned that ICT changed people’s lives and mindsets by enhancing worldwide communication since technology allows citizens to interact without difficulty and actively in this globalized world. Salem and Mohammadzadeh (2018) asserted that ICT helps society harness information widely in different institutions such as business, education, economy, agriculture, and medicine. Similarly, ICT is used to reform the traditional manner people develop their activities (Schiller, 2003). ICT has revolutionized the way individuals function in their workplaces, employing updated information and being more skilled in the activities they carry out (Tearle, 2003). According to Mullamaa (2010), nowadays, the ICT strategy is well-known worldwide, and its usage has given positive results that can be evidenced by the stimulus generated by educators in the learners. For instance, Schiller (2003) asserted that since the last decade, the Australian government has implemented ICT in many educational settings, and technology has changed the quality of education by making it more active and authentic. Equally, Redmond et al. (2005) mentioned that when educators

develop their classes using ICT, their students are more likely to incorporate ICT in their professional experience.

2.2 ICT in language learning

Charpentier (2014) emphasized that “information and communication technologies play an essential role in language learning to develop the macro linguistic skills” (p.1). Similarly, Yang and Huang (2008) uttered that ICT use allows students to make more effort to support, improve, and complement the language learning process. Thus, technology significantly influences language learning by changing learners' customs to acquire knowledge, allowing a diverse way to practice one specific area and improving critical thinking and cognitive processing (Aqsha & Pei, 2009). Furthermore, Cakici (2016) highlighted that “the use of ICT as a teaching [equipment/resource] emphasizes obtaining, analyzing, and organizing information, by this way giving students [the chance] to get in touch with different kinds of media” (p. 73).

Alkamel and Chouthaiwale (2018) asserted that the ICT used in an EFL classroom is classified into two types: non-web-based and web-based. Non-web-based ICT tools are radio, television, films, overhead projectors, and language lab. These are very helpful for learners because they will hear different people speaking and interacting, giving realism to the whole educational process. These pundits stated that one of the most modern English aids of non-web-based tools is the language lab because it allows students to learn different accents and try to imitate them by recording themselves. On the other hand, web-based learning presents the following resources as efficient: YouTube, e-mails, blogs, skype, and mobile phones since they help instructors implement a student-centered model of teaching. Likewise, students can chat with native speakers through e-mails, send homework to their teachers, and receive feedback in the same way (Alkamel & Chouthaiwale, 2018).

2.3 ICT incorporation in EFL teaching methodologies

ICT implementation has influenced the educational process, benefiting educators, school directors, learners, and parents (Tearle, 2003). According to Ratheeswari (2018), ICT helps educators transform their teaching strategies and improve the relationship between students and teachers. As mentioned by Salehi and Salehi (2012), many educators look for different ways to implement technology in the curriculum. Fortunately, most of them have received the support of the ministry of education of their countries by making some changes in the curriculum and using innovative techniques and materials. Roblyer and Edwards have described the use of ICT in the teaching-learning process.

The use of ICT in education has evolved from two main approaches, namely directed and constructivist instructional methods. The theoretical foundations of directed instruction are based on behaviorist learning theories and information processing theory, which is a branch of cognitive psychology. The theoretical foundations of the constructivist approaches are based on the principles of learning derived from cognitive learning theory. (as cited in Salehi & Salehi, 2012, p. 216)

According to Walia (2012), many educators have used ICT to change the traditional methods such as the grammar-translation method, the direct method, and the audiolingual method, which focus on teaching translation, grammar points, and rote learning vocabulary activities. However, this does not mean the traditional methods do not boost the cognitive skills of students; both the conventional methodologies and ICT have to be combined to obtain better outcomes (Burriss & Wright, 2001). Furthermore, Renau (2016) asserted that teachers should use methods that encourage students to be productive in their language acquisition. Since most of today's learners are born in the age of technology, educators ought to apply strategies in which students can practice what they learned in real-life conditions (Boumová, 2008). Furthermore, Anburaj et al. (2014) claimed that instructors should employ

ICT because its usage does not feel like the conventional educational process, and learners like it the most.

2.4 ICT implementation effects in EFL classrooms

Cox et al. (2003) stated that teachers have to implement technology in EFL classrooms so learners can improve their levels of competency in the field of ICT and the learning context. Equally, Ahmadi (2018) and Azmi (2017) explained that while using ICT for educational purposes, students enhance their English skills mainly through communicative activities such as debating and discussing any topic or sharing their ideas and emailing friends. In addition, Guerza (2015) mentioned that using ICT motivates learners to use English to communicate actively in any context, interact with authentic material, and talk with native speakers.

Related to the positive effects of ICT implementation in EFL classrooms, Salem and Mohammadzadeh (2018) claimed that ICT gives educators and learners advantages such as enhancing the educational process, motivating teachers to update their methodologies and strategies, and making the teaching-learning process enjoyable. Likewise, ChanLin et al. (2006) asserted that ICT allow students to enhance their creativity, participation, and involvement. Also, the authors noted that technology helps improve self-confidence, sustains concentration, boosts problem-solving strategies, gathers information, and creates knowledge. Besides, using ICT reinforces the four English skills, cognitive skills, critical thinking, among others. Another positive effect is the comfort generated in the educational environment by technology use compared to educational settings that do not use technology (Burris & Wright, 2001).

On the other hand, an adverse effect of ICT integration in EFL classrooms is its misuse by students. As established by ChanLin et al. (2006), learners have to be well-guided to use ICT properly since most of them only copy and paste the information instead of

reflecting and creating their knowledge in a meaningful form. Similarly, Baytak et al. (2011) mentioned that some students prefer learning face-to-face instead of studying with computers since these devices may not give them instant feedback while developing certain activities that cannot be checked and graded by machines.

ChanLin et al. (2006) mentioned that some teachers are against ICT integration because it implies instructors' and students' readiness to use staple ICT to develop particular tasks. Nonetheless, Schoepp (2005) noted that even if technology is accessible for everyone in an EFL classroom, they do not receive the necessary guidance and coaching to incorporate it. Moreover, as established by Bingimlas (2009), to successfully embed ICT in classes, teachers stated that they have to either reduce the number of their lessons or raise their class time; hence, many instructors view this as a negative effect.

CHAPTER III

3. Literature Review

Nowadays, we live in a technological era; thus, many people are already using or starting to implement ICT in different settings, either for academic or non-academic purposes. Samuel and Bakar (2006) noted that educational institutions have been incorporating ICT in EFL classrooms to enhance the language learning process.

Research developed by different pundits has focused only on students' perceptions regarding the use of ICT in EFL classrooms (Baytak et al., 2011). Nevertheless, the literature review of this research synthesis will focus specifically on educators' perceptions and the benefits and constraints of ICT implementation in EFL classrooms.

This chapter starts presenting the debate regarding using traditional methods, alluding to the use of classic whiteboard, markers, and textbooks as their only way to teach vs. using ICT, meaning technology implementation to instruct in EFL classrooms. It then summarizes the main constraints teachers face when implementing ICT in their classes and the main benefits of using ICT in EFL classrooms. The chapter finishes with teachers' perceptions about implementing technology in their EFL classrooms.

3.1. Traditional method vs. ICT to teach English in EFL classrooms

The Traditional Method of teaching, explained above, has been questioned a lot, and as a result, to innovate EFL classes and boost learners' performance, several strategies have emerged. According to Texas A & M University (2014), the most used teaching strategies are gamification, lectures, drills and practice, debates, role-plays, among others. However, ICT has gained special attention from educational authorities and institutions.

The authors Anburaj et al. (2014), Liu and Long (2014), and Walia (2012) stated that to obtain optimal performance results from students, the right thing to do is to combine the traditional method with an innovative strategy such as ICT, taking advantage of their

different features. For instance, based on the results obtained from the study developed by the researchers Hiep (2000), Walia (2012), and Boumová (2008), the traditional program is the best option for teaching grammar rules in EFL classrooms.

Technology can be used to practice the four English skills, either individually or in combination. Bingimlas (2009) stated that ICT material influences a lot in the acquisition, improvement, and abilities that benefit learners in their daily life situations.

According to the authors Boumová (2008), Hiep (2000), and Raja (2018), traditional methods and ICT have advantages and disadvantages at the moment of their usage. As highlighted by the author Liu and Long (2014), the main advantages of the traditional method are learners' comprehension of the language structure, acquisition of vocabulary, and reception of instant feedback. Regarding its disadvantages, the class is teacher-centered, and students are passive receivers (Wang, 2007). Likewise, as mentioned by the author Renau (2016), memorization is a strategy of the traditional method, and this procedure does not work for everyone. In addition, there is no time for practicing communicative skills, preventing students from speaking in real-life situations. Finally, according to Anburaj et al. (2014), Liu and Long (2014), and Hiep (2000), students can be easily distracted if they do not use ICT equipment/software properly, they do not interact with learners, and they tend to cheat on tests.

Regarding ICT, Boumová (2008) and Liu and Long (2014) presented the main advantages of its usage: learners' engagement in the teaching-learning process and their preparation to solve academic problems by themselves. Besides, ICT implementation encourages students' autonomous learning and allows learners to use updated strategies and resources within their learning environment by using the knowledge in the demanding world of technology.

3.2. Main constraints teachers face when implementing ICT in their classes

All strategies involve constraints that teachers have to face. Related to ICT incorporation, educators have to face new challenges due to its integration in EFL classrooms.

The first constraint is the lack of technical and human resources. As mentioned by Al-Maini (2013) and Pelgrum (2001), teachers want to incorporate ICT in their classes; however, educational institutions do not have the essential ICT equipment/software. Furthermore, according to Al-Munawwarah (2014) and Ghavifekr et al. (2016), even though some educational establishments have enough technological resources, they do not have the necessary staff to solve technical problems while using ICT.

The second constraint is lack of training. As stated by Habibu et al. (2012) and Hismanoglu (2012), the main reason teachers are reluctant to use ICT is their lack of training. Since, sometimes, educational authorities do not provide any training to teachers, some educators are forced to learn by themselves how to use technology by practicing with different technological devices and ICT resources at home (Schiller, 2003). Raman and Tamat (2014) mentioned that educational institutions highly recommend instructors integrate ICT in classes; however, they do not guide teachers to use ICT equipment/software properly. Therefore, instructors consider that educational authorities should increase their salaries because their workload is more demanding since they plan and prepare ICT activities more carefully (Habibu et al., 2012).

The third constraint is lack of time. Yang and Huang (2008), Al-Munawwarah (2014), and Mollaei and Riasati (2013) claimed that the amount of time teachers have for each EFL class is too short to spend their time working with ICT. Also, their lack of ICT training is directly related to this third constraint. Instructors spend much time developing their classes through ICT without knowing how to use technology; thus, they prefer not to use it.

3.3. Main benefits of using ICT tools in EFL classrooms

Pundits Al-Munawwarah (2014), Gobbo and Girardi (2001), Merç (2015), and Samuel and Bakar (2006) agreed that ICT deployment allows students and teachers to have better performance during the teaching-learning process. There are three main advantages of ICT usage in EFL classrooms:

One of the main benefits is that ICT enables educators to modify their teaching methodologies and promotes students' autonomous learning. Researchers Ahmadi (2018), Bingimlas (2009), and Drent and Meelissen (2008) claimed that when instructors use ICT, they have the chance to create innovative activities to boost students' participation during the class. Likewise, Chouthaiwale and Alkamel (2018) asserted that technology usage favors students to improve a specific skill or sub-skill in which they are having difficulties. Additionally, while students increase their autonomous learning, they get authentic information by themselves rather than facts (Bingimlas, 2009).

Another benefit is that ICT integration increases communication and collaboration among students (Raja, 2018; Bingimlas, 2009). Proof of it is that students communicate easily with their partners inside and outside classrooms by supporting each other in developing their homework or tasks. Also, through collaboration and communication, learners enhance relationships with their classmates and instructors. Besides, students collaborate and look for strategies to obtain significant knowledge using technology (Ahmadi, 2018). In other words, ICT usage in EFL classrooms promotes collaborative and communicative learning.

Lastly, ICT implementation promotes learners' motivation. Azmi (2017) and Samuel and Bakar (2006) portrayed that technology permits students to increase their motivation by participating freely and actively during the teaching-learning process. They feel that way since ICT integration helps learners become the center of the class putting aside the

traditional method, which is teacher-centered. Furthermore, Ahmadi (2018), Aminullah et al. (2019), and Merç (2015) claimed that students' motivation is one of the fundamental aspects that boost their long-term memory. To sum up, ICT is required to engage students in their EFL classes.

3.4. Teachers' perceptions about implementing ICT in their EFL classrooms.

Every human being has a different mindset about every situation in life, and ICT integration in EFL classrooms is not the exception, especially for educators. The model instructors project while using technology is one of the points that generate debate among teachers. On one side, Ahmadi (2018) stated that teachers have to be excellent models of technology use for their students. Hence, learners will feel responsible and motivated to integrate technology within their educational process. On the other hand, instructors who are reluctant to incorporate ICT in their classes are conscious that basic knowledge about computers is not sufficient to motivate and improve students' in-class performance (Hismanoglu, 2012). Thus, this demonstrates that some teachers still fear going beyond the traditional methods and innovating.

Another aspect that causes discrepancy among educators is the whole idea of ICT usage in EFL classrooms. On one side, as explained by Gobbo and Girardi (2001), many teachers are constantly searching for different activities to innovate their classes through ICT to make each class more engaging and dynamic. On the other side, instructors might be forced to implement technology in their classrooms because they feel pressure to do it since this new era is technological. For this reason, the general belief is that valuable learning is achieved through the use of ICT (Raman & Tamat, 2014).

Similarly, another aspect related to the teachers' perception is the usage learners give to ICT equipment/software they possess within their educational institutions. On one hand, educators believe that ICT use should not be allowed for students since most of them do not

use it properly to improve their academic performance (Al-Munawwarah, 2014). On the contrary, the rest of instructors claimed that technology has to be available for pupils but under severe conditions and under the control of the teachers (Mollaei & Riasati, 2013).

Throughout what has been presented in this chapter, the studies show that ICT incorporation in EFL classrooms can have benefits and constraints. Some researchers established that the teaching-learning process would be developed in a better way if ICT is used. However, other pundits claimed that technology implementation is not crucial for improving learners' performance results and engaging them in the class. They emphasized that the educational process depends on autonomous and collaborative learning, not the resources used. In this chapter, the most relevant studies were shown to support the aspects that ICT incorporation involves.

CHAPTER IV

4. Methodology

This research synthesis used a qualitative bibliographic approach to attain pertinent information to reach the proposed objectives. As mentioned by Norris and Ortega (2006), a research synthesis “pursues systematic (...) understandings of the state of knowledge that has accumulated about a given problem across primary research studies” (p. XI).

This research synthesis gathered data about the benefits, constraints, and teachers’ perceptions regarding ICT use in EFL classrooms. The articles were found in relevant databases: emerald insight, Google Scholar, Eric, JSTOR, LearnTechLib, ResearchGate, ProQuest Educational Journals, ScienceDirect, and Taylor & Francis Online. For the search, some aspects were considered to select the data. First of all, the articles had to be written in English because it is the language in which the study will focus. Second, the papers had to involve investigations carried out in EFL classrooms to obtain varied instructors’ perspectives about ICT integration in EFL classes. Third, these studies could be qualitative, quantitative, or mixed methods studies; no restriction regarding the approach was included.

In addition, the articles must have been published since 2000, so we could get an idea of how ICT has been applied in the teaching-learning process in recent years. Finally, the keywords for searching research studies were 1. ICT resources, 2. teachers’ perceptions, 3. EFL classrooms, 4. teaching, 5. strategy, 6. learning, 7. knowledge, 8. performance results, 9. training, 10. education.

Some journals that were reviewed are the following: *Journal of Curriculum Studies*, *ENGLISH REVIEW Journal of English Education*, *Journal of Educational and Social Research*, *Malaysian Online Journal of Educational Technology*, *Journal of Information Technology for Teacher Education*, among others, which we considered relevant and reliable

journals that contributed significantly to our research synthesis. Later, an analysis procedure was conducted to classify the articles according to different categories that emerged through the analysis itself.

CHAPTER 5

5. Analysis of the Data

This chapter presents the analysis of 28 studies to answer the established research questions. These studies are divided into four categories: benefits of using ICT, constraints teachers face while using ICT, teachers' perceptions of ICT implementation to teach English, and the most common ICT equipment/software used by instructors. The results of the analysis are presented in tables with their corresponding description.

To make the results clear for the reader, we would like to specify that in the term ICT, we include computers and overhead projectors, e-mails and blogs, radio and television, YouTube and films, the internet, and mobile phones, which are reported in the different studies of the analysis (Al-Munawwarah, 2014; Redmond et al., 2005; Martínez et al., 2018; Cano & García, 2013).

5.1 Benefits of using ICT

This category of analysis presents data on the benefits of ICT implementation in EFL classrooms reported in the analyzed studies.

Table 1

Advantages of ICT use in EFL classrooms

Benefits of ICT	Enhances students' autonomous learning	Improves collaborative and communicative learning	Classes become groundbreaking and amusing	Boosts students' motivation	The teaching-learning process runs effectively and efficiently	Learners solve complex problems using their cognitive skills
Authors						
Al-Munawwarah (2014)	X		X	X		
Alshumaim and Alhassan (2010)				X		
Aminullah et al. (2019)					X	
Aqsha and Pei (2009)	X	X		X		X
ChanLin et al. (2006)	X		X			X
Gobbo, and Girardi (2001)	X					
Guerza (2015)	X	X		X		
Habibu et al. (2012)	X		X		X	X
Martínez et al. (2018)		X		X	X	
Mollaei and Riasati (2013).			X		X	
Raman and Tamat (2014)					X	
Redmond et al. (2005)				X		
Salem and Mohammadzadeh (2018)			X		X	X
Samuel and Bakar (2006)	X	X		X	X	
Schiller (2003)			X		X	
Tzagkourni et al. (2021)					X	X
Yang and Huang (2008)			X		X	

Table 1 presents 17 studies about the benefits of using ICT divided into six categories.

The results of the data analysis show that the two main benefits of ICT implementation in EFL classrooms are the teaching-learning process runs effectively and efficiently and the

enhancement of students' autonomous learning. For instance, Habibu et al. (2012) stated that ICT is crucial for engaging learners with their acquisition of knowledge not only inside the classroom but also after school hours. Furthermore, Samuel and Bakar (2006) established that technology integration's main benefit in EFL school rooms is that the educational process becomes more effective and efficient. Other advantages come up because of its implementation; the common ones are boosting students' autonomous learning, enhancing communicative and collaborative learning, and improving learners' motivation.

5.2 Constraints teachers face while using ICT

This category of analysis presents data on the constraints teachers face while using ICT in EFL classrooms. The data has been reported by the educators that participated in the analyzed studies.

Table 2

Challenges of ICT usage

Constraints teachers face while using ICT	Lack of support from educational authorities	Lack of teachers' training	Lack of technological resources	Lack of technical support	Lack of confidence	Lack of educators' class time
Authors						
Al-Munawwarah (2014)				X		X
Alshumaim and Alhassan (2010)	X		X			
Aminullah et al. (2019)	X	X	X		X	
Cano and Garcia (2013)	X	X				
Ghavifekr et al. (2016)		X	X	X		X
Habibu et al. (2012)	X	X	X	X	X	
Hismanoglu (2012)	X	X			X	
Mahdi and Al-Dera (2013)		X				
Merç (2015)	X	X	X			
Mollaie and Riasati (2013)		X	X	X	X	X
Rahimi and Yadollahi (2011)		X				
Raman and Tamat (2014)		X			X	X
Redmond et al. (2005)		X	X		X	
Salehi and Salehi (2012)			X	X		X
Salem and Mohammadzadeh (2018)	X	X	X	X		
Samuel and Bakar (2006)			X			
Schoepp (2005)		X	X	X	X	X

Table 2 presents 17 studies that analyzed the constraints teachers face while implementing ICT in EFL classrooms which were organized into six categories. The participants of these studies concluded that all the constraints included in Table 2 are the core obstacles instructors have to deal with while developing activities through ICT. For example, Habibu et al. (2012) asserted that teachers who do not have any training on using ICT do not feel confident enough to use technology to teach learners. Furthermore, Merç (2015) explained that the lack of technological resources is a side effect of the lack of support from educational authorities. According to the answers obtained from educators, they desire to innovate their classes through ICT usage, even in a basic form like radio, loudspeakers, or just an internet connection to present a YouTube video. However, accomplishing this goal is not possible due to the lack of ICT equipment in their educational settings. Equally, educators who participated in Merç's study (2015) emphasized that the only activity they can do with their students is to show pictures on the computer. Additionally, interviewed educators suggested that insufficient time and lack of technical support are constraints instructors have to face every time they want to use technology since they spend excessive time looking for adequate activities for their learners' level. Besides, while presenting the material in class and some inconvenience arises, they do not have the necessary technical support (Al-Munawwarah, 2014).

5.3 Teachers' perceptions

This category of analysis presents data on the positive and negative teachers' perceptions about ICT implementation in EFL classrooms. For a better understanding of these results, two tables are provided.

Table 3

Teachers' favorable insights of ICT implementation

Positive educators' points of view regarding ICT usage	Enhancement of interpersonal communication among school members	Innovation of EFL methodologies	Accessibility to online EFL material	Teacher as a guide
Authors				
Al-Munawwarah (2014)		X		
Aminullah et al. (2019)		X	X	
Cano and Garcia (2013)	X			
ChanLin et al. (2006)	X	X	X	
Ghavifekr et al. (2016)		X		X
Gobbo and Girardi (2001)	X	X		X
Guerza (2015)		X		X
Hismanoglu (2012)		X	X	
Merç (2015)		X	X	X
Mollaei and Riasati (2013)		X	X	X
Rahimi and Yadollahi (2011)		X	X	
Schiller (2003)		X		X
Yang and Huang (2008)	X	X		

Table 3 presents 13 studies that analyzed teachers' positive perceptions about implementing ICT in EFL classrooms. The results of the data analysis demonstrated that most teachers have a positive perception of incorporating technology in EFL classes. For instance, Al-Munawwarah (2014) asserted that while educators use ICT, they can help students be more engaged and independent within their learning environment. Similarly, Aminullah et al. (2019) claimed that most instructors recognize the benefits of ICT integration in EFL classrooms in aspects such as planning and evaluating.

The first category of this table emphasizes the progress of interpersonal communication among school members. Yang and Huang (2008) mentioned that

educators who work together to teach and learn the various uses of ICT obtain better results from its implementation since they will consider the knowledge and experience of their colleagues to overcome the problems that arise as a team. Besides, the participants of Merç's study (2015) asserted that technology allows instructors to obtain EFL online material and adjust it to fit students' needs. In addition, in the second and fourth categories of Table 3, innovation of EFL methodologies and teacher as a guide, respectively, Dweck mentioned that while integrating ICT in EFL methodologies, four factors influence the teaching-learning process:

type of work ..., the role assigned to teachers..., level of task ... (whether self-directed or teacher-directed), and disposition and effort to increase competence, both as a challenge to learn about a new tool and to improve teaching and pupils' independent learning. (as cited in Gobbo & Girardi, 2001, p. 80)

Table 4

Teachers' negative standpoints of ICT incorporation in EFL classrooms

Negative educators' points of view regarding ICT usage	Inability to see the benefits of using technology in the classroom	Teachers' computer anxiety	Students' misuse of ICT equipment/software	Teaching experience, age, and gender
Authors				
Al-Munawwarah (2014)	X			
ChanLin et al. (2006)		X	X	X
Demetriadis et al. (2003)	X	X		
Ghavifekr et al. (2016)		X		X
Gobbo and Girardi (2001)	X	X	X	
Habibu et al. (2012)		X		
Hismanoglu (2012)	X	X	X	X
Mahdi and Al-Dera (2013)				X
Merç (2015)	X	X		
Mollaei and Riasati (2013)	X	X		X
Rahimi and Yadollahi (2011)	X	X		X
Raman and Tamat (2014)		X		
Salem and Mohammadzadeh (2018)				X
Schiller (2003)				X
Schoepp (2005)		X		
Yang and Huang (2008)	X			

Table 4 presents 16 studies that analyzed teachers' negative perceptions about implementing ICT in EFL classrooms. The studies are divided into four categories: inability to see the benefits of using technology in the class, teachers' computer anxiety, students' misuse of ICT, and teaching experience, age, and gender.

The results of the data analysis showed that a few teachers have a negative perception of incorporating ICT in EFL classrooms due to their bad experiences using it. The first category of this table underscores the inability to see the benefits of using technology in the

classroom. Gobbo and Girardi (2001) stated that educators reject ICT implementation since they prefer traditional teaching methods such as writing on a typical whiteboard, using notebooks, and showing printed flashcards. Educators favor conventional methods because they master them, and they do not have anybody to guide them on how to incorporate technology within their EFL activities. Regarding teachers' computer anxiety, Habibu et al. (2012) claimed that some educators feel insecure using technology in front of their students because they do not want to embarrass themselves. For example, one of the teachers reported that while she was giving a demonstration class in front of the authorities of her educational institution, the projector stopped working, and she could not finish her presentation successfully.

According to ChanLin et al. (2006), most instructors guide their students to improve their academic performance using technology; however, learners misuse such resources (third category) to enhance their educational process. For instance, the participants of Hismanoglu's study (2012) claimed that most of their students prefer to spend their time within their language lab doing nonacademic activities instead of practicing and reinforcing their EFL skills.

Furthermore, regarding the fourth category, Rahimi and Yadollahi (2011) claimed that teachers' age and experience influence their ICT usage. Younger teachers tend to be more motivated to incorporate ICT in their classes than their middle-aged colleagues because they are native technology users. Even though older instructors are more experienced in the teaching-learning process, they suffer from computer anxiety, limiting them from incorporating ICT resources in their EFL classrooms. Additionally, Rahimi and Yadollahi (2011) stated that before the 21st-century, gender was a vital factor that influenced male teachers to incorporate ICT since female educators suffered from computer anxiety. However, today, this aspect does not bias technology usage anymore.

5.4 Most common ICT equipment/software used by instructors

Within the studies, there is a wide range of equipment/software cataloged as ICT and classified into two big groups: physical technological tools such as computers, overhead projectors, radio, television, mobile phones, and software such as e-mails, blogs, YouTube, films, and internet. This category of analysis presents data on the most common ICT resources used by instructors in EFL classrooms reported in the analyzed studies.

Table 5

Most common ICT equipment/software employed by educators

Most common ICT equipment/software used by instructors	Computer and overhead projector	E-mails and blogs	Radio and Television	YouTube and films	Internet	Mobile phones
Authors						
Al-Munawwarah (2014)	X				X	
Alshumaim and Alhassan (2010)	X					
Cano and Garcia (2013)		X				
Ghavifekr et al. (2016)	X				X	
Hismanoglu (2012)	X	X			X	
Martínez et al. (2018)	X			X	X	
Merç (2015)	X				X	
Mollaiei and Riasati (2013)	X					
Rahimi and Yadollahi (2011)	X		X			X
Redmond et al. (2005)	X	X			X	X
Schiller (2003)	X					
Yang and Huang (2008)					X	

Table 5 shows the analysis of 12 studies divided into six categories related to the most common ICT equipment/software used by instructors in EFL classrooms. The results show that the common ICT resources employed by educators are computers, overhead projectors, and the internet. For example, Martínez et al. (2018) asserted that the combination of these three popular ICT equipment/software used by educators helps them encourage students to acquire and practice the target language, especially the speaking skill and the vocabulary sub-

skill. Additionally, Ghavifekr et al. (2016) emphasized that ICT is essential for students to access different websites and improve their academic performance autonomously.

CHAPTER VI

6. Conclusions and Recommendations

6.1 Conclusions

This research synthesis aimed to assess the benefits, constraints, and different perspectives educators face while incorporating ICT in EFL classrooms. Based on the analysis of 28 empirical studies, we were able to identify some benefits, constraints, and positive and negative effects that ICT implementation has in EFL classrooms. Afterward, the following conclusions are established.

The outcomes of this research synthesis portrayed that educators are aware that the benefits are higher in number than the constraints of technology integration in EFL classes. According to Aqsha and Pei (2009), the two main benefits of ICT usage are the teaching-learning process running effectively and efficiently and the enhancement of students' autonomous learning. Hence, instructors should develop their EFL classes through technological tools to enhance learners' cognitive skills and adapt the institutional environment to this technological era. Similarly, the Ministry of Education should train educators on ICT implementation for their own and their students' benefit.

Most teachers know the advantages that ICT resources provide to their lessons and students; nonetheless, the challenges they have to deal with do not let them be objective and finally decide to incorporate technology in their EFL classrooms. Furthermore, relying on the outputs of the data analysis, Habibu et al. (2012) claimed that lack of instructors' training and lack of technological resources are the two principal constraints educators have to face. For instance, some teachers want to develop their classes through ICT usage; however, the previously mentioned aspects demotivate them from integrating technological tools within their classrooms. For this reason, instructors should be trained properly, and educational

authorities ought to assist educators with ICT resources and technical support.

Another inference from our analysis is that the most common positive point of view regarding ICT usage among educators is the innovation of EFL methodologies (Merç, 2015). Highlighting this, technology allows educators to develop their classes more dynamically and creatively and use methods that cover learners' requirements. Additionally, educators can use updated methods to engage students in the teaching-learning procedure.

Another conclusion is that the most common negative teachers' viewpoint regarding ICT implementation is their computer anxiety; however, teaching experience, age, and gender also play an essential role. Instructors who were not born in the technological era have more difficulties using ICT than their younger counterparts. ChanLin et al. (2006) claimed that elderly teachers are more likely to suffer computer anxiety since they do not feel capable of using technology in any of its forms. Likewise, Rahimi and Yadollahi (2011) asserted that educators continue using traditional methodologies that focus on grammar, vocabulary, and translation because they are afraid of making a mistake while using ICT in front of their learners. For this reason, instructors should never stop learning to keep updated on new educational trends and methodologies and choose the best ones to impart their EFL classes.

An outcome about the most common ICT equipment/software employed by instructors are computers, overhead projectors, and the internet. Redmond et al. (2005) stated that many educators use ICT to encourage their students to be independent in their daily life activities by enhancing their English skills. Moreover, some teachers tend to use computers, overhead projectors, and the internet because these technological devices are manageable. Equally, educators who are reluctant to ICT implementation in EFL classrooms should rethink their position since technology brings opportunities to find considerable instructional information and websites for learners to practice.

To sum up, the benefits, constraints, and the different perspectives instructors have

while incorporating ICT in EFL classrooms show a different side of the educational process, which usually focuses only on students' reality leaving out teachers' truth. These factors will guide educators to acquire a broad vision of the varied ways of implementing technology in their classes. Hence, instructors should bear in mind the different advantages that technological tools bring to their work environment and recognize the methodologies that fit learners' needs.

6.2. Recommendations

There are some recommendations for further research on benefits, constraints, and perceptions teachers have about ICT implementation in EFL classrooms. Several studies were analyzed to answer the proposed research questions; however, neither of the research papers examined took place in Ecuador. Thus, future inquiries about ICT usage within the EFL context should be developed in this country. This type of information will help Ecuadorian educators and learners obtain an overview of the reality that teachers face every day throughout the whole educational process.

Another suggestion emerged from the lack of studies involving educational authorities' perspectives. For this reason, more studies should be conducted about ICT integration in EFL classrooms from institutional leaders' positions because they are a vital pillar for the success of technological implementation. In other words, educational authorities should be in charge of obtaining the economic resources to buy the necessary equipment and provide training to the teachers.

Associated with the practical implications of this research synthesis, the outputs suggest a few guidelines on how everyone, from parents, teachers, and educational authorities, should be involved in the different aspects of ICT incorporation during the teaching-learning process. Teachers should consider their learners' technological resources and accessibility to the internet before asking them to develop any assignment. This is

because not all students possess the economic resources to afford having a computer or internet access. Additionally, instructors should guide learners on the appropriate usage of technology so that students can take advantage of the diverse ICT resources to enhance their autonomous learning and be constantly acquiring new knowledge.

Finally, the last recommendation is for teachers to overcome their technology anxiety and do their best to use ICT in the teaching-learning process. Hence, educators can vary their in-class activities using updated resources that motivate students to be engaged in the classroom.

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