

The Uses of Technology in the English Learning Process through Online and Virtual Modes in 2020 during the COVID-19 Pandemic

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Abstract

To characterize the use of technology by English teachers in Esmeraldas through online and virtual classes during the Covid-19 pandemic period in 2020, a mixed-type (Quan/qual) descriptive investigation was carried out with a population of 30 English teachers who were doing the Master's Program of Pedagogy of English as a Foreign Language at the PUCE Esmeraldas campus in the year 2020. The sample coincided with the population. The methods of investigation utilized were the analytical-synthetical, inductive-deductive and hermeneutics, and the techniques used were a survey and an interview. The results revealed that teachers mostly use Question and Answers, Exercises and Continuous Practice as teaching techniques. It was also found out that most of the teachers use Kahoot and Quizizz as assessment tools, the most frequent applications teachers use are Padlet and Edmodo, which provide a easy way for teachers and students use it in a free manner, anytime and anywhere, whereas the most widely used platforms to teach their lessons in a synchronous and asynchronous way are Zoom, Teams and Moodle. Based on the results, it can be determined that teachers during the time of the pandemic have combined traditional teaching techniques with the use of information and communication technologies (ICT), using different types of platforms and applications to ensure that the teaching-learning processes are carried out.

Keywords: Covid-19 Pandemic, ELT, Learning Process, Use of Technology, Virtual Classes

Introduction

English has been the most widely spoken language in the world. It is now impossible to find a country where English is not part of the curriculum in both basic and higher education. The benefits of learning and mastering English go beyond the four corners of one's own country. English is the most spoken language around the world, 1 out 5 people understands it. There are approximately 380 million native speakers and 300 million speak English as a second language and another 100 million use it as a foreign language. It is the language of science, information technology, diplomacy and tourism. English is the official language in 45 countries and is spoken widely in other countries where it does not have official position but is needed in many fields and jobs (Aning, 2018). Some people tend to consider the learning of English as something difficult and for some others even impossible. That idea is a compilation of many years being taught with wrong methods and tools that have caused mental blocking, reducing the English language teaching learning process effectiveness (Aning, 2018).

Today, the uses of information and communication technologies (ICT) are part of the technological culture in which we human beings are surrounded by (Perron, Taylor, Glass, & Margerum, 2010). They are really important, because people in general and students in particular have the need to use them (Microsoft Word, for instance) to accomplish different activities in a fast and easy manner.

Nowadays, technology is used almost everywhere and in every field. The use of technology is influencing every developing discipline and that includes education. Also, it is affecting every aspect of pedagogy from the teaching learning theories to assessment or evaluation. Koehler, Mishra, Kereluik, Shin, and Graham (2014) created the TPACK framework that refers to how teachers' understanding of content, pedagogy and technology interact with each other to produce real and meaningful teaching. (p.9). In this theory we can clearly understand how technology works effectively if the teacher has good pedagogy, uses correct techniques and masters the content. Everything the teacher does in the class has to have a link, a connection with the only objective that students learn.

Martin, Mora, and Añorbe (2017) stated that technologies should be a complement to traditional education (p.15). The use of technology in educational terms provides several benefits, such as improving the effectiveness of lessons as well as facilitating research and academic communication. Technology can help to facilitate the construction of knowledge inside and outside the classroom (Unser, 2017).

Social isolation due to the COVID-19 pandemic has produced great changes not only in daily life, mobility or social interactions, but also in our relationship with technology and the different digital tools that have been necessary to continue activities related health, entertainment, faith, work and of course education. The Gartner report defined that today's information age has had drastic, deep progress and changes in almost every field, and one of them is the teaching of English (Woods, 2016). For example, Ghasemi and Hashemi (2011) expressed that tasks done at home, at school or on a trip abroad could be uploaded to a learning platform, enabling teachers, parents and children to make comments and celebrate achievement. According to Kriscautzky (2020):

"In order to be a citizen of this era, it is not only necessary to read and write in the traditional way, but also to be able to perform and communicate through reading and writing using different digital tools" (p.6).

Given the severity of this pandemic, teachers and directors of presential education have had to use digital tools to continue the teaching process, which has generated challenges in the appropriate use of technology, to discern which information on the Internet is true and which is not, or its effect which is appropriate according to the subject to be addressed in order to promote the process of teaching and learning in the best way.

Teachers must use teaching-learning techniques all the time. Teaching-learning strategies and techniques refer to the system, methods, procedures, and processes that a teacher uses during the teaching-learning process (Landoy, Popa, &Repanovici, 2020). Dinuta (2013) stated that the combination of different didactic techniques and strategies offer solutions for teaching and learning, also combining different methods, processes, didactic means and forms of specific organization (p. 299). These processes are the interaction between teacher, students and tools. Vygotsky (1978) expressed that "Humans develop the ability to acquire meaningful speech in their interaction with others" (p.16). Vygotsky (Kurt, 2020) also stated the Zone of Proximal Development theory (ZPD), it relates to the mental capacity of the student to solve problems on their own or with an adult assistance. In the technological field the student has the ability to perform actions with knowledge that he already has, for example, turn on a computer or open a web page and with the help of the teacher the same student can perform more complex actions such as downloading an article or make computer calculations. Galvis (2012) said it is clear that students' motivation using digital technologies while completing their assignments represents how the teachers use technology and sharing ideas (p.95).

According to Luppicini (2015), educational technology is the study and ethical practice of promoting the learning process and improving performance by creating, using and managing adequate technological processes and resources. The concept of educational technology gives an important theoretical basis for research and practice in teaching and learning. The field of educational technology is relatively new and has been struggling to establish its boundaries.

All teachers should have basic knowledge in the use of word processing software, such as Microsoft Word, which is available on all school computers. Most teachers, especially in high school, are allowing students to use the Internet as a source of information for projects, investigations, and daily activities. Bassett (2005) recognized that the digital age is not just about technology, but about what teachers and learners do with technology to improve their skills (p. 77). This indicates that technology is not only a set of tools that helps to make things easier or solve problems through a digital display, but it is created for multiple functions as well, such as to develop the teaching learning process in a better way.

In the case of Ecuador, the Covid-19 pandemic, with the restrictions that have been arising around the world has made the use of technology indispensable for the educational process. This gives an opportunity to learn how the English teachers are using technology in the English language teaching learning process, in both, online and virtual modes in the city of Esmeraldas, what teaching techniques are being used, which technological assessment tools are available and what are the most useful applications that have been considered by English teachers to make learning a great experience for any student.

Research done by Helleve (2013) manifested that computers can be used in collaboration for all subject areas, but teachers must consider the different methods of teaching, keep in mind the level and age of the students, in order to use them effectively (p.82).

Martone (2015) established that digital technologies have not been created with an educational objective in mind. He expressed that the modest effect which computers have had on how students learn and teachers teach is due to the forms in which technologies are employed in the schools or universities: “perfectly predictable, perfectly logical – and perfectly wrong” (p.73). To all this, it is important to add that the way in which the teacher uses technology, or any technological tool can make the students’ learning more or less significant. It is essential then, that the teacher knows how to use the tool correctly before handling it to the students. Martone (2015) affirmed that not only most of the teachers but also school administrators have strong ambitions to increase technology use and technology- enhanced pedagogies. Nevertheless, as mentioned by Martone, there is a need for a strategy to understand the possibilities and restrictions with digital system and how to increase their impact. Thullberg and Millstam (2016) more supported a long-term plan about how digital system could be integrated in pedagogy in our daily work.

From an educational viewpoint and learning perspective, today, technology allows and accommodates different ways and moments of teaching and learning, in which students can choose different approaches and find ways to learn different subjects that are consistent with their learning style or type of intelligence (Martone, 2015).

It is important to make a distinction at this stage, and it is the difference between what online and virtual classes are. According to Lawton et al. (2013), virtual classes involve the use and exchange of information between teachers and students in a virtual way, either by email or platforms specially created for this purpose. Online classes are based on virtual education but add a new ingredient: real time. In other words, teachers and students coincide in time. The students attend live classes or study meetings where they coincide with their teacher or classmates. Also, the use of network is linked with the virtual classes, Gómez, Roses and Farias (2012). "The academic use of social networks in university students", this indicates that use of networks has been deeply increased in the daily routines of students, in classes, house or doing any activity. Sotomayor (2010) and Justina (2016) also expressed that social networks are excellent to generate and promote collaborative work in class, not only between teacher-student, student-student, teacher-teacher within the same institution, but among students from anywhere in the world.

The main objective of the study presented here was to characterize the uses of technology in the English language teaching learning process in online and virtual classes in the city of Esmeraldas during the Covid- 19 Pandemic period. To attain that goal, it was necessary to determine the teaching techniques used by the English teachers, to determine the assessment technological tools they use through the online and virtual classes and to identify the platforms and applications teachers consider most helpful in the English language teaching learning process in online and virtual classes in the city of Esmeraldas during the Covid- 19 Pandemic period.

González (2016) conducted a research to inquire whether technology has any incidence in the educational scope. The results revealed that technology when used as a complement in traditional education has many

benefits such as the improvement of the effectiveness of education, also as a research and scholarly communication facilitator.

Salavati (2017) led a research to reveal the factors that influence how teachers use digital technologies, the results determined that the use is mainly affected by the need of information technology support (IT) and pedagogical support.

In order to determine the importance of Internet, Contreras, Camacho and Badrán (2017) elaborated a study, concluding that having access to Internet and other technological devices are determinant components to a wider success; they emphasized this for the region of Latin America. It was revealed as well that not only the access to Internet is necessary, but also the contact with different technological and electronic tools, even social networks.

To make a distinction between virtual and online classes, Lawton et al. (2013) concluded that, when information between teachers and students is used and exchanged by email or any platform designed for this purpose, is a virtual way, for online classes which are based on virtual education, a new ingredient is added, that is real time. This means that teachers and students must coincide in time, the students attend live classes or study meetings with classmates or teachers.

In accordance to the latest events, Basilaia and Kvavadze (2020) carried out a research to study and analyze the ability of their country and population to continue the education process at the schools in the online form of distance learning during the SARS-CoV-2 Coronavirus (Covid-19) Pandemic in Georgia. They took in consideration the different available platforms and were able to indicate that the ones that were being used were online portal, TV School and Microsoft Teams by public schools and some alternatives like Zoom, Slack, Google Meet and EduPage platforms. The authors also developed a case study, where they reveal that Google Meet platform was the most used platform for the online education process. Their statistics results confirmed that the quick transition to the online form of education went successful.

Method

This research was conducted at the Pontificia Universidad Católica del Ecuador Sede Esmeraldas, PUCESE; it is located in the city of Esmeraldas in Ecuador. The student population of the University is approximately 1500 students. The university offers several careers and master's degrees, and English is taught in all of them.

This mixed-type (Quan/ Qual) investigation has been carried out with a descriptive scope and a cross-sectional design. The population and sample were matched and was composed of 30 English Teachers. The inclusion criteria included teachers of both genders, regardless of age, but who were doing the Master's Program of Pedagogy of English as a Foreign Language in the PUCE Esmeraldas campus in the year 2020 during the Covid-19 pandemic, so they were considered as experts in a non-representative sample (Hernández, Fernández, & Baptista, 2014) of all the teachers in Esmeraldas city.

The methods of investigation used were the analytical-synthetical, inductive- deductive and hermeneutics. The first one was used to analyze the bibliography and the development of teachers during their classes of the English language, meanwhile the second was used to synthesize the theories that support this research, and hermeneutics was used to interpret the information collected in the theoretical framework. The techniques used were a survey and an interview. The instrument for the survey was a questionnaire which requested information about the following variables: teaching techniques, assessment tools, the applications and platforms used to teach. The instrument for the interview was a set of three questions. The interview was done to the six teachers in the Master's program who coincided in using only the two applications more often selected by the 30 teachers, and the aim was to get the most complete picture about why they consider those applications as the most helpful in the English language teaching learning

process. The quantitative data collected with the questionnaire were interpreted and displayed in figures in percentages after they were processed using the Microsoft Excel program. The qualitative data obtained in the interviews were classified and summarized to present that information in the Results section.

Results

A survey was applied to verify the most recurring teaching techniques, assessment technological tools and applications used by English teachers on online and virtual classes in the city of Esmeraldas during the Covid- 19 Pandemic period. The results of the survey revealed the following information.

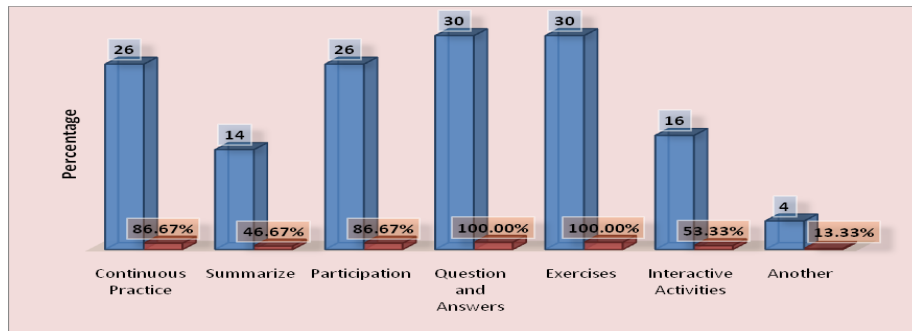


Figure 1. Use of teaching techniques.
Source: Survey applied to teachers.

As stated in Figure 1, 100% of the teachers argued that questions, answers and exercises are the most widely used teaching techniques, followed by 87% that responded that continuous practice is the technique they use the most. On the other hand, around 50% of them answered that their choice was interactive activities and text summaries.

In relation to the tools used to assess students in the English language teaching / learning process on online and virtual classes during the Covid- 19 Pandemic period, 83% answered that Kahoot is their first choice, followed by 43% with Quizizz.

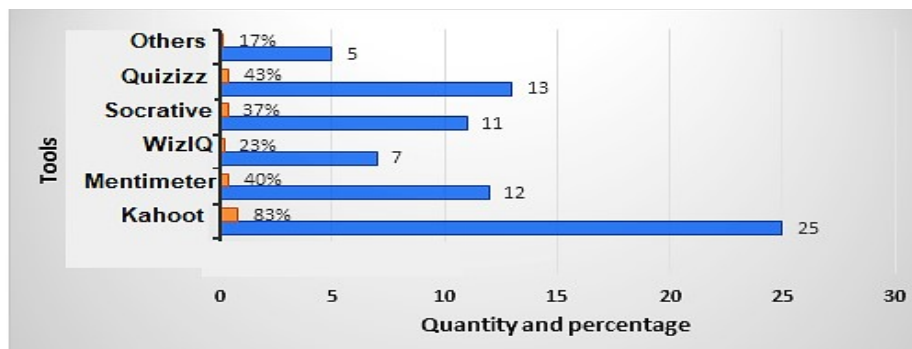


Figure 2. Use of assessment tools.
Source: Survey applied to teachers

About the applications more often used for the English language teaching learning process through online and virtual classes during the pandemic period, Figure 3 reveals that 47% use Padlet and 43% Edmodo.

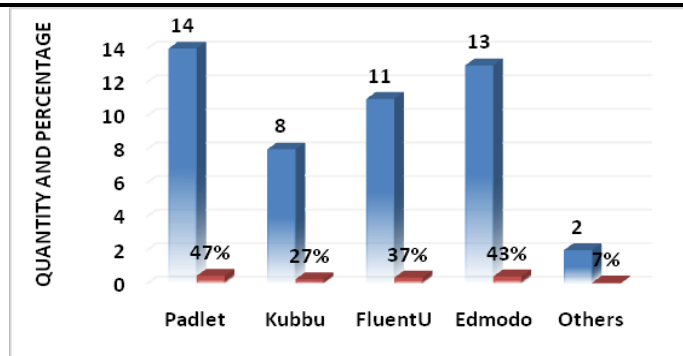


Figure 3. Applications more often used.
 Source: Survey applied to teachers.

When asked about the platforms that they use for the English language teaching learning process through online and virtual classes during the Pandemic period, it is possible to observe that most of the teachers use Zoom (83%) and Teams (77%).

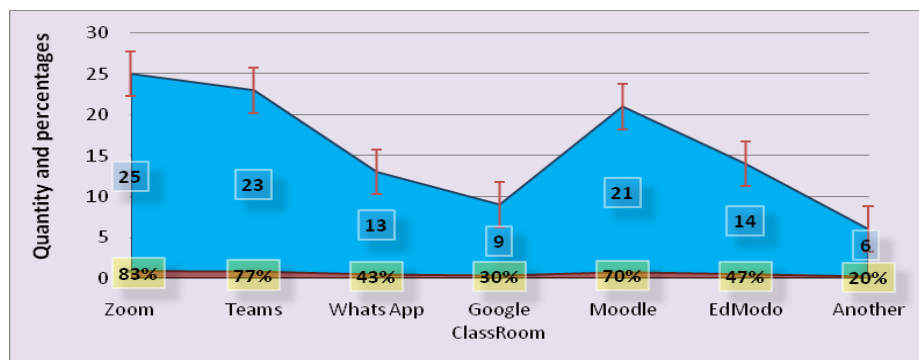


Figure 4. Platforms used by the teachers
 Source: Survey applied to teachers.

After having computed the results of the applications that the teachers use more often for the English language teaching learning process through online and virtual classes during the pandemic period, six teachers who only chose Padlet and Edmodo were interviewed. The interview was necessary to better understand why they had picked up those applications.

Question one asked what benefits they had found with their use of those applications. The six teachers indicated that Padlet is a useful application to promote collaborative learning among their learners and that they could express their thoughts on a common topic easily. Some of them pointed out that it encourages creativity among students to create and collect ideas or pictures; others referred to the fact that Padlet is a virtual writer's journal or notebook which allows students to modify the ideas later if they discovered something new or a way to improve what they had done. They all also added that parents can track their children's details and that Padlet is an educational resource library.

As to Edmodo, the six interviewees said that Edmodo helps make a teacher's daily work easier by providing a safe and easy way for them and their students to engage and collaborate for anytime and anywhere; and that it is also one of the best means of teacher-student communication. Some of them highlighted that it allows students to keep connected via sending notes and messages. Two of the teachers referred to the fact that Edmodo is like a community building platform, where both teachers and students share resources and interact with each other.

Question two asked the teachers to give specific activities they had developed with either Padlet or Edmodo. In the case of Padlet, they gave the example of what they have done with the reading skill. These teachers ask students to read a short story and then the students share their favorite quotes, ask questions and discuss the characters. But the teachers also use it to present and summarize grammar points in a very visually pleasing way. As for the speaking skill, teachers sometimes post photos or other images for the students to prepare descriptions, and then the learners talk about the pictures during the synchronous activity. Finally, as part of the integration of skills, teachers often ask the students to write the descriptions, post them and, collaboratively, the students improve what has been written.

In reference to Edmodo, the teachers have used it for role-play activities and problem-solving tasks, to encourage students to practice their speaking skills through real life conversations. They also mentioned the use of this platform to improve grammar and punctuation by enforcing proper usage on Edmodo by asking the students to post in complete words and sentences.

Question three inquired if they had found any disadvantages or limitations in the use of the two applications. Some of the teachers said that, in Padlet, inappropriate content may be created by other users on the site and that they, as teachers, have no control of what students may type or post, so some things have happened from time to time, especially childish jokes. In the case of Edmodo, it may be difficult for some students to have the discipline to remain focus on the activities and be responsible for keeping up with the assignments.

Discussion

When technology is the topic under discussion, there are different points of view from both teachers and students; some teachers have a more positive viewpoint towards the use of digital technologies, while others are more skeptical about the benefits. Besides, the teachers with a negative point of view expressed concerns about the technical problems and the time they need to develop in using digital technologies. Salavati (2017) states that teachers' use of digital technologies is mainly affected by the need of information technology (IT) support and pedagogical IT-support (p.57). The results discussed here show that, especially in the educational system of the city of Esmeraldas, it has been proven that e-learning is an indispensable tool to effectively continue the teaching-learning process during the isolation due to the Covid-19 pandemic, but as Aning (2018) mentioned, new technological platforms have been developed that are more efficient and faster in information transmission and sharing; however, all the systems rely on human input for them to function. Learning to use such systems effectively has emerged to be a critical need for teachers and students alike.

As it was shown, all the teachers in the present study responded that the teaching techniques they use more often are questions, answers and exercises, followed by 87% that responded that continuous practice is the technique they use the most. All these techniques belong to what is called traditional teaching. Only half of the sample answered that their choice was interactive activities and summaries. The tendency they showed is not contrary to the results of González (2016), who documented in his investigation that technologies should be a complement to traditional education because there are many benefits of using technology in educational terms such as the improvement of the effectiveness of education and its use to facilitate research and scholarly communication.

It is well known that a teacher must use teaching-learning techniques all the time. Teaching-learning strategies and techniques refer to the system, methods, procedures, and processes that a teacher uses during the teaching-learning process (Landoy, Popa, &Repanovici, 2020).

Teachers should use strategies and techniques as tools that help to reinforce the teaching learning process. And for the students, they are the actions used to learn in a perfect way. Dinuta (2013) stated that didactic

strategies and techniques offer solutions for teaching and learning by combining different methods, processes, didactic means and forms of specific organization (p. 299).

According to specific objective two, the tools used to assess students in the English language teaching learning process in online and virtual classes during the Covid- 19 Pandemic period are Kahoot (first choice), Quizizz (second most mentioned), Mentimeter (in the third place) and Socrative (as the last option). The fact that they use those tools coincides with Contreras, Camacho and Badrán (2017) who, in their study, demonstrated that the access to Internet and to technological devices is a determinant component to a wider success, especially in the Latin American region, and who also added that not only access to Internet is necessary, but contact with different technological and electronic tools and even social networks as well, so it is positive that the teachers from Esmeraldas, much more now than ever before, use Internet to carry out their activities that were previously done only in a classroom, and adapt them to a virtual or online mode because of the current circumstances.

The results of specific objective three showed that, according to the survey, the applications that the teachers use more often through online and virtual classes during the Covid- 19 pandemic period are Padlet, Edmodo, FluentU and Kubbu; and the platforms most widely used are Zoom, Teams and Moodle. In accordance with this study, Soni (2020), in Iraq, found out that students have been using online platforms and applications since the global lockdown and that mostly applications like Google classroom, Teams and Zoom have been used to fulfill the academic needs.

The investigation presented in this article has similarities and differences with that of Basilaia and Kvavadze (2020), who studied the capacities of their country and its population to continue the education process at the schools in the online form of distance learning during the SARS-CoV-2 Coronavirus (Covid-19) Pandemic in Georgia. They reviewed the different available platforms and indicated the ones that were used were online portal, TV School and Microsoft Teams for public schools and the alternatives like Zoom, Slack, Google Meet and EduPage platform. The authors made a case study, where the Google Meet platform was the one most used for online education. Their statistics results confirm that the quick transition to the online form of education went successful.

Then it was mandatory to ask why Padlet and Edmodo are the best choices for the teachers in Esmeraldas. Their answers reflect that both are useful applications to promote collaborative learning, that the learners could express their thoughts on a common topic easily, that they encourage creativity among students that they can develop role-play activities and simulations, and that parents could follow up their children's progress. It was good to know the teachers reinforced the idea expressed in the Gartner Report, which defined that today's information age has had drastic, deep progress and changes in almost every field, and one of them is the teaching of English (Woods, 2016). But long before that, Ghasemi and Hashemi (2011) had found out that tasks done at home, at school or on a trip abroad could be uploaded to a learning platform, enabling teachers, parents and children to make comments and celebrate achievement. They concluded that, chosen carefully and used creatively, software enables teachers and children to engage with tasks in ways that are not possible with printed materials.

It was also positive that they, with their acting, reflect their knowledge that the online and virtual classes imply a physical distance between teachers and students and that is why they are teaching with the use of technology (with its platforms, applications and devices). With that attitude, they take into consideration the importance of the Sociocultural Approach, an approach explains that children's cognitive development happens through social interaction and with the support of teachers and the necessary aids, such as technological tools that, at the same time, influence upon and give the correct stimuli to the students, who learns by seeing, imitating what others do, in order to comprehend what is going on within his or her current environment. Vygotsky (1978) expressed that "humans develop the ability to acquire meaningful speech in their interaction with others. For example, in their interactions with adults, children

continually ask the names of things (p.16). In other words, it is evident that teaching and learning is being developed easier, because there is interaction in their classes, something that is not easy to achieve when teaching is being developed from in distance mode.

At the same time, the Covid- 19 pandemic has made relevant the use of technology to fulfill the Zone of Proximal Development, a concept developed by Vygotsky (Kurt, 2020) that refers to the actual development of the learner and the potential development through the use or mediation of semiotic and environmental tools and capable adult facilitation. This fits perfectly with what the teachers are doing with the interactions with their students, whether it is in a classroom as a virtual or online mode, because even from the distance, they help their students go further in learning. For example, what teachers do during their online and virtual classes emphasize what Galvis (2012) stated when he said that it is clear that students' motivation using digital technologies while completing their assignments represents how the teachers use technology.

This study also coincides with Gómez, Roses and Farias (2012), where in their study "The academic use of social networks in university students" revealed that the use of networks has been deeply increased in the daily routines of students, in classes, house or doing any activity. Besides, all that communication possibilities of these networks could be considered to take advantage of. All in all, Sotomayor (2010) also expressed that social networks are excellent to generate and promote collaborative work in class, not only between teacher-student, student-student, teacher-teacher within the same institution, but among students from anywhere in the world. This indicates that our teachers should enhance and increase the scope of their online and virtual classrooms to have their students get in touch with others of the same language level, anywhere in the world. For that purpose, teachers from Esmeraldas should follow Justina's thoughts. Justina (2016) established that the role of the teachers when students are using social network is to identify what their students enjoy doing and utilize it to engage them in the teaching learning process, especially reading and writing (p.10).

Conclusions

The characterization of the use of technology in the English language teaching learning process through online and virtual modes in 2020 during the Covid- 19 pandemic in Esmeraldas city has demonstrated that teachers combine some traditional techniques in their English lessons (as exercises and question and answers) with technology to teach the language and meet their course goals, and they do that with the use platforms such as Zoom, Teams and Moodle, applications like Padlet, Edmodo, FluentU and Kubbu; and the most used technological assessment tools are Kahoot, Quizizz.

What they are being using in technology are means that bring students' attention and the example they have given with the use of technological tools should be promoted so that people take advantage of the great facilities they provide. With those means the learning of the English language has become easier and faster and, since the Covid-19 Pandemic has interfered with the face- to- face classes, online and virtual lessons has helped to increase the need to use technology in appropriate ways to achieve good language learning.

This study has demonstrated that technology has become a very important and useful tool for students and teachers in Esmeraldas to develop activities to teach the language skills, assess students, allow communication between students and the teacher, and follow up students' performance and progress during the pandemic time. It would be interesting, though, to deepen into certain areas within this field and which were not included in the present research; some of them could be the support teachers receive from their institutions to keep updated in IT and ICT knowledge, the Internet connection possibilities of students and how parents evaluate their children's academic improvement.

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