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Ecuadorian Public High School Teachers' Perceptions on
Technological Resources used by teachers in their EFL
Classrooms during the Covid-19 Pandemic

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Dedication

First of all, I want to thank God for giving me life, good health and for providing me with the opportunity to fulfill my greatest dream of becoming an English teacher. Second, I thank my family for always giving me their support in times of adversity, for giving me strength to move forward. And third, I thank my husband who has been there to help me and support me all those nights when I would stay up late to study for my college exams or when working hard on my assignments, and for always being there for me in these 4 long years of study and dedication.

Nelly

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Nelly

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Abstract

The study intended to analyze the technological resources employed by teachers in their EFL classrooms during the Covid-19 pandemic in Ecuadorian public schools. In order to reach that objective, a qualitative and quantitative approach was applied, by means of a survey and interviews, using a teacher questionnaire given to ten EFL public high school teachers from seven Ecuadorian towns located in two provinces. Both female and male, of different ages and experience in teaching participated as sample. In order to do the analysis, three dimensions were considered; the type of technological resources and frequency of use, the self-assessed competency in employing said resources and the teacher's attitudes and perceptions towards them. After the analysis, the study concluded that all teachers use technological resources in their EFL classrooms, that the overall majority consider to have the necessary skills and knowledge to solve technological problems that arise in class and that the perception and attitudes of the teachers towards using those technological resources are generally positive. Further investigation, especially related to teachers' perceptions towards technology use and increasing competency is recommended.

Keywords: English as a Foreign Language (EFL) teachers, Information and Communication Technology (ICT) frequency, ICT use, EFL teachers' perceptions.

Resumen

El estudio se propuso analizar los recursos tecnológicos empleados por los profesores de inglés en sus aulas de clases, durante la pandemia de Covid-19, en las escuelas públicas de Ecuador. Para alcanzar el objetivo se empleó un enfoque cualitativo y cuantitativo, mediante una encuesta y entrevistas, a través de un cuestionario dirigido a diez profesores de inglés en colegios públicos de siete ciudades ecuatorianas, ubicadas en dos provincias, tanto mujeres y hombres, de diferentes edades y experiencia. Para realizar el análisis se consideraron tres dimensiones, el tipo de recursos tecnológicos empleados, la frecuencia de uso, la competencia autoevaluada, las actitudes y percepciones del profesor sobre su uso. Tras un análisis exhaustivo, el estudio concluyó que todos los profesores utilizan recursos tecnológicos, que la mayoría considera tener las habilidades y conocimientos necesarios para resolver los problemas tecnológicos en clase y que la percepción de los profesores hacia el uso de dichos recursos tecnológicos es positiva. Se recomienda seguir investigando en relación con las percepciones de los profesores y las maneras de mejorar sus competencias en el uso de los recursos tecnológicos.

Palabras clave: Profesores de inglés como lengua extranjera (EFL), frecuencia de las tecnologías de la información y la comunicación (TIC), uso de las TIC, percepciones de los profesores de EFL.

Introduction

The new normal imposed on the world by the Sars-Cov2 virus pandemic has presented challenges to all aspects of our society, and education was one of the hardest hit sectors. English as a Foreign Language teaching has also been affected by the unprecedented transformations put in place through the response measures. Prior to the pandemic, EFL teachers in Ecuador had started implementing technological resource use in their classrooms, but the new normal of complete suspension of onsite classes made teachers adapt and use technological resources daily.

Consequently, this made it necessary for the academic sector to carry out research in order to best understand the challenges EFL teachers were experiencing and how best to address and overcome them. Intending to achieve that, the present study identified and analyzed EFL teachers' perceptions towards the use of technological resources in their classrooms during the Covid-19 pandemic, focusing exclusively on the public educational environment at the high school level.

The general objective of the study was to carry out a thorough analysis of the technological resources used by Ecuadorian public high school EFL teachers in their classrooms in the context of the novel coronavirus pandemic. Consequently, in order to achieve the general objective, three specific objectives were formulated, namely, to identify the specific technological resources used; to determine the frequency of use of said technological resources and, lastly, to determine what the teachers' perceptions are regarding the use of those technological resources.

Accordingly, in order to meet those objectives, the following research questions were formulated: Which technological resources are used by EFL teachers in their classrooms during the Covid-19 pandemic? How frequently do teachers use technological resources in their EFL classrooms in the context of the Covid-19 pandemic? And how are technological resources perceived by EFL teachers?

By answering those questions, the study contributes to building a body of research to support the implementation of technological resources in the EFL classroom in the context of

the Covid-19 pandemic, as well as to ease the transition of teachers to this new technological educational model. Policy makers and administrative staff as well as teachers and students alike can benefit from such research efforts.

Furthermore, the research process meant reviewing prior studies related to the topic under investigation, focusing on both similarities and differences of approaches and results as well as to identify patterns and trends that are relevant.

This study was structured into three chapters, the first one features the introduction providing the justification for the research, the second chapter presents the method and the literature review, placing the study in the broader context of the body of research being compiled on a global scale. The third chapter, consisting of the analysis and discussion, presents and analyzes the gathered data, and last are the conclusions and recommendations that resulted from this investigative endeavor. Certainly, the investigative process also had its difficulties, namely doing exclusively online work, which would have been enriched, assuredly, had the circumstances been different, by in-person interviews.

It is expected that this research paper provided EFL teachers and investigators with an additional tool to better understand teaching dynamics during the Covid-19 pandemic in Ecuadorian public high schools. It was also meant to help stakeholders see and evaluate the transformation that took place in EFL classrooms and how the participant teachers, and the demographic they represent, adapted to and perceived said changes, with a look toward improving and innovating EFL teaching.

Chapter One

Literature Review

In order to understand English as a Foreign Language (EFL) teaching and relate it to the topic under investigation, it is necessary to bear in mind the different language theories and methods that have been in use over the last decades. Several authors like Ally (2008) or Blake (2011) have agreed that the English language has gained great importance in our current world, calling it the 'international language'. Among the many benefits EFL brings to society are that it serves as a communication tool between people of different cultures, it increases the chances of being employed, it encourages international collaborations and trade, and it allows access to a greater amount of information, among others, as stated by Wiangsima and Boonmoh (2018).

Moving the focus towards the present-day context, we stand now before the Coronavirus disease 2019 (COVID-19) pandemic, which originated in the People's Republic of China's Hubei Province and from there on has spread across the world. This virus has infected many countries. The WHO Emergency Committee declared a global health emergency in late January 2020, citing an increase in COVID-19 confirmed cases around the world, according to Fu and Zhou (2020).

Having said that, once the Covid-19 pandemic was declared, immeasurable consequences in all aspects of life were the outcome, including in education and our field of interest. We have all witnessed the world undergo a series of unprecedented changes in patterns of behavior, and the English language teaching field was no exception, as it has also been forced to transform at an alarming rate, as observed by Jiang et al. (2020). In the EFL field, the impact of the immediate transition to online teaching left a lot of unanswered questions and challenges to teachers and students alike.

Technological Resources Use in EFL Teaching

Given that the context of this investigation is an exceptional one, it becomes more relevant to analyze the use of modern technology in teaching English. That is generically understood to mean an innovative application of methods, tools, materials, devices, systems, and strategies which are directly relevant to English language teaching, and which lead to the achievement of the envisioned goals. Therefore, it becomes clear that technology is now generally accepted as an important educational and auxiliary tool across a range of teaching contexts, as stated by Yi and Jang (2020). That is particularly true regarding English language teaching since it affords several potential opportunities to enhance both the content and delivery of the pedagogies typically associated with traditional English language instruction. FroGao and Zhang (2020) tell us that this is primarily achieved by enabling the student and/or teacher to revisit problematic content many times over, until it is fully understood and assimilated. To adequately understand the topic, a presentation of the definition, characteristics, importance, advantages and disadvantages of each technological resource in use becomes necessary.

Despite its recent surge in popularity as a result of the pandemic, online learning is not a novel idea. It is characterized as distance learning that is aided by electronic devices such as laptops or smartphones that require an internet connection. As a result, students will continue to receive class lessons from the comfort of their own homes, without having to visit their campuses in person. As such, we learn from Plaisance (2018) that web-facilitated classes are those in which online learning channels are used to complement face-to-face training, hybrid or mixed classes are those in which instruction is provided both offline and online in roughly equal proportions, and fully online classes are those in which all instruction is performed online, the third type being the case at the time of the Covid-19 pandemic.

Students and teachers are more familiar with online learning, and they see the possibility of setting up and accessing opportunities to learn in a different way. As such, a collection of learning experiences in a subject distributed through a network providing access and information sharing is referred to as online learning, as observed by Son (2018). This

term was coined to describe a method of teaching and learning that incorporates the use of internet technology. Students may use the online learning environment to not only access information and resources, but also to connect and collaborate with other students in the course.

Consequently, familiarity with the concept of using modern technology is not merely limited to the use of modern appliances and devices, but rather refers to the introduction of innovative systems and methods of teaching which facilitate faster and more comprehensive learning progression. According to prevailing pedagogical theories, we are told by Ally (2008), that in utilizing the learning potential of technology students are better able to acquire and use their language knowledge and skills. According to Fatimah and Santiana (2017), the use of technology in teaching English consolidates the integrated view of the modern means system and association with other components which benefit students by achieving the required results.

Therefore, modern technology in English language teaching has become indispensable, especially in the wake of the unprecedented developments across numerous fields and disciplines. It is essential that the education sector keeps up the pace of the global technological revolution by adopting modern technological means such as computerization, multi-media devices, mobile phones, audio/visual effects applications, and social media, to optimize English language instruction and equip teachers to connect with classroom language learners in a systematic and advanced way, as Atmojo and Nugrojo (2020) remark.

Moreover, the Internet provides easy, immediate, and virtually unlimited access to software, applications, and a host of platforms and materials which can expedite English teaching and learning. While these affordances may be widely available to all, it is noted by FroGao and Zhang (2020) that teachers often play a key role in operating the different tools and teaching methods. Moreover, many such programs are specifically designed to promote effective English teaching whilst simultaneously increasing learner understanding and attainment of English language skills.

Online learning systems are simple and streamlined. That means that it is centered on serving the student instead of the student serving the system. Furthermore, it is user-friendly. An easy-to-use online teaching system makes things more accessible, less difficult, and enjoyable. It is pointless to rely on a cutting-edge learning management system, as it would still struggle to deliver if the system is riddled with technological flaws. In such circumstances users would have a difficult time navigating it, and, as a result, we discover from Ally (2008) that it's important to ensure that the system is not only attractive but also functional.

In addition, online learning requires a user-friendly interface that allows for flexible workarounds. A simple text-based online framework that only allows users to access documents, presentations, and pdf files will fail to meet the engagement's objectives, as observed by Alrashedi (2019). It is also remarked that the home page of an online course are the course pages and that current and prospective students will need to see a detailed course page that includes a clear overview, learning goals, and videos discussing each subject, in order to maximize the learning experience.

Finally, the last two important characteristics of online learning are its flexibility, its innovative nature, and the way it fosters interaction and collaboration as it enables users to work together on group projects by chatting in forums, participating in surveys, and competing for high scores on the leaderboard, as noted by Brydolf (2007).

In an interesting study by Otero (2016) it was found that such technology enhances student learning motivation and attention since it implicates students in the practical processes of language learning via communication with each other. Furthermore, Otero (2016) also recommended the use of multi-media technology in classrooms, particularly as its positive impact on the learning process aligns with the ongoing efficacy of the teacher role. The findings of the research support the proven futility of traditional English teaching methods and confirm that learners are more enthusiastic and interactive when using modern technology to assimilate English.

Consequently, statistical data shows that a high percentage of those learning English language skills do so via modern media such as smart boards, computers and screens, as compared to traditional teaching methods. Moreover, as it is revealed by Borg (2019), the interaction with teachers and overall responsiveness of students in the classroom is significantly improved when using modern techniques in English teaching. In fact, it is clear both that students are more likely to learn from electronic curricula and that English language teachers prefer to employ modern technology rather than traditional methods of teaching.

In the same way, given that technology is pervasive in all aspects of modern life, the teaching method cannot be separated from this global trend, we are told by Yi and Jang (2020) that the effect of recent English teaching technology in comparison to conventional methods, which can cause students to become passive and bored, makes it preferable. Indeed, this research shows that the implementation of new technical aids has a positive impact.

Similarly, many studies have emphasized the importance of technology in language teaching and learning; its function is not limited to foster learner motivation and learner-centered teaching, but also to involve learners in the learning process, according to Plaisance (2018). The advantage has been further improved and extended as a result of technological advances that have resulted in the introduction of mobile devices such as smartphones and tablets to language learning environments, such as mobile phones and tablet computers. Language teaching and learning have been made “more enjoyable and interactive” by overcoming time and space constraints, as remarked by Moorhouse (2020). Likewise, mobile learning's ease, mobility, and efficacy have all been proven, observe Bailey (2020) as well as Green (2016), to name a few.

Therefore, it becomes apparent that mobile learning's advantages can be extended to EFL contexts as well. As a result, mobile technology has been integrated into EFL teaching and learning in ways that help students improve their language skills. Basilaia and Kvavadze (2020) remark that while mobile learning appears to be more important to

students than teachers, students will still need guidance and advice from teachers. Online learning can also be described as using the internet to access materials, connect with content, teachers, and other students, and receive help in the learning process in order to gain information, make sense, and progress through the learning process. Online learning is characterized as learning that takes place over the internet and is supported by electronic devices such as tablets, smartphones, laptops, and computers, as observed by Ally (2008).

Another clear advantage of online learning is the fact that it is student - centered. Student-centered learning (SCL), also known as learner-centered education, is a contemporary learning approach that focuses on the students rather than the teachers. Because of the ease with which online learning can be implemented, it is inherently student-centered, according to Burston (2014).

Furthermore, online learning has the advantage of cost-efficiency. That refers not only to educational institutions, but also to students. Some authors, such as Gonzalez and Louis (2018), also remark that online learning, for example, eliminates or at least reduces costs associated with driving, textbooks, and childcare.

Individual learners' variations are considered in online learning, which encourages students to practice their own unique learning styles. In other words, students are not necessarily expected to pass all the classes in a class that they do not want to take, and they may select topics that they are interested in. There will never be a one-size-fits-all solution for all students since they all have different learning styles, observe Park and Son (2009).

According to some authors such as Isnani (2019) and Zhang et. al. (2020), it appears to be that data is the new oil, and online learning makes much more efficient use of student data than any other mode of education in history. Analytics is to blame for this. Online learning analytics is the process of extracting useful data from online learning management systems, and it is yet another of online learning's many advantages.

Finally, online learning is also environmentally friendly. Distance learning courses use 90 percent fewer resources and emit 85 percent less CO₂ than conventional university

courses on average, according to Park and Son (2009). E-Learning also does not lead to many of the environmental problems associated with paper production since it is a paperless learning process. There is no need, for example, to cut down trees for paper or to build paper-cellulose factories.

Nevertheless, there are a series of disadvantages regarding the use of technological resources in the EFL classroom. Looking at the industry also reveals plenty of enthusiasm, with the statistics of the online learning industry in 2020 showing massive growth. However, educators worldwide still recognize some major issues plaguing the industry. As such, the biggest drawbacks identified, according to Ally (2008) are:

First, it has been noted by Otero (2016) that there sometimes is a lack of self-motivation. Numerous variables in conventional classrooms actively drive motivation. Conversely, we learn that online student feedback is limited. In traditional classrooms, teachers can give students immediate face-to-face feedback. Online learning, on the other hand, still tends to struggle with student feedback, as such students completing regular assessments become dissatisfied when they experience a lack of personalized feedback.

Second, online learning can cause social isolation. Consequently, according to Doghonatze et. al. (2020), students engaged in it are more likely to experience contemplation, remoteness, and a lack of interaction. As a result, many students and teachers who eventually spend a significant amount of time online will begin to show signs of social isolation as a result of the lack of human interaction in their lives.

Similarly, E-Learning requires strong self-motivation and time management skills. One of the most common reasons for students failing to complete online courses students toward their learning objectives. Face-to-face contact with teachers, peer-to-peer programs, and tight schedules all work together to keep students on track during the semester, as observed by Plaisance (2018).

Third, cheating prevention during online assessments is complicated. Online students can cheat on tests more easily than on-campus students because they take them in their own environment and on their own computer. Without a video feed, students cannot be

specifically monitored during tests, making cheat identification more difficult than it is with standard examination procedures.

It follows that online instructors tend to focus on theory rather than practice. The issue is that many online learning training providers tend to concentrate primarily on theoretical knowledge development rather than realistic skills development. The explanation for this is obvious: theoretical lectures are much easier to incorporate into an online learning environment than practical lectures, notes Subekti (2020).

Admittedly, online learning often lacks face-to-face communication. A lack of face-to-face contact with the teacher reduces student input, leads to social isolation, and can lead to a lack of pressure among students. A lack of pressure is a downside since it makes it easier for students to stop trying. Wiangsima and Boonmoh (2020) share in this opinion.

Furthermore, Yi and Jang (2020) inform us that online learning is inaccessible to the computer illiterate population. Despite the rapid advancement of technical capabilities, computer literacy is still far from ideal. The estimated number of people who are technologically illiterate in the OECD is about 25%, which means that a quarter of the population would have significant difficulty using online learning as a form of education. And we're talking about OECD countries, which are called developed countries.

Finally, lack of accreditation and quality assurance in online education are also notable issues. Unfortunately, there are still a large number of unaccredited online learning sites out there, and none of the materials are standard tested by anyone other than the teachers themselves. As a result, inadequate quality assurance and a scarcity of approved online learning services continue to undermine online education's credibility, as noted by Son (2018).

Types of Technological Resources

Given the recent historical context and trends, high school teaching and learning, including in the EFL classrooms, has been overtaken by online learning and, therefore, using technological resources. Today's young learners are naturally much more familiar with technology than previous generations, making it far easier to introduce innovative ways of

teaching and at the same time having a student base that has the developed skills to use it, or who are very fast and avid learners.

One way of achieving a successful online EFL learning experience is via synchronous and asynchronous applications, as such, online learning can be delivered synchronously or asynchronously. Synchronous classes allow teachers and students to communicate in real-time, such as through a teleconference, as stated by Plaisance (2018). These teleconferences are made possible using virtual platforms, which include Zoom, Skype, and Google Meet, to name a few. Asynchronous classes, on the other hand, enable students to complete tasks from anywhere with internet access within a set time limit, such as a week. Asynchronous online classes are typically taught using Learning Management System (LMS) software such as Moodle, Schoology, and Google Classroom.

Even in a synchronous teleconference session, some students can choose to attend classes without video, preventing teachers from seeing their facial expressions, let alone in an asynchronous session, where students' complete tasks in an LMS. Ironically, the time and space flexibility that learners can see as an advantage of online learning may also be a hindrance.

Virtual Platforms. VLE stands for virtual learning environment, which is a type of e-learning system that uses networked computers to offer a variety of functions to tutors, students, and other users. A web-based learning platform or learning management system developed by a lecturer for his or her students and intended for various academic purposes is also referred to as a VLE. In the twenty-first century academic world, virtual learning environments (VLE) also known as virtual platforms, have adapted to the teaching and learning dynamic, at the same time they are a fad, as remarked by Doghonadze et. al. (2020). We also learn from the same authors that students view VLEs favorably, according to many reports, and that VLEs promote learning English as a Foreign Language (EFL) and provide an avenue for educators to assist their EFL students. Maintaining VLEs is a difficult task, as it poses several concerns and challenges, especially in the area of security.

To illustrate how VLEs work, we learn that they allow educators to reach out to their students by uploading a variety of learning materials, inspiring students to ask questions about their classes, and empowering them to be more self-sufficient and accountable for their academic progress. Moreover, VLE use is gradually influenced by technology, blended learning, and the students' increasing propensity to use their smartphone or tablets wherever they are and whenever they like.

Correspondingly, students may use a VLE to chat, collaborate, and access information. Outside the walls of their classroom and beyond the official class hours, students can access content, upload homework and specifications, take online quizzes, request assistance from their instructor, and so on. Created in Moodle, Edmodo, Schoology, and Google Classroom, among other social networking sites and learning platforms. Furthermore, VLE encourages student engagement and cooperation by providing a variety of communication resources that allow for successful communication and collaboration between the primary stakeholders - students and educators.

However, the use of VLEs in EFL classes has its drawbacks and shortcomings, such as cultural sensitivity and time constraints. Furthermore, some students use the VLE to draw attention to themselves by uploading irrelevant materials that are unrelated to the lessons. The available learning platforms or sites that serve as an avenue for the development of VLE may not be available if the VLE is not properly managed.

The second flaw, a lack of time, influences both the instructor and the students (Aydin, 2013). VLEs take time, and a teacher must balance his or her time with all his or her other commitments and keeping the VLE up to date. Although it may seem to some educators to be easy, maintaining a VLE takes a significant amount of time.

Social Media Networks. They are forms of electronic communication, social media allow users to create online communities and share information, ideas, messages and other forms of content. They have become extremely popular, especially in the last decade. Among the most used social media networks are *Facebook*, *Twitter* and *Instagram*. According to

Alrasheedi (2019) social media networks allow billions of people worldwide to meet, collaborate, share ideas, interests and things with one another through the internet.

Social networks are defined as online services or sites through which people create and maintain interpersonal relationships. They are extremely popular nowadays and they have also become incorporated into the teaching process, including in and outside of the EFL classroom.

It is very difficult for most people to imagine their lives, at the present time more so than ever given the dire circumstances we are under, without the existence of social networks. Social media has become a central focus point of people's lives, the public square and much more. Businesses are built on it; relationships are started on it and an education can also be attained through it or at least facilitated by it.

Social media, as a very popular and continuously developing form of online learning, is efficient in mediating communication and information exchange between people and collectives. Access to social media is easy and available over most of the world. Also, the costs involved with its use have become more and more affordable, even in developing countries. It has allowed many people with reduced connectivity to continue to have access to education and health services even in times of crisis, such as the present-day Coronavirus Pandemic.

One of the most important advantages of social networks are the possibilities they offer to connect to people all over the world. People can keep in touch with old friends, business partners or meet new people at any time with incredible ease and speed.

Also, it makes it possible for people to engage in easy and instant communication. Land line use has basically become obsolete and even regular cell phone calls are much less common after social networks started their call services. Social media allows people to stay up to date with global or local events, as well as access information on any topic they might be interested in, including a huge database of EFL teaching and learning material.

Likewise, using social media, EFL students find a source of fun and enjoyment, at the same time practicing their English skills. For example, sometimes it is enjoyable to watch an

interview of your idle and practice listening and vocabulary or browse the comment section and do some reading practice.

Of course, there is also a dark side to the social media universe that nobody is immune from, including EFL students and teachers. Some of the biggest disadvantages that they have are the sheer information overload and how that has an overwhelming effect on users. Having too many friends or followers to keep up with the posts is a common source of user frustration. The bloated newsfeeds filled many times with information one is not interested in is quite common.

Another disadvantage are privacy issues. This has become a big concern in recent times, as sharing too much with the public can open people up to a host of problems that sometimes cannot be undone.

An important issue is cyberbullying, very common, especially among younger users, sometimes with dramatic consequences. These kinds of problems many times generate increased feelings of social isolation, another great tragedy of our time, as observed by Brydolf (2007), issues made many times worse by Covid-19 Pandemic restrictions.

Finally, social media tends to induce a sedentary lifestyle in students, as well as be a source of distraction and procrastination. That, in the context of EFL teaching and learning has a negative effect, given the social isolation and sedentarism that the pandemic restrictions imply.

YouTube. This is an online video repository in which nearly any digital video file can be stored and exhibited free of charge. The website was started in February 2005, and it presently hosts videos that are cumulatively currently viewed more than 2 billion times each day.

According to Watkins and Wilkins (2011) the two primary benefits to using YouTube in the classroom are the exposure to authentic English as well as the promotion of a learning style that is more autonomous and student-centered. Among the many potential applications of *YouTube* use in the EFL classroom, we can name listening and speaking practice through conversation analysis, movie trailer voiceovers and vlogging, to name a few. In the same

way, with respect to reading and writing, students can practice notetaking and summarizing, how-to writing videos and more. Correspondingly, *YouTube* can familiarize students with all English dialects, something that was difficult to achieve in the EFL classroom prior to the development of such online resources.

Similarly, the video sharing platform provides cultural entertainment and current event analysis while allowing students to improve and practice their English skills. According to the same authors, *YouTube* is a valid resource for teachers seeking to enhance their lessons with lively, topic-based content, which explains why it has been so widely embraced by the EFL community.

Accordingly, a lot of good use has been made of *Youtube* and other similar online video streaming sites, yet it must also be noted that certain limitations do exist. Among the biggest, copyright infringement laws, abundant content not appropriate for underaged viewers and the risk of exaggerating regarding the time invested in it, are the most notorious.

Given the above, structure and guidance from teachers is necessary in navigating and making the best of *YouTube* as a tool for the EFL classroom, as noted also by Watkins and Wilkins (2011).

Digital Games. A technological resource that has proven to be very useful and successful are digital games, as stated by Reinders (2017). Game-based learning is defined as any initiative that combines or mixes video games and education with a game being a system in which players engage in an artificial conflict, defined by rules, which results in a quantifiable outcome. Conceptualized language learning through DVGs to involve two forms, namely, game-based and game-enhanced. The former involves using educational games-DVGs that focus on the direct representation of educational materials.

Informal language learning instruments such as DVGs and movies have been found to result in higher learning outcomes compared to classroom practice. It is suggested that DVGs can enhance LLM in high schools. Furthermore, according to Putri (2019), motivational engagement experienced through DVGs will transfer to educational settings meaning that using a DVG in the classroom positively affects student motivation.

It is common sense that online learning programs be organized in such a way that they engage and motivate students. It can be particularly true for adults, because their solid opinions of what works for them and how they want to learn it can be a powerful filter, as observed by Moorhouse (2020), where it is also stated that digital games present themselves to achieve that end.

It can be concluded that digital games applied to the EFL classroom is bringing new atmosphere and improving students' critical thinking as it helps solve problems. At the same time, students can develop their interpersonal skills as they collaborate in teams and work in tandem with their peers, during their activities. However, there are also some teachers who are not perceiving the usefulness and the ease of using digital games at school, but through training programs that perception can be changed, as remarked by Reinders (2017).

Online Dictionaries. Online dictionaries are an effective aid in the language learning progress. Much will depend, however, on the kind of dictionary and how and why it is used. Traditionally, language learners have had recourse to bilingual dictionaries, enabling them to find the mother tongue translation of new words and to find the foreign language equivalent of terms in their native language. Some methodologists argued against the use of bilingual dictionaries, maintaining that they did more harm than good, mainly by focusing the learner on his or her mother tongue, but also by leading the user to potentially incorrect equivalents.

When teachers become familiar with the most useful elements of learner online dictionaries, they can easily incorporate dictionary-based activities into their lesson plans. They provide many features and suggestions on how teachers can enable students to recognize and use them to help them learn English.

Some teachers of English might often refer their students to general-use dictionaries that are designed for native speakers of English, according to Aydin (2013), not being informed that nowadays most learner dictionaries are learner-centered and informed by second language research and pedagogy. Learner dictionaries offer and how these features can be introduced to help learners become expert dictionary users. The practical suggestions will hopefully add variety to the teachers' lesson plans and raise learners'

awareness about the features of online learner dictionaries that can make their word learning convenient and student oriented.

Web pages. Many web pages are currently being employed by EFL teachers in their classrooms to aid them in helping students best acquire new vocabulary and practice their skills. Some popular ones include *Busyteacher.org*, *ISLcollective*, *the Britishcouncil* website and many more. These websites provide both interactive activities as well as a variety of printable worksheets, teaching tips and a wealth of other tools for both teachers and students willing to use them.

According to Burston (2014) the wide variety of web page resources available to teachers is conducive to better a better teaching experience and an increase in student motivation. Professional websites as well as blogs or niche options are available for all teachers to choose from and make their EFL classrooms much more attractive and dynamic.

Educational Applications (Apps). Now, nearly everyone in the world has a smart phone and can download literally thousands of English language learning applications to learn English. Similarly, TEFL teachers can download thousands of apps to teach English. Some of the most popular ones, such as Duolingo, really stand out. Most of these English language apps have free versions and the better ones usually give full access either free of charge or at a very affordable price. Whether a child or adult, a learner or teacher, there are so many apps out there which can change the way English is learned and thought forever.

EFL teachers are always looking for ways to improve the quality of their ESL lessons, as noted by Putri (2019). Making them more interesting for students is important for learner motivation and language acquisition. Most importantly, teachers should be thinking of ways to help the language they teach stick. There should not be a situation where millions of people have years of learning English in the classroom but are unable to speak any English. In order to avoid that, using English apps to teach English is something that can be done successfully. Integrating technology into the English classes is now a necessity in order to achieve the set-out goals.

Teachers and Technological Resources

The past decade has witnessed a rapid development in the field of educational technology with the increasing role of technology in every part of human life. With no surprise, education, which increases the value and the quality of the human life, has also started to be affected by these technological developments.

In modern classrooms, it is seen that using technology takes a great place in learning a foreign language and language teachers have begun to use some common digital media and resources such as videos, PowerPoint presentations and Web 2.0 tools, just to name a few, because they are aware of the advantages of the technology use in the classroom regarding traditional pedagogy.

Even though it has only been a short time since the crisis began, several papers and articles have been written on the topic of EFL teachers' adaptation and differences in the employment of technological resources, which is remarkable from an academic expediency standpoint. Among the many research projects, some scholars such as Ally (2008) and Plaisance (2020), among others, explore the possibilities for English language teachers around the world to adapt and make the best of the situation before, during and after the COVID-19 pandemic in the sense of it no longer being a choice if they use online learning tools or not, rather a must now and how they learned to cope with that reality.

Being aware that technology makes teaching both more flexible and student-centered, when the pandemic (Covid-19) shifted the traditional teaching into a technology-based teaching and learning, and designed the trends in the field of education, the beliefs of teachers on technology-based teaching is of vital importance. EFL teachers have implemented digital technology in their classrooms, which contribute and help curriculum designers, governmental authorities and academics to work together and set up strategies to help both pre-service and in-service EFL teachers design the present-day foreign language teaching classrooms, especially now that it is necessary to be creative and innovative in designing technology-driven lesson plans and deliver technology-based methodology, as note by Yukselir (2016).

Teachers and the use of Technological Resources

Teachers' technological competence. Interestingly, according to some authors such as Yi Y (2020), under pandemic circumstances and using technological resources, teachers have had more opportunities to negotiate their teaching philosophies and methods and to reflect on their online materials and instruction during remote teaching. Furthermore, teachers seemed to engage in collaboration at a deeper level and became equal and productive partners in the learning process.

Competencies for online teaching have been categorized at different levels and several approaches have been adopted to classify them. Some authors, such as Brydolf (2007) and Son (2018), describe and group the qualities or competencies into five categories: understanding the online process, technical skills, online communication skills, content expertise, and personal characteristics. The standards for technology facilitation compile competencies that aid technology moderators to execute their duties. These competency groups include technology operations and concepts; planning and designing learning environments and experiences; teaching, learning, and developing lesson plans; assessment and evaluation; productivity and professional practice; social, ethical, legal, and human issues; procedures, policies, planning, and budgeting for technology environments; and leadership and vision.

These standards have been extensively employed in many online projects and studies, as noted by Ally (2008). Some researchers briefly list online competencies as personal, social, pedagogical, and technological in addition to a set of competencies related to the content, design, communication, and management. Other researchers go further by developing a framework that classifies and summarizes a cluster of competencies. The first stage contains before-teaching practices that included preparing, planning, and designing. During the teaching stage, there is facilitating, interacting, and providing and seeking feedback competencies. Finally, teachers must demonstrate the competencies of reflecting and drawing on lessons learned.

Teachers' attitude towards technological resources. Many authors have made an interesting observation regarding the number of positive reviews and feedback from EFL teachers recompiled by EFL investigators that praise or have an overall positive outlook on the use of digital and technological resources in their classrooms during the sanitary crisis, such as Basilaia and Kvavadze (2020) as well as Zhang et al (2020). It is also striking the degree of consensus among authors who state that conformity and acceptance of the trends are necessary. In that sense, it was remarked by FroGao and Zhang (2020) that language teachers, as colleagues in other disciplines, need to be flexible, resilient, and ready to learn new skills for tiding over unexpected challenges such as COVID-19. It is understandable why that should be so from an adaptive perspective, but more oppositional or contrarian perspectives were also to be expected.

Hence, the overwhelming majority of EFL teachers surveyed and interviewed in the studies that made the object of this review have had a positive or mostly positive attitude toward the implementation of online learning and technological resources in their classrooms. They have collaborated willingly, learned to use devices and technology that had previously been unfamiliar, and patiently adapted to all the imposed or supported changes.

Nevertheless, there have also been and will always continue to be EFL teachers, a minority apparently, that resist change or are suspicious or doubtful of its merit and uses. As such, there are those teachers who complain, many times rightfully so, about internet service provider limitations, excessive costs, excessive time invested in training and carrying out online learning, as it was designed for them.

Moreover, the presentation of the topics under investigation, and the preparation work for an effective research effort would be incomplete without a thorough analysis of previous similar investigations carried out, to identify and achieve understanding and knowledge of what has already been discovered and what needs to be researched further still. The focus of the studies selected for this analysis are teachers' perceptions regarding online learning, most of which are set in the context of the Covid-19 pandemic.

The first study under observation is Boonjat (2021), that by means of a questionnaire sent to 126 EFL high school teachers from 58 different schools in 17 districts, set out to discover teachers' perceptions and experiences in using technological resources in their language classes and whether they use them or not. This was a qualitative and quantitative study. Upon interpreting the recollected data, the author concluded that the overall attitude of the teachers was willing, ready and eager to integrate technology into their classes, and to prepare accordingly. The results of this study also suggest that having more teacher training alone may not be sufficient to help teachers improve their performance, but rather that providing technology devices and resources needed by schools could be more effective than repeated teacher training. Finally, the study also reaches the conclusion that teacher training with technologies is encouraged by organizations and educators, but that not enough focus is placed on technological resource infrastructure. This study further proves that these issues raise a lot of interest of late in the ELT research field.

Likewise, as many sought to investigate the beliefs of EFL teachers regarding the learning process under Covid-19 pandemic conditions and restrictions. One such study is Subekti (2020), where 9 EL teachers were asked to provide written reflections of between 300 and 500 words detailing how they implemented online learning and what their experiences were. This was qualitative research where a thematic analysis was carried out in order to interpret the data. It concluded that there were three actors that impede proper and satisfactory online learning, and those were: "inadequate supporting infrastructures or resources, teachers' limited pedagogical skills in managing effective online learning and the lack of (sufficient) teacher- student and student-student social connections during the learning process. On the positive side, the study also found that teachers understanding of learners' struggles manifested in their facilitating actions.

Similarly, another interesting study worth mentioning for its relevance to the topic under review is Aydin (2013), who carried out a study on 157 EFL high school teachers in Turkey, which intended to find out teachers' perceptions of computer use. The author employed a questionnaire and a survey to quantitatively assess what was intended and

detailed above. The results of the study indicated that even though an overwhelming majority of teachers (86%) were open to and excited about using technological resources in their EFL classrooms, nevertheless “there is a lack of knowledge regarding certain computer software which indicates the inadequate level of Information Communication Technology (ICT) instruction” among teachers. Furthermore, the study also revealed that “Turkish teachers rarely played games or used problem solving, tutorial or simulation programs” which was explained away by discovering that the teachers’ “main reason for using computers were accessing the Internet, communicating with others via e-mail, text process and access educational CDs”. The findings also suggested the need for further investigation being done.

In the same way, Yükselir (2016) published a study concerning the perceptions and perspectives of EFL teachers on the integration of the Internet and internet-based resources into language learning and teaching. In order to gather the necessary data for analysis, 82 EFL teachers from Turkey took part in a survey, part of a mixed-method approach, qualitative and quantitative study. The aim of this research was to discover what type of Internet resources teachers use to enhance the learning experience and to identify what kind of barriers prevent the use of the Internet in EFL classrooms. The study showed an overall “positive perception towards using internet - assisted language teaching in EFL classrooms” also there were over 60% of EFL teachers that consider themselves competent to use internet-based materials in the classrooms. Finally, the study pointed out that, in spite of teachers’ positive attitudes to incorporate tech resources into their EFL classrooms, “the internet activities they used were limited, and that there were barriers against internet use such as limited time, limited computer facilities and certain technical problems”. As such the authors conclude that the willingness to use tech resources exists, yet technical issues and lack of training affect their application. This already profiles itself as being a common concern among EFL teachers in many different locations around the world and requires further investigation.

Equally, Chabaan and Ellili-Cherif (2017) set out to examine the impact of teachers' perceptions of environmental factors on the extent of technology integration in EFL classrooms. In order to achieve that goal, they designed a 22-question survey sent to 263 teachers from 67 schools. The qualitative and quantitative approach envisioned by the authors provided relevant and conclusive data which allowed them to draw useful conclusions. In that sense, the study identified a "slow paced uptake of technology integration in instruction, as a learning tool, despite big investments in technological resources. It also shows that the results of the survey "echo international research on the low impact educational technology has had on K-12 classrooms". Furthermore, the authors found that, according to the data, "when teachers are given sufficient access to tools that encourage the use of technology as a learning tool, accompanied with effective training, they (might) then see value in these particular uses of technology and more frequent use also". Finally, the authors believe that the survey will allow "developments motivated by a clear definition of policies and practices".

An older yet worth mentioning study is Mallaei (2013) that aimed at investigating the perceptions of EFL teachers about the use of technology in their classrooms and the factors affecting technology implementation. 40 teachers, half male, half female, participated in a questionnaire, and 7 of them were also interviewed, in order to provide data for both a qualitative and quantitative analysis to reveal trends in perception. Thus, the study found that gender differences in teachers' perception and attitude towards technological resources are almost absent and that concerning these gender differences in teachers' attitude toward computers did point to higher levels of anxiety in female teachers more so than is their male counterparts. Both groups had a positive attitude toward technology implementation in EFL classrooms and recognize the benefits. The authors go on to reflect on teachers' acceptance of the use of technology as an undeniable part of instruction and that integrating technology in the classroom is inevitable. Finally, the study also found that the results align with popular trends and beliefs that learners are expected to be active participants in the learning process rather than passive recipients, and that technological resources make this process possible.

So, the classroom becomes more learner centered. Finally, due to the same process, teacher realize that the teacher became a facilitator, a resource person and a counsellor, rather than an authority figure.

Further, Isnani (2019) carried out a descriptive qualitative research study to investigate EFL teachers' perceptions regarding ICT's role in the modern classroom. As such, 5 teachers from different schools were included in the study, who were interviewed, and whose resulting data was analyzed. The study showed that in teachers' view, technological resources play the role of a tool, source, and an encouragement of students' English learning, as the media make the teachers' explanation more effective, and the students are able to understand the lesson easier. The study also found that teachers overall perceive those online games incorporated into their EFL classrooms as being particularly entertaining and useful, as well as emphasized the teachers' perception that a shift is taking place in EFL classrooms from teacher centered environment to a student-centered environment with the expected outcome of many opportunities in developing their language abilities. Finally, from this Indonesian study it becomes apparent that teachers feel that their classes have become much more interesting after introducing technological resources.

Analyzing the previously provided information, it becomes clear that the willingness and enthusiasm towards incorporating technological resources into their EFL classrooms not only exists, but that it is prevalent among teachers, as noted by Bailey (2020), Yi and Jang (2020) and Subekti (2020), among others. However, they are confronted with a series of limitations, which have been insufficiently thus far investigated, let alone dealt with, and more focus on them is needed immediately.

Given all the above, now more than ever before in recent decades, the challenges we face and the conditions under which we are forced to live, work and study, have created the necessity to envision new ways of doing education, to overcome prejudices many used to hold against technology, technological resources and their impact on education in general and the EFL classroom. That alone is reason enough to intensify the investigative and

research efforts all around the world, in order to find the best uses with the best results and levels of satisfaction or EFL students and teachers alike.

Chapter Two

Method

The present chapter aims to detail the setting, the sample chosen for this investigation and the procedures selected and used to fulfill the stated objectives. In addition, it will present the details of the process of the investigation, the data gathered, and the analysis of the results, including a comprehensive discussion, a series of conclusions drawn, and some recommendations made for future reference.

Setting and Participants

To begin with, the research was done in a series of Ecuadorian public high schools from the cities or towns of: Lago Agrio, Huaquillas, Machala, El Dorado de Cascales, Lumbaqui, Cascales and Arenillas, located in the provinces of El Oro and Sucumbíos, respectively. In these educational institutions, through the participant EFL teachers, the information was gathered in order to describe, analyze and discover the sought-after results. The data were obtained through a survey applied to 10 EFL teachers to achieve detailed and relevant information about important aspects of this study, and interviews were also conducted to the participant teachers with the intention to further clarify and detail the aspects under investigation.

Regarding the teachers' characteristics, their ages ranged from 26 plus year-olds to 56 and up year-olds, of which 1 was in the 26 to 30 years of age category, 5 were in the 31 to 35 age group, 1 in the 36 to 40 category and the remaining three were in the 56 and up age group. In relation to the participant teachers' personal and professional characteristics, of the 10 total participants, 4 were female and 6 were male; 5 had a bachelor's degree, 4 had master's degrees and one registered as Other. Finally, concerning the participants' teaching experience, 5 had between 1 and 5 years of experience, 3 had 21 and up years of experience, one had between 6- and 10-years' experience and one between 11 to 15 years' experience.

Procedures

The first step of the research work was to collect and compare the literature using textbooks and research papers published in different academic journals using the internet and the library as academic resources. After careful review of the selected literature, and the selection of the most relevant studies and theoretical frameworks that provided useful guidance and reference points for this investigation, the literature review allowed the identification of global patterns regarding the use of technological resources, among other interesting and useful realizations. Furthermore, six different studies published in scientific journals were thoroughly analyzed to have a better understanding about technological resources as applied to the EFL classroom context, the advantages and disadvantages of their use as well as teacher competency, perceptions and compliance.

This study was conducted through mixed method research, using quantitative and qualitative research approaches. The quantitative method was used to obtain relevant aspects related to the research questions as they have been envisioned in the preparatory stages of this investigation. The instrument chosen for this approach was the survey containing a total of 18 questions, as detailed below. Besides that, the qualitative method was used to identify perceptions, using the interview as the main instrument.

The main objective of this study was to identify and find the answers to the three research questions: 1) Which technological resources are used by teachers during the Covid-19 Pandemic? 2) How frequently do teachers use technological resources during the Covid-19 Pandemic in their EFL classrooms? 3) How is technological resource use perceived by EFL teachers during the Covid-19 Pandemic?

As mentioned before, data collected was gathered from seven different public high schools where English is taught as a foreign language. The questionnaire survey had 18 statements related to the kinds of technological resources being used, the frequency of use as well as the teachers' attitudes towards employing said technological resources, using a four-point scale, with the parameters agree, strongly agree, disagree and strongly disagree. Once the information from the survey was collected with the help of Microsoft Forms

platform, from there, it was organized and processed in Microsoft Excel, and compiled into 3 tables, in order to accomplish statistical data related to:

1. Technological resources used in the EFL classrooms during the Covid-19 pandemic.
2. Frequency of technological resources used in EFL classrooms during the Covid-19 pandemic.
3. EFL teachers' perceptions toward the use of technological resources in their classrooms, which in turn was divided into 3 dimensions measured separately, namely: the usefulness of the technological resources, the teachers' competency for their use and the teachers' attitudes towards technology.

Regarding the teachers' interview, it was composed of 26 items within a survey in order to further develop and detail the perceptions of the participant teachers, as the possibility to express ideas and answer open - ended questions always allow a deeper understanding of the issues under review. Of the 26 items considered, 6 inquired about personal information related to the participants, such as their age, gender, work experience and location. One was a yes or no question where teachers were given names of technological resources that they might apply to their EFL classrooms, and they would have to either admit or deny using it. Another question inquired about the frequency of use, with the established parameters: always, usually, sometimes and never. Two further yes or no questions that dealt with more technical aspects of EFL teaching such as reinforcing language skills and the perceived importance of the frequency of use and finally 12 open-ended questions that focused on gathering teachers' opinions, perceptions and attitudes regarding the use of technological resources in their EFL classrooms, tackling many different specific aspects including the advantages, disadvantages limitations that exist.

Furthermore, the research presented, the discussion, description, analysis and interpretation of the results reflected in the graphics of the data collected, allowed reaching conclusions about EFL teachers' perceptions toward the use of technological resources in their classrooms during the Covid-19 Pandemic. Moreover, the results also made possible the formulation of recommendations, in order to consider important aspects related to

technological resources, their use and perceptions thereof, during the novel coronavirus pandemic.

Chapter Three

Results and Discussion

Description, Analysis, and Interpretation of Results

This chapter presents the analysis of the data collected from the participant EFL teachers and its discussion thereof, in order to best convey the information-regarding

teachers' attitudes and perceptions of technological resources, how they are employed in their classrooms, and the interpretation of said data.

The resulting information is presented in three tables structured to answer the investigation inquiries as they have been formulated and the data is expressed in percentages of participants that either subscribe or do not subscribe to the given parameters. In each respective table, the highest percentage is in bold to highlight patterns or trends. The information has been carefully analyzed in order to best shed light on the reality of the impact of the Covid-19 pandemic on teachers' perceptions towards the use of technological resources in their EFL classrooms. As such, we have structured the following analysis and discussion in blocks, each corresponding to the respective research question or sub question, as was the case.

Which technological resources are used by teachers in their EFL classrooms during the Covid-19 pandemic?

Table 1

Technological resources used in high school in EFL classrooms, during the Covid-19 pandemic

<i>N°</i>	<i>Type of technological resources</i>	<i>I use it</i>	<i>I do not use</i>	<i>Total</i>
		<i>%</i>	<i>%</i>	<i>%</i>
1	Virtual platforms	90	10	100
2	WhatsApp	100	0	100
3	Facebook	60	40	100
4	Twitter	20	80	100
5	YouTube	90	10	100

6	Digital games	60	40	100
7	Online dictionaries	70	30	100
8	Web pages	80	20	100
9	Educational Apps	80	20	100
10	Power Point Presentation (ppt)	80	20	100

The Table 1 featured above names 10 such possible resources that teachers were asked to mention whether they use or not. Rates vary from 100% confirmed use of *WhatsApp* social network and 90% use for *Virtual platforms* such as *Google Teams* or *Zoom*, as well as *YouTube*, the video sharing website, to 80% that mentioned using web pages, educational apps and power point presentations, as they are practical, useful and easy to use technological tools for the EFL classroom. Seventy percent affirm using online dictionaries. Another 60% said they use *Facebook* or digital games. The only instance of an online resource listed with a minority use was the case of *Twitter*, regarding which 80% said they did not use at all.

From these data, we can clearly see that the use of technological resources is very popular and varied among the participant EFL teachers. Virtual platforms such as *Zoom* and *Google Teams*, and social networks such as *WhatsApp* and *Facebook*, are the most employed. The reasons for that, as could be deduced and interpreted from both the survey and interview, are their convenience and effectiveness as a means of communication, as well as the institutional imposition or necessity in the case of virtual platforms. As it can be observed, there are both institutional, educational and personal reasons justifying the choices

teachers make when choosing the technological resources that they used in their EFL classrooms during the Covid-19 pandemic.

Furthermore, the variety and convenience of the technological resources available, as well as the Covid-19 pandemic circumstances, have had a clear effect on teachers' uptake of use of these resources, allowing us, through the answers the participants gave to this section, to draw the conclusion that teachers had more opportunities than ever before to reflect on and diversify their use of technological resources such as online materials. As Yi and Jang (2020) suggest, the increase in the use of technological resources in EFL classrooms during the Covid-19 pandemic is noticeable during this unprecedented period when compared to previous studies carried out before the pandemic began.

Moreover, and considering all the above, technological resources are indeed being used by EFL teachers, at the same time underscoring the variety of technological resources employed at present by participants.

The interpretation of the data showed an overall preference for social networks used as teaching tools among younger, less experienced teachers, and a higher incidence of *PPT* use among older and more experienced ones. The data also showed a higher preference among male teachers surveyed regarding the use of digital games and educational apps and an increased overall preference for social networks and online dictionaries in the case of female teachers.

The answers outlined to the first research question confirm that technological resource use has increased among teachers, in their EFL classrooms, under pandemic circumstances. Furthermore, the data also allowed the identification of specific resources used and their respective popularity.

How often do teachers use technological resources in their EFL classrooms during the Covid-19 pandemic?

Table 2

Frequency of technological resources used in EFL Classrooms, during the Covid-19 pandemic

	<i>Type of technological resources</i>	<i>Always</i>	<i>Usually</i>	<i>Sometime</i>	<i>Never</i>	<i>Total</i>
		%	%	%	%	%
1	Virtual platforms	70	30	0	0	100
2	WhatsApp	80	10	10	0	100
3	Facebook	10	50	10	30	100
4	Twitter	10	10	0	80	100
5	YouTube	30	50	20	0	100
6	Digital games	0	30	20	50	100
7	Online dictionaries	40	20	10	30	100
8	Web pages	50	20	10	20	100
9	Educational Apps	40	50	10	0	100

10	Power	Point	40	50	0	10	100
	Presentation (ppt)						

Regarding the second research question, Table 2 shows the frequency with which the participant EFL teachers employ the different technological resources they were surveyed about in their classrooms during the Covid-19 pandemic. The frequency parameters with which the teachers measured the frequency of use of the various online resources were always and usually, considered as the positive parameters, sometimes and never as the negative ones, respectively.

Notably, all participant teachers, in all but two of the surveyed technological resources' categories, namely *Twitter* and *Digital Games*, had confessed to always or usually employ the online resources shown in the table. The most frequently used social network is by far *WhatsApp*, with 80% of teachers saying they use it always, and second are the virtual platforms (*Zoom* and *Teams* especially), which 70% of teacher participants state that they always use. Furthermore, *Facebook* and *Youtube* are usually used by 50% of teachers surveyed, as are *Educational Apps* and *PowerPoint Presentations*. *Web pages* and *online dictionaries* are always used by 50% and 40% respectively.

The reasons for that high popularity, that are given by the teachers, predominantly deal with ease of communication, familiarity and imposition or necessity in the case of virtual platforms. That realization was further consolidated through teachers' answers to the open-ended questions asked in the interview, where they confirmed the use and further explained their preference for these two variants of technological resources applied to EFL teaching. It is in that category that web pages, online dictionaries and educational applications find themselves in, apart from the most popular resources already mentioned. The only exceptions to that observed pattern are the two technological resources mentioned below.

Furthermore, it stands out from the table that the frequency of use of all the listed online resources is very high in almost all participants with two notable exceptions. The first one is the very low use of *Twitter* social network, which 80% of participants declare to never

use, mostly because they do not find it relevant enough to the EFL teaching context, and *digital games* that are not used at all by half (50%) of participant EFL teachers surveyed, the reasons for which are not mentioned, other than a certain unfamiliarity with them on the part of those who do not use them.

When asked on the reasons for their choices during the interview stage of the investigation, the teachers made a clear distinction between online technological resources whose use and frequency thereof was imposed by their superiors, school board members or district of education directives and those freely chosen due to their ease-of-use, utility and attractiveness. As noted by Zhang et. al. (2020) this was a global trend during this crisis. To clarify this distinction, in the case of Ecuadorian public high schools under investigation, the imposition refers to virtual platforms such as *Zoom* and *Google Teams*, whose use was non-negotiable and outside of the realm of personal choice, whereas all other resources, maybe with the added exception of *WhatsApp*, the instant messaging application convenient for fast and easy communication with both students and their parents or representatives, were freely chosen by teachers according to their preferences and prior experience in using them.

Therefore, Table 2 shows the frequency of use, making the highest parameters noticeable among the measured parameters, in accordance with previous studies measuring similar technology use frequency among EFL teachers. A contrasting pattern was observed among participant EFL teachers by Chabaan and Ellili-Cherif (2017), which talk about the immense impact of the Covid-19 pandemic on EFL teaching standards. In that sense, the above-mentioned study identified a slow-paced uptake of technology integration in instruction, as a learning tool, despite big investments in technological resources. That seems to imply that the extraordinary circumstances created by the Covid-19 pandemic changed teachers' perceptions and attitudes to a great degree facilitating and accelerating technological resource use, without as much concern to training and infrastructure as time and circumstances did not allow for thorough planning or review.

As a sidenote, it also important to remark that, overall, younger teachers are using technological resources somewhat more frequently than their older and more experienced

counterparts, for reasons that surely have to do with generational factors as applied to how they relate to technology and their frequency of use in all aspects of life. A similar pattern was found regarding the distribution of the frequency of use of ICTs among the two genders, in favor of females, but it was barely noticeable.

Accordingly, the research question formulated above, and the data produced and analyzed have satisfactorily allowed us to affirm that technological resources are either always or usually employed, in their majority, with the few exceptions highlighted in this analysis and for the reasons outlined within.

What are teachers' perceptions regarding the use of technological resources in EFL classes during the Covid-19 pandemic?

Table 3

EFL Teachers' Perceptions toward the use of technological resources in their classrooms, during the Covid-19 pandemic

N°	Statements	Strongly agree	Agree	Disagree	Strongly disagree	Total
		%	%	%	%	%
<i>Usefulness of technology</i>						
1	I think technological resources have more advantages than disadvantages in EFL teaching.	60	40	0	0	100
2	I think that technological resources are necessary tools when teaching English.	60	40	0	0	100

3	I think when I use technological resources my students are motivated.	50	50	0	0	100
4	I think that if I use different types of technology in my class, students will learn better.	60	40	0	0	100
5	I think that the use of technological resources helps me to organize my class.	40	60	0	0	100
6	I think that technological resources have a positive impact on teaching process	50	30	20	0	100
<i>Teachers' competencies for the use of technology</i>						
7	I think I have good competencies regarding the use of technological resources.	40	60	0	0	100
8	I think I can solve any technical problem with the use of technological resources in my class.	40	60	0	0	100
<i>Teachers' attitudes towards technology</i>						

9	I hesitate to use technological resources because I am afraid of making mistakes.	10	20	30	40	100
10	I feel positive to learn more about technological resources.	60	40	0	0	100
11	I think I avoid using technological resources because I feel uncomfortable.	20	10	50	20	100
12	I feel motivated to use technological resources because they help me to innovate my class.	60	20	10	10	100
13	I think I that the use of technological resources makes me more productive in class.	20	40	40	0	100

The third and last research question deals with identifying *teachers' perceptions regarding the use of technological resources as they apply them to their EFL classrooms during the Covid-19 pandemic*. As it can be observed in Table 3, the information provided by the participant EFL teachers, during the surveys, has been structured into three dimensions or subsections.

The first dimension deals with teachers' perceptions of the usefulness of the technological resources they routinely employ, as it has been previously identified through table 1 and table 2, respectively. The teachers' answers related to the usefulness of technological resource use revealed that 60% of them strongly agree and 40% agree that

technological resources have more advantages than disadvantages for EFL teaching, that they are necessary teaching tools and that varying the resources they employ in their classrooms will help students learn better. Furthermore, 50% of teachers strongly agree and 50% agree that technological resources motivate students. Also, 50% strongly agree and 30% agree that the impact of technological resource use is a positive one on the teaching process. In conclusion, the positive parameters in this dimension summed 100%, in each instance under investigation which implies that 0% of participants chose the negative ones: disagree or strongly disagree, with only one exception.

More exactly, that exception refers to viewing technological resources as a positive influence on the learning process, where 20% of participants said that they disagree. This percentage was made up of two of the older teachers surveyed, whom according to the literature review resources employed, such as FroGao and Zhang (2020) as well as Jiang et al. (2020), is in alignment with the identified patterns, namely that the older more experienced teachers tend to be somewhat more hesitant toward technological resource use and qualifying its impact as a positive one.

To sum up the first dimension of Table 3, it must be mentioned that among the surveyed usefulness perceptions were those related to the advantages and disadvantages of technological resource employment, organization, innovation, motivation, quality and impact on the style of teaching. As such, upon analyzing these rubrics, it was noticed that there was overwhelming similitude between the percentages of participants who either agreed or strongly agreed with each of the usefulness of technological resources under discussion in this dimension of the third table. Also, there was a relative balance in the answers chosen by both male and female teachers, as well as little difference in perception among younger and less experienced teachers compared to older and more experienced ones.

Furthermore, and moving on to the second dimension under investigation, which dealt with *teachers' competences for the use of technological resources* listed, we must observe that even though this only included two measured rubrics, the information produced is relevant and important in the effort to answer the corresponding research question.

In this instance, just like the case of the previous dimension, it resulted in an absolute majority of participants choosing to agree and strongly agree as their answers to the questions formulated. Namely, 40% strongly agree and 60% agree that they have good competency for the use of technological resources and the same percentages strongly agree or agree that they can solve any problem that might arise with the use of technological resources in their classrooms. This has important implications because it outlines a positive self-image and confidence in their ability and skills to use said technological resources. An observation needs to be made in this respect, as from the open-ended questions of the interview survey related to this topic, there have been some contradicting responses, in the sense that when given the opportunity to detail that self-assessed competence, participants tended to be more reticent and mention hesitancy and a small degree of lack of confidence regarding their abilities to use their skills to solve all problems that might arise in their EFL classrooms.

Given that all the EFL teachers interviewed either agree or strongly agree that they have good tech skills regarding the online resources they use in their classes and that tech problem solving is one of those skills that they possess, reflects the positivity in their attitudes, which can be interpreted as openness, confidence and enthusiasm towards technological resources and their use for EFL teaching.

The third and last dimension under investigation refers to *teachers' attitudes towards technology and technological resources they have been using in their EFL classrooms since the beginning of the current Covid-19 pandemic*. This is where the tide turns and the focus shifts towards a more balanced choice of positive or negative attitudes. This in turn leads to a certain degree of contradiction between the results analyzed in previous dimensions.

According to the registered answers, 50% of teachers disagree and 20% strongly disagree that they avoid technological resource use because it makes them feel uncomfortable. Also, 60% strongly agree and 20% agree that they feel motivated to use tech resources because it helps them innovate in class. Interestingly, 40% of teachers agree and 40% disagree that technological resources' use makes them more productive in class. As was also observed by Mollaei (2013), regarding perceptions, there is a divide among

teachers related to how technological resource use increase productivity in the EFL classroom.

Furthermore, as revealed by 30% of participants, there is hesitancy towards them regarding technological resource use. That appears to negate the enthusiasm expressed in the skills appreciation dimension. Additionally, again 30% of teachers say they agree or strongly agree that they avoid using technological resources in their classrooms because they make them feel uncomfortable.

Overall, this last dimension makes for a more balanced outlook on teachers' perceptions than can be deduced from the previous two dimensions and reveals that hesitation, doubt and skepticism is present, registered and admitted to y teachers, even when a minority, but a significant one, nonetheless.

With the importance of identifying a correspondent in the available literature under review, we mention Boonjat (2021) who through his study concluded, in the same way we have for this third research question, that it has allowed for thought provoking data that answers it in the sense of presenting varied perceptions with a positive bias overall, showing a willingness to work with and adapt to the changes imposed by the extraordinary pandemic circumstances the world over.

Conclusions

All participant teachers widely use technological resources in their EFL classes, without exceptions. Presently, technological resources use, based on internet connectivity is an unavoidable presence in English teaching during the Covid-19 pandemic in Ecuadorian public high schools

Many technological resources were chosen by the participant teachers, who varied the use of said resources in their EFL classrooms. The wide choice of technological resources employed, as well as their convenient availability for educational purposes, made it possible for teachers to choose as many of these tools as they could or were willing to entertain, in order to innovate and improve their teaching.

Social networks such as *WhatsApp* and *Virtual Platforms*, more exactly *Zoom* and *Teams*, as well as *YouTUBE*, were used by almost all or all participants. The reason given for that popularity is the convenience, versatility and ease of communication in the case of *WhatsApp*, and imposition by the Ministry of education due to the pandemic circumstances, in the case of the latter.

Teachers use technological resources all the time, given that on-site classes have not started yet in Ecuador, so there is no other choice than employing technological resources during EFL classes. Most teachers have accepted and assumed this with a positive attitude; however, some pressure is felt, especially by older teachers.

Teachers considered themselves to be quite competent and well- prepared to deal with any issues that might arise in their EFL classrooms because of the use of technological resources. However, the incidence of positively assessed technological competence of the participant teachers somewhat decreased upon comparison with their answers to interview questions numbers 12 and 13 where they were asked to elaborate on the issues and limitations they faced when using said resources.

Teachers' attitudes towards using technological resources in their EFL classrooms is positive and they enjoy using the new technology available to them. The gathered and analyzed data shows that there is willingness on their part to pursue the use of ICTs

enthusiastically and continuously, as well as to further train themselves to improve their competency.

Recommendations

Teachers should continue to use technological resources in their EFL classrooms even after the Covid-19 pandemic ends and classes go back to normal, as it is expected to take the best of a bad situation and adapt it in order to provide the best learning experience possible for their students.

Ecuadorian public-school teachers should not stop looking for new technological resources and continue to innovate their classrooms as it is apparent that the variety of options available to them and their use in the classroom has had positive results and will surely continue to be so.

The popularity of *Whatsapp* and *Virtual platforms* especially, suggest that they have a positive impact on teaching and should therefore continue to be used, in an adapted form, after the return to normal, as there is benefit to be drawn from them, that should not be lost. Public schools should encourage teachers to continue using them.

It is recommended that teachers address their misconceptions regarding their competencies in the use of technological resources with the aim of achieving a balance between perceived skills and the application thereof to the EFL classroom context. It follows that the free or affordable competency training would incentivize teachers to participate in technological skill building courses or other such programs that have a strong positive effect on teacher perceptions and attitudes vis-à-vis technological resource use in their EFL classrooms.

Given the overall positive perceptions of the participant EFL teachers, it is recommended to frame the questions asked, in future research on the same topic, in a way to allow teachers to project all negative feelings or attitudes some undoubtedly hold, as it is just as important to explore the negatives as are the positive aspects outlined.

Also, there needs to be a more considerable sample selected for future research into teachers' perceptions regarding the use of technological resources in the context of the Covid-19 pandemic, given that higher samples allow for broader inferences to be made and patterns to be identified, with respect to how they portray the reality of the profession,

focusing more on how the differences in training, age groups and experience affects those perceptions.

References

- Ally, M. (2008). *Foundations of Educational Theory for Online Learning in The Theory And Practice of Online Learning*. Edmonton: AU Press.
- Alrasheedi, S. (2019). "The effect o social media networking use in efl classrooms in Saudi Arabia: an argumentative review". *International Journal of English Linguistics*, 241-255.
- Atmojo, A., & Nugroho, A. (2020). "Teaching activities and challenges during covid-19 pandemic in indonesia". *Register Journal*, 49-76; Retrieved from: <https://doi.org/10.18326/rgt.v13i1>.
- Aydin, S. (2013). "Teachers' perceptions about the use of computers in efl teaching and learning: the case of Turkey". *Computer Assisted Language Learning Journal* , 214-233; retrieved from: [sci-hub.se/https://doi.org/10.1080/09588221.2012.654495](https://doi.org/10.1080/09588221.2012.654495).
- Bailey, D. R. (2020). "Learning from experience in the midst of covid-19: benefits, challenges and strategies in online teaching". *Computer Assisted Language Learning Electronic Journal*, 18-198.
- Basilaia, G., & Kvavadze, D. (2020). "Transition to online education in schools during sars-cov-2 coronavirus pandemic in Georgia". *Pedagogical Research Journal*, 1-9.
- Blake, R. (2011). "Current trends in online language training". *Annual Review of Applied Linguistics*, 19-35.
- Boonjat, A. (2021). "Teachers' perceptions and experience in using technology for the classroom". *Computer- Assisted Language Learning Electronic Journal*, 1-24; retrieved from: callej.org/journal/22-1Boonmoh-Jumpakate-karpklon2021.pdf.
- Borg, S. (2019). *Language Teacher Cognition: Perspectives and Debates in Second Handbook of English Language Teaching*. Gao: Springer.
- Brydolf, C. (2007). "Minding myspace: balancing the beneits and risks of students online networks". *The Education Digest*, 4-8 Retrieved from:

<https://www.proquest.com/openview/f46ad7c15f7147a2c5009300f8bdc875/1.pdf?pq-origsite=gscholar&cbl=25066>.

Burston, J. (2014). "The pedagogical challenges of computer assisted language learning".

MALL Journal, 344-357; Retrieved from:

<https://doi.org/10.1080/09588221.2014.914539>.

Chabaan, Y., & Ellili-Cherif, M. (2017). "Technology integration in efl classrooms: a study of

Qatari independent schools". *Education And Information Technologies no. 22*, 2433-

2454; retrieved from: <https://doi.org/10.1007/s10639-016-9552-3>.

Doghonadze, n., Aliyev, A., Halawachy, H., Knodel, L., & Aledoyin, A. S. (2020). "The

degree of readiness to total distance learning in the face of covid-19 - teachers'

views". *Journal of Education in the Black Sea Region*, 2-41; Retrieved from:

<https://doi.org/10.31578/jebs.v5i2.197>.

Fatimah, A., & Santiana. (2017). "Teaching in the 21st century: students- teachers'

perceptions of technology use in the classroom". *Journal of Linguistic and English*

Teaching, 125-135; doi:10.24903/sj.v2i2.132.

FroGao, L., & Zhang, L. (2020). "Teacher learning in difficult times: examining foreign

language teachers' cognitions about online teaching to tide over covid-19". *Front.*

Psychol.

Fu, W., & Zhou, H. (2020). "Challenges brought by 2019-ncov epidemic to online education

in China and coping strategies". *Hebei University Journal*, 14-18.

Gonzalez, D., & Louis, R. (2018). *Online Learning in TESOL Encyclopedia of English*

Language Teaching. Lion: Liontas.

Green, P. (2016). "How to succeed with online learning". In D. Rushby, & W. Surry, *The*

Wiley Handbook of Online Learning (pp. 261-286). London: Research Publishing.

Isnani, K. (2019). "A study among english teachers' perceptions: investigating the roles of

ICT in indonesian EFL classrooms". *Eternal Journal*, 60-72; Retrieved from:

<https://doi.org/10.24252/Eternal.2019.A6>.

- Jiang, H., Jiang, L., & Yu, R. (2020). "The construction of online teaching modes during covid-19". *China Educational Technology Journal*, 40-41.
- Mollaie, F. (2013). "Teachers' perceptions of using technology in teaching EFL". *International Journal of Applied Linguistics and English Literature*, 13-22; retrieved from: <http://dx.doi.org/10.7575/ijalel.v.2n.lp.13>.
- Moorhouse, L. (2020). "Adaptations to a face-to-face initial teacher education course "forced" online due to the Covid-19 pandemic". *Journal of Education for Teaching*, 1-3; Retrieved from: <https://doi.org/10.1080.02607476.2020.155205>.
- Otero, R. (2016). "Innovative resources based on ICTs and authentic materials to improve EFL students' communicative needs". In A. Pareja-Lora, C. Calle-Martinez, & P. Rodriguez-Arancon, *New Perspectives on Teaching and Working with Languages in the Digital Era* (pp. 83-93). Dublin: Research Publishing.
- Park, C., & Son, J. (2009). "Implementing computer assisted language learning in the EFL classroom: teachers' perceptions and perspectives". *International Journal of Pedagogies and Learning*, 80-101; Retrieved from: <https://doi.org/10.5172/ijpl.52.80>.
- Plaisance, M. (2018). "Online Course Delivery". In J. L. (Editor), *Encyclopedia of English Language Teaching, First Edition* (pp. 120-132). n/a: Research Publishing.
- Putri, S. (2019). "Kahoot application in english language teaching (ELT) context: an alternative learning strategy". *ELSYA Journal of English Language Studies*, 11-15; Retrieved from: <https://doi.org/10.31846/elsya.v1i1.2488>.
- Reinders, H. (2017). "Digital games and second language learning". In S. Thorne, & S. May, *Encyclopedia of Language and Education* (pp. 6-26). Munchen: Tech Pub.
- Son, J. (2018). "Technology in english as a foreign language (EFL) teaching" - *The TESOL Encyclopedia of English Language Teaching*. Liontas: JI.
- Subekti, A. S. (2020). "Covid-19 triggered online learning implementation: pre-service english teachers' beliefs". *Metathesis: Journal of English Language Literature and Teaching*, 232-248; DOI: 10.31002/metathesis.v4i3.2591.

Watkins, J. & Wilkins M. (2011). "Using YouTube in the EFL classroom". *Language Education in Asia*

Magazine, Volume 2, Issue 1. Retrieved from:

https://leia.org/LEiA/LEiA%20VOLUMES/Download/LEiA_V2_I1_2011/LEiA_V2I1A09_Watkins_Wilkins.pdf

Wiangsima, A., & Boonmoh, J. (2018). "Teachers' perceptions for teaching English in the near future". *Journal of Liberal Arts*, 270-310.

Yi, Y., & Jang, J. (2020). "Envisioning possibilities amid the Covid-19 pandemic: implications from English language teaching in South Korea". *Current Issues in TESOL Journal*, 1-5.

Yukselir, C. (2016). "English foreign language (EFL) instructors and teachers' perceptions toward the integration of internet assisted language teaching (IALT) into EFL instruction". *Efficiency And Responsibility in Education and Science Journal* , 23-30; doi:10.7160/eriesj.2016.0904.

Zhang, W., Wang, Y., Yang, L., & Wang, C. (2020). "Suspending classes without stopping learning: China's education emergency management policy in the Covid-19 outbreak". *Journal of Risk and Financial Management* , 1-6.

Appendix

Appendix 1

UNIVERSIDAD TÉCNICA PARTICULAR DE LOJA
MODALIDAD ABIERTA Y DISTANCIA
CIENCIAS DE LA EDUCACIÓN, MENCIÓN INGLÉS.

TEACHERS' SURVEY

Dear teacher.

The aim of this questionnaire is to obtain information about which type of technological resources you use in your EFL classroom in this COVID-19 pandemic.

The following information will be used for academic purposes only.

Informative data:

Please fill in the information below.

Gender: M () F ()

Degree of the teacher:

Bachelor degree: () Master's degree: () Other: ()

Years of EFL teaching experience:

1 – 5 years	()	6 – 10 years	()	11 – 15 years	()
16 – 20 years	()	21 – and up	()		

Age:

20 –25	()	26 – 30	()	31 – 35	()
36 – 40	()	41 – 45	()	46 – 50	()
50 - 55	()	56 – and up			

City: _____ **Province:** _____

Based on the following information, choose the technological resources you use in your EFL classroom, and mention the importance it has in your classes.

Technological resources used in high school in EFL classrooms

Type of technological resources	I use it	I <u>do not</u> use
Virtual platforms		
Social networks		
WhatsApp		
Facebook		
Twitter		

YouTube		
Digital games		
Online dictionaries		
Web pages		
Online resources		
Apps		
Power point presentation (ppt)		
Other (which one)		

Based on the following information, choose the frequency you use these technological resources in your EFL classroom

Frequency of technological resources used in EFL Classrooms

Type of technological resources	Almost every day.	Once or twice a week	Once or twice a month	Never
Virtual platforms				
Social networks				
WhatsApp				
Facebook				
Twitter				
YouTube				
Digital games				
Online dictionaries				
Web pages				
Online resources				
Apps				
Power point presentation (ppt)				
Other (which one)				

Thanks for your collaboration

Appendix 2

UNIVERSIDAD TÉCNICA PARTICULAR DE LOJA

**MODALIDAD ABIERTA Y DISTANCIA
CIENCIAS DE LA EDUCACIÓN, MENCIÓN INGLÉS**

TEACHERS' SURVEY

Based on the following information, decide whether you disagree or agree with the statement using the four-point scale.

EFL Teachers' Perceptions toward the use of technological resources in their Classrooms.

STATEMENTS	STRONGLY AGRE	AGREE	DISAGREE	STRONGLY DISAGREE
1. I like to use technological resources in my English class.				
2. I hesitate to use technological resources because I'm afraid of making mistakes.				
3. I avoid using technological resources because they are unfamiliar.				
4. I do not know how to use any technological resources.				
5. I have no attended any technological resources training courses.				
6. I have learned to use technological resources by myself.				
7. I would like to learn more about technological resources.				
8. I think that technological resources are necessary tools when teaching English.				
9. I like to use technological resources because they help me to innovate my class				
10. I think that the use of technological resources helps to keep my students motivated.				

11. I think that if I use different types of technology in my class, students will learn better.				
12. I think that technological resources have a positive impact on teaching process				
13. I think technological resources have more advantages than disadvantages in EFL teaching.				
14. I think that teaching English language skills (listening, speaking, reading, and writing) will be effective with the use of technological resources.				
15. I think that teaching English language components (grammar, vocabulary, and pronunciation) will be effective with the use of technology.				
16. I think that the use of technological resources helps me to organize my class.				
17. I think that the use of technological resources makes my work more dynamic.				
18. I think I can solve any technical problem with the use of technological resources in my class.				

THANKS FOR YOUR COLLABORATION

Appendix 3

UNIVERSIDAD TÉCNICA PARTICULAR DE LOJA

**MODALIDAD ABIERTA Y DISTANCIA
CIENCIAS DE LA EDUCACIÓN, MENCIÓN INGLÉS**

TEACHERS' INTERVIEW

1. What is your opinion about the use of technological resources in EFL teaching in this COVID-19 pandemic?

2. Do you like to use technological resources in your classes?

Yes ()

No ()

Why? or Why not?

3. Which are the most common technological resources you use in your classes. Why?

4. Do you think the use of technological resources in your classes is important?

Yes ()

No ()

Why?

5. Does the institution, where you work, offer any technological resources to be

used in your classes?

Yes () No ()

Which one? _____

6. Do you consider that the use of technological resources used in class influences student's language skill?

Yes () No ()

Why?

7. Do you usually use technological resources to reinforce language skills?

Yes () No ()

Which one?

8. Is the frequency of use of technology resources important in your classroom?

Yes () No ()

Why?

9. Have you attended any training course regarding technological resource use? Why?

10. Is there any advantage to use technological resources in your classes? Which one?

11. Is there any disadvantage to use technological resources in your classes? Which one?

12. Which are the issues you have to face when using technological resources in classes?
Why?

13. Are there limitations to use technological resources in your classes? Which ones?

14. Do you have all the facilities to teach English in a virtual environment? Why?

THANKS FOR YOUR COLLABORATION