INTEGRATING ICT IN TEACHING A FOREIGN LANGUAGE

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SUMMARY

The research consists on the analysis of the integration of information and communication technologies in language teaching in a teacher formation program in a private university in Cali. It aims to identify the attitudes, uses and perspectives of teachers and students regarding the integration of technology in the teaching of a foreign language, in the Integrated Skills course in English VII of the program of Foreign Languages at Santiago de Cali University. In addition, our theoretical perspective focuses on the active use of technology in education and language teaching. This is a qualitative case study where interviews, surveys, and observations were used for the data collection.

The collected information was analyzed by frequency analysis and discourse analysis. The results show that some of the professors of the program of foreign language at Santiago de Cali University use technology for the development of their classes. However, the use of technologies in classes focuses on a passive notion of the apprentice where technology is used mainly to perform limited activities. In addition, the findings suggest that there must be a teacher training in order to use technology in education to develop different activities in order to motivate students during their learning process. Consequently, it is suggested that future studies focus on the students' conception of technology and the impact of particular language skills and their conception of language teaching and learning. Moreover, this research is useful for future researchers in order to analyze the importance of the integration of information and communication technologies in the classroom. Finally, this study opens the door to future research for a greater
understanding of the processes of integration of technology in the training of foreign language teachers.
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CHAPTER 1: INTRODUCTION

The educational field has changed along with the new challenges and needs imposed in the XXI’st century. Currently, education has integrated information and communication technologies as a means to “share and transfer knowledge effectively in order to reuse and optimize processes” (Leaño & Schmilinsky, 2018, p.167) in teaching and learning areas. Furthermore, the educational field should acknowledge that this generation, as well as future generations, are going to interact more often with technological devices and resources (Ramos, Rojas, & Sierra, 2018). Consequently, that acknowledgement will allow us to keep up with current and future technological developments (Ramos et al., 2018).

Additionally, the integration of ICT in education has brought challenges for teachers, students and educative institutions as well. For example, ICT tools can represent an element of distraction rather than an instrument that facilitates learning (Sprietsma, 2007). Additionally, according to Padrón (2008), teachers have difficulties in their pedagogical practices with technological tools by not knowing how to use them.

On the other hand, foreign language teaching is known to be structured and to use physical didactic materials and nonetheless, language teachers have used ICT as complementary tools (Ramírez, Casillas, & Contreras, 2014). However, in the particular context of this research work, there is a poor usage of technology in foreign language classes to support and motivate learning among students. For that reason, this work will focus on the identification of attitudes, uses, and perspectives of teachers and students.
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regarding the integration of technology in the teaching of EFL, in the Integrated Skills course in English VII of the LLE program of the USC.

The theoretical perspective adopted here focuses on the application and advantages of technology in the language classroom proposed (O’Dowd & Ritter, 2006; Ware, 2005). Additionally, the concepts of education, teaching, technology and foreign language are developed. This is a diagnostic case study developed at Universidad Santiago de Cali. Data collection instruments. Discourse analysis and frequency analysis were used to analyze the data collected.

Below the reader will find the following the sections such as the background, problem statement, research question, justification, general and specific objectives, research relevance, research limitations, definition of important concepts, then in the chapter two there will be the theoretical framework, then in chapter three the methodology, in chapter four the results and in chapter five the conclusions. Finally, there will be the bibliography and the annexes.

1.1. Background

These technological tools have made possible to establish active communication among educational communities. Even more, these tools have contributed to access to online information. Therefore, these resources help with the development of the classes and the academic development of teachers and students. Due to this great importance of ICT in education, this research will focus on the diagnosis of the use, attitudes, and perception of
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technology in the EFL classroom in the Foreign Language Program at Santiago de Cali University.

Recently, there have been a series of research topics related to the study of the ICT applicability in education and more specifically, in foreign languages teaching. Some of the most important lines of research in this field are: Technology in the classroom (Carter, Greenberg, & Walker, 2017; Comi, Argentin, Gui, Origo, & Pagani, 2017; Mama & Hennessy, 2013). Online learning (Álvarez & Fernández, 2018; Huang & Hong, 2016; Zhizhko, 2018). Technological infrastructure (Cárdenas, Suárez, & Guerrero, 2014; Gil, Rodríguez, & Torres, 2017, Roman & Murillo, 2014). Hence, from the research lines aforementioned, we are going to focus on the following studies: Carter et al. (2017), Comi et al. (2017), Álvarez & Fernández (2018), Huang & Hong (2016) and, Gil et al. (2017) in order to develop more broadly the idea of ICT in the educational field.

1.1.1. Technology in the classroom

Comi et al. (2017) study aimed to analyze the impact of the use of ICT had on student’s performance at a school in the Lombardy region, the most populated and economically advanced region in Northern Italy. This research provides statistical data indicating how information and communication technologies have changed student environments in the United States and Europe. Moreover, this research focuses on analyzing if the student’s performance is affected by using technology tools such as computers, tablets, internet access or educational programs during the classes.
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Furthermore, Comi et al. (2017) also focus on the practical knowledge that teachers have about the integration of ICT tools in the classroom. Likewise, the authors investigated how the participant teachers handle those technological resources to develop activities in and out of the classroom, creating material such as slides by using the internet. This research was a quantitative study case about the use of ICT integrated into the classrooms and it was developed in Italy. The population was tenth-grade students and their teachers in the school. Data was gathered through two surveys conducted synchronously to teachers and students asking about the ability in the ICT field.

Results show that new teaching methods based on the application and integration of technology, are not enough for the intellectual development of the students during a course. Teachers have to increase consciousness using ICT to access to valid and useful information. Besides, the knowledge teachers might have in terms of using properly ICT as a tool for teaching is the way that students can reach their achievements and develop their skills. Likewise, it is pointed out that the policy should invest in teaching and students training to improve quality education.

Carter et al. (2017) study aimed to know the results that can generate the implementation and the use of technological tools in the classroom regarding the learning process in the New York Military Academy students. Likewise, the authors want to identify if the teachers of the institution have proper use of technological resources in the classroom and the effects of teachers’ authority on the students’ use of tablets or computers during their schedule.
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This was a quantitative and statistical study case where the authors analyzed the students’ practices. This study was developed in New York at the Military Academy of the United States. They wanted to know the percentage of students who properly used technological resources in classes through an experiment using tablets as a material for data collection. Therefore, the authors selected as a sample, 726 students in an introductory economics course, dividing the classrooms into two groups. The first group of students was allowed to use technological tools such as computers and tablets without any restriction. The other group was not able to use tablets; they had to let the tablets on the desk during the course. Thereby, the researchers could define what kind of effects may happen on the student’s behavior with the integration of technological means with free and restricted use to develop activities in the course.

The authors found that students of the Military Academic can decrease their grades by using ICT tools without restriction, using platforms such as email or social networks, thus, causing a distraction in the classes; there must be supervised by teachers, by controlling those technological resources during the course. The authors mention that ICT tools or technology can cause negative effects in classrooms if there is not an appropriate use. Moreover, they emphasize that there is a lack of knowledge and familiarity by teachers and students with those tools for academic use.

1.1.2. Online learning

Álvarez & Fernández (2018) article aimed to describe the potential to develop intercultural communicative competence through the usage and interaction within a social
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networking site for language learning (SNSLL), Livemocha. The authors adopted the intercultural communicative competence (ICC) model proposed by Byram (1997). This was a qualitative interpretative multiple case study. It was carried out with students of a course of Integrated Skills in English VII at Universidad Del Valle in Cali. The authors collected data using screen recordings, students’ logs, surveys, and a focus group. Data were analyzed using a matrix and frequency analysis.

Findings suggest that students showed indicators of Byram’s (1997) ICC components. Among these components, the most salient were attitudes and knowledge. There was also a subtle representation of the skills of interpreting and relating, and discovery and interaction. However, the component of critical cultural awareness did not appear in the students’ reflections. The authors mention that further studies should emphasize the need for adopting an intercultural view of language learning and implement technological applications in order to enhance the students’ understanding of cultures.

Huang & Hong (2016) article aimed to analyze the consequence of integrating a flipped English classroom on high school students’ information and communication technology and reading comprehension courses. This was a mixed quasi-experimental study. It was carried out with 10th-grade students from a high school in Taiwan. The authors collected data using observations, tests, interviews, and surveys.

Findings show that the English flipped classroom is a great alternative for students to learn how to handle ICT in an easy and fast way. In addition, it is a skillful tool for the integration of learning a foreign language because it motivates students to have autonomous and meaningful learning thanks to the different topics and activities related to everyday life.
The authors remark that EFL teachers need to pay attention to innovate teaching strategies for students. Furthermore, the researchers suggest that teachers need to attend training courses in flipped English classroom management.

1.1.3. Infrastructure

Gil et al. (2017) article seeks to characterize the factors that influence the use of ICT as learning tools in education. Moreover, the authors seek to characterize the teacher training and the technological infrastructure in the institution which is intended to impart teaching based on ICT. Likewise, they want to identify how frequent the students have access to places in the institution where they can develop activities making use of these resources and to analyze the conditions in which the electronic equipment are.

This is a study case done with the help of the information from the TALIS 2013 study conducted by the OECD. Where they provide a calculation of the use of ICT in classrooms, equipment of ICT tools in institutions, and also ICT training for teachers. The study was developed in Seville, Spain and the authors worked with a population of 3,339 teachers where were randomly chosen from 192 different Spanish schools. They carried out questionnaires as a data collection asking teachers about the inadequacy and insufficiency of the infrastructure in the institution and the collaboration and knowledge they have had using ICT tools in class.

The results show that there is an absence of teacher training and disacknowledge in the technological area by the teachers. In addition, they expose that the infrastructure is not
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the main flaw but the lack of collaboration among the teachers with these technological resources to develop activities during the classes limiting ICT in classrooms. Furthermore, the authors point out those educational policies should boost the investment in teachers training to advance their professional development with ICT tools and at the same time to improve the infrastructure allowing teachers and students high-quality education.

1.2. Problem statement

Technological advance is one of the key issues in the modern world. What in ancient times were mechanisms developed for survival, have become the basis of technological development. With the arrival of the industrial revolution, the meaning of technology underwent a strong change (Quintanilla, 2017). For many years, new technologies have developed at the extent of being considered “extensions of the human being” (Magallón, 2014, p.1). These “human extensions” can be understood as the technological tools in charge of “providing easier access to information that was previously impossible to obtain quickly” (Karsenti & Lira, 2011, p.5), as well as facilitating communication and interaction between people around the world. Likewise, the common use of new technologies “is transforming our way of being, thinking and acting in society” (Magallón, 2014, p.1) therefore technological applications have become indispensable for everybody’s daily routine.

Currently, information and communication technologies “play an increasingly central role in all the domains of activity in our lives” (Karsenti & Lira, 2011, p.3). Due to the development of these technological tools, human beings have become very dependent on these. In fact, technology has widened its impact on diverse fields such as entertainment,
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work, and education. Hence, in what concerns this work, the use of information and communication technologies in education is a phenomenon that requires further development and constant updating.

Now, society is undergoing a process of change boosted by the need for the use of information and communication technologies in education. Through these tools, “new forms of communication, production, and dissemination of knowledge” (Montaña, 2019, p.7) are sought. Technology, being a common component in the lives of teachers and students, has the potential to generate environments that facilitate the educational development of students and, in the same way, can enhance the teaching practice. In addition, the use of ICT in education has the potential to favor better interactions between student and teachers.

Certainly, information and communication technologies have been widely used in all fields of human life and have had “a truly transformative and almost automatic impact in some social contexts” (Vivanco, 2014, p.148). Nonetheless, “the education sector has not been able to keep up with these transformations or to take the lead in defining intentional transformations that arise in their bosom” (Vivanco, 2014, p.147). Consequently, technological platforms and alternatives that are widely used in entertainment have not been able to impact students due to the lack of synchrony between educational institutions and technology developers, particularly, in some contexts, teacher formation programs are decades far from the most recent advances in what pertains educative digital applications.

In addition, it is imperative to stress that the educational field “should be committed to allowing students greater freedom to expand their way of thinking outside the
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conventional” (García, Basilotta, & López, 2014, p.2). Thus, the correct integration of technology in education is necessary.

In Colombia, the organism responsible for controlling and regulating everything related to Information and communication technologies (ICT) is the Ministry of Information and Communication Technologies, or its acronym MINTIC that was founded on July 30, 2009, and is covered by Law No. 1341.

According to the law 1341 of 2009, in the second article, eight guiding principles are proposed to promote ICT to public and private sectors and to contribute to the educational, cultural, economic, social and political development of Colombia. In addition, it seeks to protect the rights of users, contribute to technological growth and the use of technological resources by government entities in order to keep citizens informed of the processes carried out by those entities (Congreso de la república de Colombia, 2009).

In Colombian education, the term “technology and informatics” appears in law 115 of 1994, as a mandatory and fundamental area of the basic education. Subsequently, it was included in the national curriculum through the Resolution 2343 of 1996. Thenceforth, the Colombian Ministry of National Education (MEN) and the Ministry of Information and Communication Technologies (MINTIC) have been responsible for drawing up national plans for the benefit of the use and development of ICT in education, as well as in Colombian society and politics.

Another important point refers to the use of ICT in the teaching-learning processes of EFL, which has evolved. Thanks, to the information and communication technologies, the classroom dynamics have been changing. Little by little, technology has been integrated
with this process, which has facilitated communication between the teacher and the student. On the other hand, technology in EFL teaching has allowed teachers to “improve the presentation of academic material, make the teacher’s administration more efficient and provide professional support through the internet” (Gonzáles, 2015, p. 55). Even though technology has facilitated in some way the work of teachers, the application and use of ICT in the teaching of languages must be studied in greater depth.

There are still problems in the integration of ICT in the teaching of EFL. Such as technical problems, lack of training of teachers in the use of ICT, lack of resources and in general the little use of ICT in EFL classrooms. All these issues have a negative impact on the students’ motivation and performance, causing lacking of proficiency and obsolete teaching practices. In order to potentiate and promote the integration of TIC in the University Santiago de Cali, it is necessary to analyze at what extent technological tools are used in the English classes.

1.3. Research question

Since our present study is a case study, we are going to focus on the English VII groups. For that reason, the particular problem is the lack of updated information concerning the frequency, types of activities and purposes of using technology in the English classroom. Additionally, the professors and students’ attitudes towards technological tools in the EFL classroom will also be analyzed. Therefore, our research aims to answer the following research question:
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- How has ICT been implemented in an EFLVII course at the Santiago de Cali University?

In the following sections, we will answer this question and we will start with a theoretical review, background, concepts, we will present the methodology, the results that will lead us to identify the challenges that the university has and finally we will present the pertinent conclusions.

1.4. Justification

The information and communication technologies have changed and improved communication across nations and has enhanced the alternatives to achieve intercommunication with people with different cultural origin (Fernández, 2019). According to (Beck, 1998), the ICT is not only reflected individually or in a certain group, but it extends to all the societies of the planet with the purpose of leading to important changes. At the same time, (Cabero, 1998) argues that new technologies of information and communication are those that currently allow achieving new communicative realities.

In education, technologies have become a useful tool in the development of lessons and the improvement of knowledge in students. (Ferro, Martínez, & Otero, 2009) argue that having new tools for the processing of information and communication generates an improvement in quality and efficiency, increasing competitiveness in students. Some of the advantages that technology has brought to the educational system are the awakening of the students’ motivation in classes and the proposal of alternatives for allowing teachers’
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improvement in the use of new technological tools. (B. Fernández, Suárez, & Álvarez, 2006) Expose that students value positively the use of ICT by teachers when it is based on the possibility of accessing information or to solve problems with technology generating motivation in learning. Despite this outstanding advancement, some aspects do not help to properly apply ICT in classrooms and generate problems when trying to improve learning. An exemplification of those problems might be the loss of time due to the slowness and bad condition of the equipment, the poor internet connection and sometimes the absence of equipment in the classrooms.

Currently, neither teachers nor students take advantage of all the tools provided by information and communication technologies for learning and teaching purposes, for example, (Naval & Lara, 2003) point out three negative effects using improperly ICT tools, such as loss of privacy, promote consumption and addiction. Hence, some teaching practices discourage the students. At the same time, many of the students miss their classes because they find the class boring and monotonous or many teachers do not know how to implement technology in their class performance. Therefore, some teachers lack training and knowledge in the use of ICT. Consequently, many teachers require training to discover and learn more thoroughly the use of ICT, according to (Congreso de la república de Colombia, 1994, article 112) the universities, higher education institutions with a faculty of education or other academic unit associated to the education system, are responsible for training teachers. Additionally, (Albero, 2002) points out that there is a need to train teachers in this field because, in many cases, adolescence has a higher level of knowledge of these technologies than their professors do.
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Furthermore, the infrastructure issues in the classrooms such as the lack or poor condition of computers, video projectors, audio system, and other technological tools, generate problems. For example, it is important to have the audio in the classrooms since in foreign language learning students have to listen to conversations and examples of topics they are studying and the video projectors are useful to create better oral presentations. In the same way, the integration of computers in the classrooms awakes interest in students with modern practices by teachers carrying out active classes developing students’ learning skills.

Additionally, most of the time, the internet connection is not very useful due to the low or bad signal in the classrooms, regarding what we observed in the classrooms where we made our data collection. It is important to have access to this tool because teachers can search for activities through web pages that help or support the topics. Likewise, the internet access is useful for students in institutions as well as at home to collect information that is useful for their work. (Sánchez, 2001) says that internet access can be used methodologically to navigate using collaborative and cooperative activities, facilitating access to global information, facilitating the construction of new knowledge.

Nevertheless, one of the main concerns in the education system is the lack of appropriate internet service because there are web pages with harmful information or virus that can damage the electronic devices. According to the (UNESCO, 2011) students must be trained to face cyber risks responsibly, and thus avoid being harmed.

In conclusion, the use of technological resources in teaching not only awakens the interest to learn in the students, but it also prepares them to compete within the rules of the
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postmodern society. In addition, ICT tools help the teachers to develop and create more dynamic and motivating activities in their class performance, having an appropriate infrastructure, in which students receive an outstanding education. (INEE, 2018) argue that, infrastructure is an essential resource for the educational process, investing in computer equipment and information technologies such as databases.

At the same time, there are also disadvantages such as the lack of access to technological tools pose difficulties to students and teachers to improve their knowledge and skills in the educational environment. (Ertmer, 1999) notes that the most essential support to the teachers could be the integration of technology. Likewise, teachers require more technical support to use and integrate the new technology. Hence, it is necessary to have more investment in training teachers, in improving infrastructure so the technological resources can be properly used.

1.5. Objectives

General Objective:

- To identify the attitudes, uses, and perspectives of teachers and students regarding the integration of technology in the teaching of EFL, in the Integrated Skills course in English VII of the LLE program of the USC

Specific objectives:

- To describe the attitudes and habits of students concerning the use of technology as part of EFL learning inside and outside the classroom.
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- To determine the English 7 course teachers' opinion about the use of ICT in the teaching of English.
- To analyze the use of ICT by the teachers in English 7 class.

1.6. Research relevance

Information and communication technologies (ICT) have had exponential growth during recent years (Acosta, 2014). This growth has transformed the role of technology in education due to its varied tools for teachers and students (Cacheiro, 2018). In fact, ICT has been so widely used that today they are even applied for language teaching. However, the use of technology for language learning at tertiary level requires more in-depth studies. Given the fast advance of technology, particularly in the field of language teaching, sometimes foreign language teachers fall short at the time of using these resources in their daily work.

Therefore, it is necessary to explore in depth how ICT tools are used in foreign language classes. Thus, this work focuses on the identification of teachers and students’ attitudes, perceptions and practices concerning the use of technology in English VII classes in the program of Foreign Languages at Santiago de Cali University. Below we present the importance of this work in three different fields, the disciplinary field, the field of the research community and the field of the application context.

In what concerns the disciplinary field, this work has the potential to raise awareness about the numerous possibilities that technology offers in language learning. In fact, the use of technology in the classroom is useful for teachers and students. On the one
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hand, information and communication technologies (ICT) provide a wide range of possibilities for language teachers (Cox, Preston, & Cox, 1999). In this sense, ICT can generate more interesting, easier and funnier lessons for teachers and students. Additionally, ICT allows teachers to design more diverse, motivating and enjoyable classes. According to (Cabero, 2006) ICT offers new environments to teachers and students with settings for training with significant aspects, such as expanding the range of information to find more interactivity and flexibility in learning, eliminating time-space barriers and facilitating collaborative work between students and allowing a self-learning. Likewise, (Gairín, Castro, Silva, & Mercader, 2016), says that ICT resources privilege their use for transmission of new content awakening the motivation. ICT resources allows teachers to create new material and include it in their lesson planning to develop more active and dynamic classes. Given these benefits, this study aims to bring the teachers’ attention towards the advantages of ICT in language teaching through the identification of their didactic practices related to ICT within the classroom.

On the other hand, students who learn a foreign language by making proper use of ICT can “acquire the language they study in an easy, striking, and with fairly high motivation” (Gonzáles, 2015, p.54). Likewise, ICT provides a large amount of auditory material. This can help and allow students to understand better the EFL they are learning and thus be able to confront different situations. (Carreras, 2012, p.17) argues, “The great possibility of performing these activities in the classroom with the help of headphones and an audio system, allows the student to work at their own rhythm and autonomously. Which is a great improvement.”
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For the academy, this work provides new knowledge regarding the use of ICT in EFL teaching in a teacher formation program. Therefore, this research can contribute to two positive advantages for the research community. First, this diagnosis will provide a study concerning the pedagogical practices and usage of ICT in English lessons for future teachers. Somehow, this work will allow researchers around the world to get an idea about the current teaching practices and the integration of technology in language teaching. Furthermore, this study offers amateur researchers an example to develop similar diagnostic studies in tertiary education level.

Furthermore, this work will contribute to the research community with an in-depth exploration of the use of ICT in teaching EFL of level VII at Santiago de Cali University in foreign language program (LLE). For example, the influence of technology in the development of English classes. Consequently, this work will provide results that could enhance the conception of ICT and its integration in EFL teaching and learning.

Regarding the application context, this work has the potential to stimulate interest in the benefits of proper and efficient use of ICT in language teaching. Hence, this work has the potential to motivate teachers to use ICT in foreign languages classes. However, this research can also be useful for the Faculty of Education of the Santiago de Cali University, as we will see below.

For the faculty of Education at Santiago de Cali University, this study would produce a diagnosis about the integration of ICT in English classes of level VII of the foreign language program (LLE). One of the duties of Colombian institutions is to meet the global challenges of education. According to (Bawden & Robinson, 2008) The internet
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gives students access to global information. The available information has widely and useful knowledge. Therefore the internet is also diversified into a variety of tools, for instance, the students can develop their tasks by networks such as email, websites, blogs, and wikis. In particular, the directors of academic programs and their work teams must constantly evaluate the integration of technology in University classrooms. With this purpose, this research can be the departure point for a large-scale diagnosis of the use of ICT in language teaching at Santiago de Cali University. Additionally, this work also has the potential to contribute to the Colombian academy. Serving as a reference model for those investigations who want to develop a diagnosis similar to this.

In conclusion, this work brings benefits in three different fields: the relevance of this research lies in the integration and strengthening of the technological world with the educational world. Based on this, three basic benefits are expected. First, teachers and students might understand the correct use of ICT in an EFL teaching even this can be something beneficial for students and teachers. Second, the research community could find this contribution useful for the development of new relevant research about ICT and language teaching. Third, it is expected that this work will awaken the interest of the professors of the English area of the Santiago de Cali University regarding the appropriate use of ICT in teaching. Likewise, it is useful for the faculty because it will provide a diagnosis that could open the way for further improvements regarding the use of ICT in language learning lessons.

1.7. Research limitations
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During the research of our study in the program of foreign languages at Santiago de Cali University, there were several limitations. Most of the limitations were present in the period of data collection. For example, at the beginning of the observations of the course English Integrated Skills VII, we could not observe the last two courses because of the weather at the time. The classrooms did not have electricity, thereby; the class had to be canceled. Subsequently, the students had to make the evaluation of the course, and this prevented us from observing the classes for almost a week.

Consequently, in the second week of observations, we could only observe two courses since the program of foreign language held some cultural events such as "Mardi Gras" and Holy Week break and “Holy Week”. In this way, we were only able to interview the professor professors during the Mardi Gras event. On the other hand, during the period of data collection, we had to postpone the application of the surveys to the students for two weeks, owing to Holy Week. Additionally, after Holy Week, the students had to complete their midterms, which affected us in a matter of time, since we had to apply the surveys to the four courses and the period of data collection was ending.

1.8. Definition of important concepts

- ICT: “It refers to the different means and technologies to transmit information and make a specific message known. In general, the term ICT is linked to computer systems and are the basis of computer science” (Mora, 2015).
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- **Computerized teaching:** “It is the direct use of the computer in teaching processes, serving as an interface between a teacher and a student” (Osin & Huergo, 1999).

- **Office tools:** “Office tools used in entities such as spreadsheets, text processing, among others” (Ministerio de tecnologías de la información y comunicación, 2018).

- **Digital literacy:** “Training process of basic skills for the use of ICT and, particularly related to the management of a computer, office software and internet browsing” (Ministerio de tecnologías de la información y comunicación, 2018).
CHAPTER 2: THEORETICAL FRAMEWORK

Education has had recent changes, as it is the integration of new technologies into teaching and learning processes. The development of technological devices like computers, cell phones or tablets used simultaneously with the internet has made information much easier to find now than it was in the past. Currently, the development of these devices has made possible for education to go beyond the classrooms. The usage of technological devices allows students to access to information from their homes or to be in contact with their teacher. Besides, ICT made possible for the educative community to access information not only in physical places such as libraries, but to access information from anywhere. Due to this paradigm shift in education, the integration of these technologies has helped to speed up and give a new meaning to educational processes.

This integration between education and technology drove the development of this research. In general terms, this study aims to understand the type of impact that the use of information and communication technologies (ICT) has on the process of teaching a foreign language. In order to illustrate this situation, it is necessary to address theories and concepts that provide clarity. In this way, it is useful to generate a basis for the proper development of this research work.

The theoretical framework was developed taking into account four global concepts and they were treated thoroughly. Hereafter, we will start with the first concept that is education, the second concept will be teaching, the third will be foreign language and finally technology.
2.1. Education

Education has changed significantly. Furthermore, the concept of education has developed according to its context. Thus, several authors like (Cabrera & Vázquez, 2012; Durkheim, 1922; Patiño, 2014; Vaillant & Marcelo, 2001) have contributed different definitions of education. However, in this section, we will focus on four different definitions. Simultaneously, this section seeks to contextualize education in Colombia.

For instance, Durkheim, (1922) defined education as:

“The action exercised by the adult generations on those who have not reached yet the level of maturity necessary for social life. Its purpose is to provoke and develop in the children a certain number of physical, intellectual and moral states” (p. 4).

Two important points emerge from this definition of education. On the one hand, the author raises the idea of social life in the definition of education. Since for him, education is a social fact. In the same way, he explains that each society is different and it has been developed from a certain ideal. Therefore, each new generation is born in a particular society and according to the place of birth, children are educated to be part of their society (Durkheim, 1922). On the other hand, this definition implies that the apprentice is a new or a very young generation. Hence, the definition of this author would be general because he fails to recognize that education is not exclusive to children. However, Durkheim explains that each new life only contributes its individuality and consequently the adult generations need to prepare them morally and socially (Durkheim, 1922).
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Notwithstanding, Patiño, (2014) defines education as “a social reality that has awakened political, cultural, economic and religious interest” (p.264). This author points out that over time education has awakened agreements and disagreements (Patiño, 2014). For example, unconformities of students or teachers concerning various topics (payment, better educational level, unrestricted education, among others). The preceding allows this author to define education as social. Since through education, the human being is involved in different ways.

For (Cabrera & Vázquez, 2012) education is an “individual, integral and social process” (p.3). This authors points out that an individual process of education refers to the processes of change in terms of the learning that people elaborate within them. The integral process refers to the restructuring that affects the individual as a whole. Finally, the social process refers to interaction of the human being with others (Cabrera & Vázquez, 2012). In other words, this definition of education integrates the different changes people have throughout their lives. Individually there are inner changes related to mental growth; socially there are cultural and moral changes that allow the human being to live with others; integrally there are mental, cultural, moral changes, as well as biological changes.

Contrary to the previous authors, Vaillant & Marcelo, (2001) defined education as an action that “leads to develop in the learner the general abilities to think, define, name, classify, choose, create and learn for themselves” (p. 20). In this definition of education does not limit education to children. By using the word learner, the authors include people of all ages who wish to access education. In addition, this definition makes the possibilities of education bigger. In other words, education can be social as stated for (Durkheim, 1922;
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Patiño, 2014), likewise, education can be individual and integral as affirmed for (Cabrera & Vázquez, 2012).

Taking into account those definitions, education is then, an individual, integral and social process. This process is developed among the main characters that make up this field (teachers and students). In this educational process a series of different knowledge are developed and have as objective the integral formation of people. In other words, it is a process that generates an intellectual, emotional and social evolution in the student. Furthermore, education has become an effective tool that allows people to have equal opportunities. Moreover, education promotes employment, helps to combat poverty levels, improve health, and achieve gender equality, peace, and stability (Banco mundial, 2018).

On the other hand, this research occurs in Colombia, according to the law 115 of February 11, 1994, of Colombia, education is “a process of permanent, personal, cultural and social formation that it is based on an integral conception of the human person, its dignity, its rights, and its duties” (Congreso de la república de Colombia, 1994). Simply put, Colombian education is a permanent process that seeks three different items. Firstly, the full development of the personality and the acquisition and production of knowledge in terms of its individuality. Secondly, the preparation of Colombian citizens in respect (for life, human rights, etc.) and training in citizen participation (democratic principles, policies, economy, etc.) in terms of their social life. Thirdly, the train in respect for authority, law, national history and for national symbols in terms of their national culture. Furthermore, the process of education in Colombia is based in the rights and duties of the citizens.
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Additionally, education can be classified in formal, non-formal and informal (Rodríguez, 2010). In Colombia, formal education occurs in approved educational establishments (Congreso de la república de Colombia, 1994, article 10). Non-formal education occurs when it is offered to complement, update, supplement knowledge in academic or labor aspects (Congreso de la república de Colombia, 1994, article 36). Moreover, informal education includes formal and non-formal. It is the education that is acquired throughout life (Congreso de la república de Colombia, 1994, alticle 43; Rodríguez, 2010, p.37).

Finally, according to the Colombian constitution of 1991 and the general education law of 1994, education in Colombia is a right and is divided into four stages: kindergarten, basic education (primary and secondary), middle education and higher education. Below, this research work will emphasize the higher education stage.

2.1.1. Higher education in Colombia

In Colombia, higher education “refers to all formal post-secondary education, university and non-university with a duration of at least two years” (OECD, 2016, p. 269). Therefore, it includes technical, technological and professional education. Professional education is divided into undergraduate and postgraduate courses. Moreover, the postgraduate programs include specializations, master degrees, and doctorates. Besides, people who want to access to higher education in Colombia must have finished middle education. In addition, people must have presented the official test of the state (ICFES) that is mandatory for all those who finished middle education. Higher education in Colombia
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varies in time depending on the type of formal education that is accessed. Additionally, it varies depending on the academic curricula and the educational institute.

However, barely 50% of Colombian citizens have access to higher education. Furthermore, merely 21% of them have graduated from institutions aimed at higher education (UNESCO-UIS, 2015; OCDE, 2015 cited by OECD, 2016). Due to several factors, such as, “a poor transition between levels, high dropout rates and a significant number of children who do not enter the educational system” (OECD, 2016, p.30).

Regarding school dropout between 2000 and 2015, it is estimated that 3.2% of students do not continue their studies after primary school. For basic education and middle education, the annual dropout rate is 4.5% and 3.1% respectively. Finally, in higher education, the annual dropout rate in universities is 10.4% and in technical or technological education institutions is 22.2% (OECD, 2016). Nonetheless, the educational policies that have been implemented have helped to increase the number of students who enroll in formal educational institutions, as well as, have reduced the number of dropouts from institutions of any formal educational level (OECD, 2016).

2.2. Teaching

Plenty of authors have defined the conception of teaching according to different factors, such as, beliefs, (Hofer & Pintrich, 1997; Pajares, 1992), conceptions (Hincapié, Rojas, Gallego, & Ledesma, 2011; Shuell, 1986), implicit theories (Cossío & Hernández, 2016; Gómez & Guerra, 2012), among others.
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However, teaching can be defined as an act of communication and interaction between two actors, the educator and the learner in an educative environment (Carrasco, 2014). The objective of teaching is to transmit a series of knowledge, techniques, and skills. In addition, communication is understood as the reciprocal social action carried out through verbal or non-verbal messages to transmit different knowledge (Carrasco, 2014). Nonetheless, this act of communication and interaction along with cultural changes, have made possible to have a shared responsibility and to develop student’s autonomy (Cebrián & Vain, 2008).

Therefore, with the conception of teaching as communicative action, the author Carrasco, (2014) characterizes the applicability of communication in teaching at three levels:

- Teaching occurs between people, which means it is a social activity.
- Teaching only makes sense in terms of producing or facilitating learning in the student, which also influences the teacher.
- The contents of the teaching are the messages, the intermediaries that relate the student and the teacher\(^1\) (p. 19).

On the other hand, teaching processes support its actions with teaching means. The teaching means are resources or elements that facilitate communication between teachers and students (Bravo, 2004; Rosell & González, 2012). Those means can be classified into three different categories. First, means of support for oral communication, which includes whiteboards, posters or slides. Second, means of substitution or reinforcement of the

\(^1\) Taken from Enseñar hoy.
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teacher's action, which includes books or videos. Third, means of continuous and remote information, which include web pages or email (Bravo, 2004). Nevertheless, everything related to technological tools will be widely explained in the technology section.

2.3. Foreign language

Through the years, people have learned one or several languages apart from their mother tongue for different reasons. Some of the reasons can be for personal pleasure, for work or for the physical need to adapt to a new cultural environment with language barriers. However, to define the term foreign language, it is important to understand the term mother tongue or first language. Afterward, a definition of the terms second language and foreign language will be presented.

It is understood by the mother tongue the language that is learned in the environment in which the person is born and by which others identify people as native speakers (UNESCO, 2003), regardless of whether it is the official language of a certain country. In the case of Colombia, a mother tongue may be Spanish, which is the official language of the country or, on the contrary, one of the Colombian indigenous languages. On the other hand, the second language is the language, which is spoken in the environment in which the person lives, and which can be learned formally or informally (A. C. García, 2013). Following the previous example, a second language for an indigenous in Cali would be Spanish. Finally, the foreign language is the language that has no presence in the sociolinguistic immediate environment in which the person lives (García, 2013). For example, learning English in Colombia.
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The acquisition of a foreign language (FL) can be formal or informal and benefits the person who learns it and the whole community. In other words, it helps the intellectual and individual growth of the learner. Therefore, according to UNESCO, (2003) “learning another language gives access to other value systems and other ways of interpreting the world, fosters intercultural understanding and helps fight against xenophobia” (p.16).

2.3.1. English as foreign language in Colombia

There are around eight thousand languages spoken around the world (UNESCO, 2010) and the three most spoken languages are Mandarin, Spanish and English. It is estimated that more than a billion people in the world speak English regardless of whether it is a first, second or foreign language. This language is the official language in at least 60 countries and in more than 70 countries as a national language (UNESCO, 2010).

“Globalization has highlighted the growing importance of English and has had a multidirectional effect on language” (UNESCO, 2010, p.92). English has influenced the diversification of communication patterns. In addition, it has become a global language of communication. For this reason, in the Colombian context, English has become into a need at all levels of education, mainly in secondary, middle and higher education.

In Colombia, the Ministry of National Education (MEN) released the National Bilingualism Program 2004-2019 in 2004. This program seeks to integrate the use of new technologies to improve the skills of its citizens in the English language and in the indigenous communities of the country that speak Spanish as a second language. According
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to the national program of bilingualism, the specific goals to which they seek to reach the
eyear 2019 are:

Table 1. Specific goals of the National Bilingualism program in Colombia

<table>
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<th>SPECIFIC GOALS</th>
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<tr>
<td>Basic and Media education</td>
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<td>Higher education</td>
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<tr>
<td>Language institutes</td>
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2.3.2. Foreign Languages at the University Of Santiago De Cali

The University Of Santiago De Cali has seven faculties. The faculty of basic sciences, faculty of economics and business administration, faculty of social communication and publicity, faculty of law, faculty of education, faculty of engineering, health faculty. In total, the university has 37 undergraduate programs (Universidad Santiago de Cali, n.d.). Moreover, 36 of the undergraduate programs include three levels of English in their study plan that must be taken at the university’s language institute.

However, the Foreign Languages Program of the University Of Santiago De Cali has as objective the integral formation that allows the future teacher to work in any bilingual school or institute of the country. Besides, the foreign language program opens the possibilities for postgraduate studies in foreign educational institutions (Universidad Santiago de Cali, n.d.). The graduate of the foreign language program must have the
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following three characteristics. “First, development of written and oral skills. Second, formal aspects of the language (grammar, morphosyntax, phonetics). Third, Exploration and practice of concepts concerning pedagogy and didactics of foreign languages” (Universidad Santiago de Cali, n.d.).

Foreign Languages Program lasts ten semesters. During these semesters, 139 academic credits must be taken. According to the characteristics and the curriculum of this program, the students will learn what will be considered next. Firstly, during the ten semesters, writing, oral and reading skills will be developed. Secondly, Classes related to the formal aspects of the language will be seen from the first semester to the seventh semester. Nevertheless, disciplinary subjects of the language (general culture, reading, and art, among others) will be seen in the last three semesters. Thirdly, topics related to the exploration and practice of pedagogical and didactic concepts of foreign languages will be covered from the first semester to the ninth semester. Finally, during the first eight semesters, topics of common and obligatory knowledge will be covered (Colombian political constitution, mathematical fields, research fields, basic technological knowledge, among others).

2.4. Technology

Today, we live in a time “where technology marks the pace of progress and patterns of life, otherwise stated, we live in a world modeled by technology” (Gay & Ferreras, 2002, p.79). Over time, the term technology has evolved and has been given innumerable meanings. Years ago, it was stated that technology was “an ordered set of knowledge, and
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the corresponding processes, with the objective of produce goods and services” (Gay & Ferreras, 2002, p.83). Nevertheless, this meaning is not far from current concepts. Cegarra, (2012) defines technology as:

“The set of knowledge of industrial art, which allows the creation of artifacts or processes to produce them. Each technology has its own, exclusive and technical language, so that the elements that compose it are perfectly defined, according to the lexicon adopted for the specific technology” (P.19).

In general, technology is the process by which technological products are created. Besides, within the technological field, there are endless categories (industrial technology, energetic technology, medical technology, technological education, among others). Therefore, each element receives its meaning according to the category that belongs. Thereby, it is stated that “technology responds to the desire and will of man to transform his environment. Specifically, the world around him, seeking new and better ways of satisfying his needs or desires” (Gay & Ferreras, 2002, p.80) as is seen in the following chart:

Figure 1. Development of technological process. La Educación Tecnológica. Aportes para su implementación. Gay & Ferreras, (2002)
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The importance that technology has acquired in the global context is significant. Human activities have been optimized, reducing manual work times. For example, sending letters. In the past, sending letters or correspondence could take more than three months depending on the distance. Currently, the correspondence can be sent online or by mail. It is necessary to emphasize that the field or category of technology that corresponds to this work is information and communication technologies (ICT). Therefore, this is an introductory section of that particular topic.

2.4.1. Information and communication technologies (ICT)

The information and communication technologies are a set of techniques, developments and advanced devices that in one way or another interfere and mediate in the informational and communicative processes between human beings. Besides, ICT are integrated technological resources that provide facilities through software, hardware and telecommunications related to the storage, processing and digital transmission of information (Nieto, Montenegro, López, & Díaz, 2018; Rodríguez, 2009).

In other words, information and communication technologies (ICT) are classified as equipment or technological goods such as computers, tablets, telephones, among others, and their services (internet, audio, mail, etc.) that have transformed the way of transmitting and acquiring information to make it more accessible.

Furthermore, information and communication technologies fulfill a large variety of purposes and therefore they have huge importance in the XXI’st century. It is necessary to take into account that the “appropriation or implementation of ICT increases productivity
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and therefore, a greater number of tasks can be completed at the same time at a reduced cost” (Nieto et al., 2018, p.5). Thus, ICT has changed many aspects of the way we live (Sarkar, 2012). The innovation of ICT has managed to break down the barriers of information and make available knowledge, no matter how far away people are.

Cacheiro, (2018) proposes a set of characteristics from different points of view. However, seven of them are important in relation with this research. Those characteristics are interactivity, dynamism, multimedia, instantaneity, interconnection, innovation and diversity. Below, each of these characteristics will be explained very briefly.

1. **Interactivity:** This characteristic refers mainly to the action of interaction between users and ICT goods and services.

2. **Dynamism:** This characteristic refers to the ability of ICTs to transform constantly, or that makes possible the transformation of information according to the user's demands.

3. **Multimedia:** It refers to the medium that makes possible the realization of digital expressions in order to show certain information.

4. **Instantaneity:** this term means everything that can be done or produced immediately by the virtual medium.

5. **Interconnection:** ICT allow one or more connections between electronic devices (e.g. Computer-Television through HDMI wire)

6. **Innovation:** It refers to the rapid changes and updates that are made to ICT in order to improve the interaction of users with ICT.
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7. **Diversity:** This last characteristic refers to the great variation of technological products related to ICT, as well as to the heterogeneity of the services that ICT offers.

2.4.2. **ICT in education**

The incorporation of information and communication technologies (ICT) has become a necessity for society (R. D. Martínez, 2014) that seeks to access information more quickly and efficiently. On the other hand, “the incorporation of ICT technologies into education is an imperative of modern societies” (Casillas, Ramírez, & Ortiz, 2014, p.24) which has developed a digital ecosystem. Therefore, ICT began to be used as a teaching and learning tool. However, the incorporation of ICT in education brought advantages and disadvantages in the teaching and learning processes.

The goods and services offered by technology have allowed people to access information and communication digitally. The access of information and communication digitally can be seen as an advantage or a disadvantage. On the one hand, it is an advantage because online information is everywhere; therefore, students can access all types of relevant data anytime. However, it is a disadvantage because numerous information lacks in reliability. In the lines below, we will discuss the advantages and disadvantages of using ICT.

Nevertheless, in higher education, the incorporation of ICT has transformed university spaces in terms of the diffusion of information, teaching and the production of knowledge (Casillas et al., 2014). However, the use of ICT in education requires a set of
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“knowledge of ICT; savoir-faire (use and skills) on ICT; and the set of practical knowledge applied in the learning process” (Casillas et al., 2014, p.33), as well as in the teaching processes.

According to Casillas et al., (2014) the level of appropriation of technology by students and teachers can be measured in ten areas of knowledge. The first area is the manipulation of files. Second, devise management. Third, the use of programs and information systems specific to the discipline of the subject. Fourth, creation and manipulation of text content and rich text. Fifth, creation and manipulation of data. Sixth, creation and manipulation of multimedia content. Seventh, online communication. Eighth, online socialization and collaboration. Ninth, digital citizenship (the conventional use of spellings in different communication contexts, as well as security considerations on the web, information integrity and responsible use of information and computer services). Finally, digital literacy. (p. 33, 34, 35).

2.4.3. ICT in foreign language teaching

Information and Communication Technologies have expanded access to language programs for professors with new strategies to improve the quality of teaching a foreign language. According to Lund, (2003), “English Foreign Language (EFL) is undergoing great change. On the one hand, because of its globalization. On the other hand, because of its transformation through ICT” (p. 96). Moreover, the design of the professors’ material can be easier and practical when the design includes a technology environment and the practices are mediated by the technology (Lund, 2003). In this case, professors can adapt
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their own teaching material using technology into their class performance, thus, allowing students performing activities with technological elements.

Furthermore, Amah, (2016) explained and suggested that “Learning through technology has become a solution to academic problems and therefore needs to be fully implemented as far as the teaching and learning of the English language” (p.8). For example, professors should develop a methodology that integrates the use of technology in their classes with the purpose of supporting the description or explanation of a topic. Allowing the learners to understand better. In this way, the professor can generate a participative environment inside the classes where students express their opinions and doubts.

At the same time, Amah, (2016) argued that “teachers should diversify teaching and include ICT tools in their teaching aids. This will go a long way to reduce their workload transmitting and communicating knowledge” (p.8). In this way, it is important to highlight that teachers are learning facilitators. Thereby, teachers should organize a proper teaching and learning environment inside the classrooms.

Consequently, it is important to point out that in order to develop an educational environment that integrates ICT, it is necessary that teachers know about information and communication technologies. Therefore, the following section will show the ICT training that foreign language teachers must have for the development of their classes.

2.4.4. Foreign language teacher’s training in ICT
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Teacher’s training is defined as the interaction between the trainer and the trained in specific contexts, with determined elements and operating rules (García, 1989). This training has as objective the “acquisition, improvement or enrichment” (García, 1989, p.31) of teacher’s professional competences. Moreover, teaching and learning processes have a set of characteristics that will strengthen or weaken teaching practices. These characteristics can be “the number of teachers, the level of training, the teaching experience, the degree of support to the teaching processes, the level of commitment to the students, among others” (OEI, 2010, p.75). Nevertheless, teacher training must be continuous to allow teachers’ professional development and to facilitate the adaptation to the continuous changes, as well as, contribute to students’ performance (García, 1989; OEI, 2010).

On the other hand, (Carbonero, Martín, Román, & Reoyo, 2010) state that teacher’s abilities are related with student’s learning. As long as, “teachers are the trained body to exercise the educating function, it is expected a good performance of their skills” (OEI, 2010, p.75). Thus, the effects of teaching over learning could be decisive in motivating students and influencing academic performance. However, it is necessary to encourage teachers to the development of their teaching practices with incentives such as “a better payment, the improvement of working conditions, among others” (OEI, 2010, p.76).

According to the Colombian law 115 of 1994, the institutions responsible for training teachers “are universities and other higher education institutions that have a faculty of education or other academic unit devoted to education, vocational training, postgraduate and updating of educators.” (Congreso de la república de Colombia, Article 112, 1994)
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The general law of Colombian education Chapter 2: Training of teachers, Article 109, teacher training should give in four stages:

a) To form an educator of the highest scientific and ethical quality;

b) To develop the theory and pedagogical practice of knowledge as a fundamental part of the educator;

c) To strengthen research in the educational field and specific knowledge;

d) Prepare educators at the undergraduate and postgraduate levels for different forms and levels of provision of educational services (Congreso de la república de Colombia, 1994).²

Moreover, the changes of times have influenced teachers to integrate information and communication technologies in the development of their classes. However, the incorporation of ICT in daily teaching practices is a difficult process that demands time and constant effort (Kalogiannakis, 2010). The incorporation of ICT has changed the role of the teacher, away from traditional teaching (Kalogiannakis, 2010). In addition, it is important that the teacher manages to “merge ICT with new pedagogies and encourage dynamic classes at the social level, stimulating cooperative interaction, collaborative learning and group work” (UNESCO, 2008, p.7). This is why foreign language teachers need “continuous training in digital didactics” (Rodríguez, 2016, p.6). Nevertheless, some teachers have had to adapt to a technological society and acquire own knowledge of digital natives. This acquired knowledge of technology makes the teacher a digital immigrant.

² Taken from the Colombian’s law 115 of 1994, Article 109
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According to (Prensky, 2001) a digital native is defined as the person who has been born surrounded by technology and who has therefore acquired technological knowledge naturally as part of its personal development. On the other hand, (Prensky, 2001) defines digital immigrants as the person who has adopted technological aspects to adapt to their environment.

ICT became something natural in society. Hence, it cannot be expected that ICT are not found to a greater or lesser extent in the foreign language classroom (Morchio, 2014). However, the use of ICT in FL teaching practices has been limited to superficial levels and are linked to factors such as the knowledge and skills of the teacher in ICT or the pedagogical beliefs of teachers in the use of ICT in the classes of FL (Gong & Lai, 2018).

2.4.5. ICT in Foreign Language Learning

Information and Communication Technologies (ICT) is viewed as an effective tool to create a powerful learning environment for learners in the classroom. The current impact of ICT in the educational field is highly dependent on the way teachers use new technological resources, also the teachers’ motivation and their know-how in the classroom. Thereby, Isisag, (2012) mentioned some effects of the use of ICT to support the foreign language learning process. For example:

“ICT allows adapting easily the teaching materials according to circumstances of learner’s needs. At the same time, ICT concedes to react and use of recent/daily news, offering access to authentic materials on the web. Finally, ICT
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enables one to focus on a specific aspect of the lesson (pronunciation, vocabulary, among others)” (p.2).

In this way, the application of ICT in classrooms gives more opportunities for communication between peers. For instance, students or learners can exchange information in real time, also they can participate in blog discussions, work in teams on different projects, exchange emails, search for information on the internet, among others. Moreover, Mullamaa, (2010) said that “ICT and web-based learning solutions offer the learners the possibilities for making the learning process more interesting and challenging” (p.2). For example, implementing games or dynamic activities in the classes where students work in groups and they must solve problems and learn expand the vocabulary about the topics they are studying. At the same time, (Mullamaa, 2010) states that students must have the possibility to review the presentations and also the vocabulary they studied in class. Thereby, it will help to increase the motivational levels of all students.

2.4.6. Positive and negative characteristics of ICT in education

The integration of information and communication technologies in the educational area brings advantages and disadvantages for students and teachers. Several authors (Cacheiro, 2018; Días, 2000; Díaz, 2013; Palomo, Ruiz, & Sánchez, 2006; Tesouro & Puiggalí, 2006) talk about the advantages and disadvantages of ICT in the teaching-learning process. Below, we will be mentioned some advantages and disadvantages for teachers and students.

→ Advantages for professors and students:
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(Días, 2000; Palomo et al., 2006) suggest that some of the advantages of ICT for teachers are:

- Immediate access to new sources of information and resources.
- The creation and production of information and resources through various office or online resources.
- Access to programs that allow remote communication (email, chats, video calls, etc.).
- Access to collaborative work tools.

On the other hand, (Días, 2000; Palomo et al., 2006; Tesouro & Puiggalí, 2006) establish that some of the advantages offered by ICT to students are:

- The increase of positive attitude towards the class, generating motivation and confidence.
- The possibility of interaction and favors collaborative work.
- Encourages communication through technological tools.
- Develops search and information selection skills.

However, although the use of ICT brings favorable characteristics in their implementation, it also brings disadvantages if people from the educational field do not know how to apply them correctly.

→ **Disadvantages for professors and students:**

(Cacheiro, 2018; Palomo et al., 2006) points out that some disadvantages posed by ICT for teachers are:

- Lack of knowledge and lack of ICT training.
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- Lack of time in school schedules for information research.
- Visual tiredness or physical problems
- Technical problems (blackouts, viruses, lack of connectivity) which requires that an alternative plan be drawn up.

In the case of disadvantages for students, (Cacheiro, 2018; Díaz, 2013) pose the following:

- Facilitator of access to many distractions.
- It causes incomplete and superficial learning.
- It can lead to plagiarism.
CHAPTER 3: METHODOLOGY

3.1. Introduction (research paradigm)

This research aims to identify the use that teachers and students give to ICT in their English lessons in the Foreign Language program at Santiago de Cali University. This research is qualitative, which means that it “seeks to identify the profound nature of the realities, its dynamic structure, which gives full reason for its behavior and manifestations” (Martínez, 2007, p. 8). This means that this study seeks to analyze in depth a specific environment in order to understand the meaning of it. In this case, the reality studied is the inclusion of technology in the language learning processes of the Integrated Skills course in English VII.

Likewise, qualitative research is an approach focused on description. That is, a method that exposes in detail the development of the research based on the perspectives and descriptions given by the participants. In addition, the qualitative research facilitates spaces in which researchers can interact in the natural context of the study subjects to analyze their behavior with the environment. This means that researchers explore the subjects’ reality to know what are their behaviors and perceptions within the context. Moreover, the qualitative research is interested in the ideas, motivations and experiences of the participants’ reality. That is, the qualitative research seeks to know the meaning that people have about the reality in order to understand their behavior. In addition, the qualitative research focuses more on the development of research than on its outcome. Which means that development helps to identify and understand reality, from the processes and collection instruments.
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This method is related to our research because our study observes the reality of the English seven courses and interprets the conception and use of ICT. In this case, the use of technology (ICT) is the phenomenon to analyze. Therefore, we want to interpret the ICT conception, use and strategies at the language learning practices. In addition, rather than identifying patterns of use we want to know the perceptions, attitudes and behaviors of the subjects in relation to this phenomenon. It should be noted that this research does not intend to create theories or establish generalizations; we just want to present the analysis of the chosen context.

• Methodological design

The methodological design is the set of actions and activities that are carried out in order to respond to the problem of research (Calderón, 2011). Additionally, the methodological design is determined by the type of research (Bernal, 2010). According to Bernal, (2010), the qualitative method is one of ten recognized methods and is characterized by “qualifying and describing the social phenomenon” (Bernal, 2010, p.60). It means that the qualitative method seeks to understand a specific environment by analyzing information obtained from the participants.

Qualitative research is related to this work because it allows a case study and descriptive study. On the one hand, it is a case study because it allows “to study in depth a specific unit of analysis, taken from a population universe” (Bernal, 2010, p.116). A unit of analysis can be a group of people or determined places (institutions, companies, etc.). On the other hand, it is descriptive because it seeks to identify the characteristics, properties, dimensions and regularities of the phenomenon under study (Bernal, 2010; Calderón,
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2011). In other words, qualitative research will allow us to study a specific group of people and identify their main features.

3.2. Context

The research was carried out at Santiago de Cali University. This is a private non-profit University which offers undergraduate programs, specializations, masters, technologies and continuing education to more than 18,000 students, youth and adults of middle stratum. Additionally, the university provides quality education with social responsibility and international perspective to train professionals, capable of contributing to development and social equity. Also, the USC promotes teaching without limitations and accessible to anyone, regardless of race, sex, ideology or social class.

The development of this work was carried out in the Foreign Languages program. This program focuses its teaching in four research areas, which are: education, foreign languages, teachability and educability. It also offers students high quality education, with a good education in languages and pedagogy and with the teaching of skills for the technology use. However, since this research is in English, we decided to work only with the English component to do this study. This area is directed by Professor Alejandro Fernandez, Program Director Oscar Herrera and Dean William Salazar. In addition, this area has 14 professors who have been teaching for more than 9 years. All have masters, except for one who is in the process of obtaining it and another who has a doctorate.

Data collection processes was developed in the English VII Integrated Skills course. Which takes place twice a week two hours each class. Due to this, we used three weeks for
the study development. This means that per week, we went 2 days (Tuesday and Thursday) from 1:00 to 9:30 p.m. During this process, we were able to observe four classes of different professors. Therefore, at the end of the investigation, a total of 24 observed classes were obtained.

3.3. Participants

For the elaboration of the research, students and professors of the Foreign Language program were taken as sample. Specifically, we worked with three professors and their students who were in the course of English Integrated Skills VII. The professors were two women and one man from the English area of the Foreign Language program. One of them was in charge of two groups: one in the afternoon and one in the evening. While the other two had only one in charge. In the courses, it was possible to work with a total of 74 students, men and women who belonged to middle stratum.

We decided to work with this course because it is the last level in which students worked integrated skills. Also at this level, there is a greater use of ICT by professors because it is not required to teach with the English book. This means that, professors use the English book as a supporting tool and not as the center of their lessons. In this sense, ICT are the tools that professor implement during the creation of their lessons and the development of their classes. Similarly, students at this level are more aware of the usefulness of ICT because of their previous experiences in English skills, pedagogy and didactic training.
3.3. Researcher role

The essential role of the researchers is based on exploring new experiences, knowledge or skills that generate changes to the investigators and to the object to be investigated. According to Martel, (2016), “every research project and its execution is an enriching experience for the researcher” (p. 6). At the same time, the main objective of all research is to be as beneficial to researchers as to society. Granada, (1984), explains that “the approach of research is based on two factors: In one hand, the objective factor is based on the field of knowledge and social problems. On the other hand, the subjective factor talks about the interest, experience, and cognitive processes of the researcher” (p. 4).

In this sense, our role as researchers in the English 7 courses was as passive participants or non-participating observers. Therefore, regarding our participation in the observations, Hernández, Fernández, & Baptista, (2014), say that “in the passive participation, the observer is present, but does not interact” (p. 403). In this sense, the observer focuses on taking notes of the class's development, the material that the professor uses and how the professor uses it. Additionally, our observations were non-participating because we only focused on identifying the development of the class and the use of technology tools by the professor and the students.

At the same time, we observed how the students interacted with technology within the proposed activities and the attitudes that the students showed along the course. In addition, the observation period had twenty-four sessions, three weeks in total. Consequently, in the observations, there was no interaction with the students and we did not generate any change in the students because our participation was not active. Moreover, to collect the information of the observations we used a format where we selected what
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electronic devices the professor used in the class and what electronic devices were available in the classroom. In addition, we took notes about how the professors developed the activities or explanations regarding the use of technological devices.

3.4. Data collection techniques

The data was collected from March to April, for 24 weeks. In addition, data collection took place in four English seven groups. At the same time, these data were collected through interviews, surveys and observations.

3.4.1. Interview

According to Hernández et al., (2014) the interview is a meeting in which the interviewed person and the interviewer can exchange information. That is, it is a space in which people share opinions on a topic. Which, in turn, generates a brainstorming that allows the creation of an interpretation of social phenomena. Moreover, interviews can be handled flexibly. That is, it is not necessary to specify the duration or time of this. In addition, in the interview the order of the questions is adjusted for the participants. Additionally, the questions are opened in order to let the interviewees to express their own opinions on the subject.

A structured interview was conducted in order to gather information related to the research topic. According to Hernández et al., (2014) in a structured interview, the interviewer uses a guide which contains the determined questions to carry out their work. This interview had 13 questions in total and was divided into five stages: technology
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conception, frequency of ICT use, purpose of ICT, infrastructure and types of technology they use in order to teach. This interview was answered by the professors and each one answered it separately. At the end, the time it took for each professor to answer was approximately 9 minutes.

3.4.2. Surveys

According to Edmonds & Kennedy, (2017) “surveys are used to observe trends, attitudes, or opinions of population of interest” (p.133). In other words, the surveys are used with the objective of gathering information generated by a group of people, which turns around a specific topic. Furthermore, surveys generate data that can be measured statistically. Besides, researchers can collect a variation of data, depending on the types of questions asked in the survey. Also, the researchers obtain descriptive, explanatory and inferential information with the survey application.

The survey was done as a questionnaire. This is a “set of questions about one or more variables that are going to be measured.” (Hernández et al., 2014, p.217). In which a series of open and closed questions are made about a specific topic. In this case, our work topic is: the use that the students gave to the ICT, inside and outside the class. This questionnaire was applied in the four participating groups of the research. Each student was given a consent format attached to the survey. In which, the format explained to the students that the information provided would be anonymous and that their personal data would not be used as part of the investigation.
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Nevertheless, this questionnaire was not done on the same day in all the groups. The survey completion of each group lasted 10 minutes. In total, 74 surveys were applied. These surveys were made with the number of students that were in class that day.

3.4.3. Observations

According to Cohen, Manion, & Morrison, (2007), the observation “offers an investigator the opportunity to gather ‘live’ data from naturally occurring social situations” (p. 396). In other words, it allows the researcher to coexist in the same environment as the subjects of analysis, in order to gather information from his/her perspective. Moreover, observations serve to describe events that occur in a specific environment. In addition, observations can focus on the behaviors or attitudes of the subjects and on particular events. For example, for our research, we were carefully observing the integration of the ICT in the groups' environment.

During the observations, our role as researchers was passive. This, according to Hernández et al., (2014), means that the researchers do not interact within the participants' environment. Despite this, our observation was descriptive. In addition, we follow a format to the groups’ observation. On the other hand, the observed participants were teachers and students of the course of English Integrated Skills VII. This observation was carried out on Tuesdays and Thursdays, from 1:00 p.m. to 9:30 p.m. during the second semester of 2019A. The first course started from 1:00 p.m. to 3:00 p.m. the second course started from 3:00 p.m. to 5:00 p.m. the third course started from 5:30 p.m. to 7:30 p.m. and the fourth
course started from 7:30 p.m. to 9:30 p.m. During three weeks, we observed a total of 24 classes.

3.5. Validity

According to Hernández et al.,(2014), the validity is the technique by which we verify if the data collection tool is adequate to measure the variable that we need. At the same time, the triangulation is compared to the information findings of each instrument. That is to say, that all the information obtained from the interviews, surveys and observations is gathered and after having been analyzed individually, the three are combined to produce large categories that meet our objectives.

For the internal validation of the interview, we made the questions' selection for the final document. This with the aim of eliminating the questions that were similar and to remove those that did not focus on the objective of our investigation. Moreover, we created categories to divide the questions that would be asked, in order to obtain a more structured, ordered and guided interview to give us the answers we wanted to obtain.

It is worth mentioning that for the creation of the survey the same technique of question selection and organization by categories was used. Besides this, we designed the survey with different type of questions to have a more varied data collection. On the other hand, for the grammatical revision of the survey we had help of an Australian professor from Universidad del Valle. It is necessary to highlight that for both instruments we followed a writing and grammar process and we review them based on the research question and the needs we had.
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At the same time, the external validation of the interview was in charge of our rigor as researchers plus the help of our research advisor. Then, the validation of the survey was carried out with 21 students of the Anglophone culture and civilization course. Thanks to this piloting, we were able to verify the time it took students to answer the survey. In addition, at the end of the survey application, we asked students if the questions had been clear. This in order to gather opinions to improve our instrument. We want to emphasize that our data is real, all the information was given by the groups participating in the research and we also follow a meticulous and systematic process of analysis in which we show the data collected objectively.

3.6. Ethic

For the data collection of our study, we wrote a letter that was addressed to the program of Foreign Language of the Education faculty at Santiago de Cali University. With the letter, we requested permission to collect data for the development of our research. At the same time, a consent format was attached to the request. In this way, the personal information and the answers provided by the students and professors of the course English Integrated Skills VII were used. In addition, the students were free to receive and answer the survey, since the participation was voluntary and there was no benefit or harm to them.

Consequently, through the consent format that was attached to the survey and the interview, the students and professors were notified that the use of the information collected would be solely and exclusively for the development of the results of this work. At the same time, students and teachers were told that the information provided by them would be used anonymously and would not generate any danger. Thereby, the information that we
obtained through surveys and interviews, was used to answer our research question and the objectives set at the beginning. Additionally, following the principles of ethics research and information management, the principles of the authors Creswell (2013), Hernández and Fernández, (2017) were taken into account.

CHAPTER 4: FINDINGS

4.1. The attitudes and habits of students concerning the use of technology as part of EFL learning inside and outside the classroom

The information about the attitudes and habits of students inside and outside the classroom were collected through a survey and observations. In the survey, participants answered questions about the academic use of ICT and personal skills in the use of ICT. On the other hand, observations were made during three weeks to four courses of level VII of English. During the three weeks, we observed the students in each class, their use of mobile and computer devices and their interactions with technology. Below, the results obtained from the survey and the observations of the students will be discussed. The findings will be presented in two sections: the attitudes and habits of students against the use of technology as part of EFL learning inside the classroom and their attitudes and habits of students against the use of technology as part of EFL learning outside the classroom.

However, before presenting the results, it is necessary to understand the concepts of attitudes and habits. On the one hand, attitudes are a set of beliefs or thoughts toward a particular object, person, thing, or event (Bohner & Dickel, 2011). People attitudes facing
the use of information and communication technologies can influence the behavior (Núñez, Ochoa, Vales, Fernandez, & Ross, 2013). On the other hand, habits are patterns of behavior based on repetitiveness that become unconscious actions (Gardner, de Bruijn, & Lally, 2012; Nilsen, Roback, Broström, & Ellström, 2012). The habits of students concerning the use of ICT are “activities that are carried out to generate knowledge (search, selection, and evaluation of information) for the solution of problems or research” (Núñez et al., 2013, p.100).

- **Inside the classroom**

  → **Attitudes:**

  During the data collection stage, 99% of the students affirmed that they made academic use of the technology during the classes. Nevertheless, not all students used technology for academic purposes.

<table>
<thead>
<tr>
<th>ACADEMIC PURPOSES</th>
<th>NON ACADEMIC PURPOSES</th>
</tr>
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<tbody>
<tr>
<td>Digital book</td>
<td>Chatting</td>
</tr>
<tr>
<td>Google Translate</td>
<td>Photos</td>
</tr>
<tr>
<td>PowerPoint Presentations</td>
<td>Listening music</td>
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<tr>
<td>Searching of vocabulary</td>
<td>Watching videos</td>
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<td></td>
<td>Social media</td>
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During the observations, it was identified that most students did not have the English book. However, from the information provided by the faculty, for the English VII courses the purchase of the book was not mandatory. Thus, although there was a minority that did have the physical book, the vast majority chose to have the digital book. Additionally, some students used their technological devices as helpful tools during their classes.

One of the key findings showed that students used technological devices for non academic purposes. Figure 2 shows the average of use of technology for non academic purposes inside the classroom.

![Figure 2. Average number of students and non academic use of ICT by observation.](image)

Figure 2, shows that most of students made inappropriate use of their technological devices in classes. As shown in Table 2, the most frequent activities that students performed on their technological devices were chatting, taking pictures, listening to music, watching videos and interacting on social networks.
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Although 99% of the students surveyed consider that they make academic use of technology during their classes, the observations showed different information. (Días, 2000; Palomo et al., 2006; Tesouro & Puiggalí, 2006) points out that educational technologies provide advantages to students. Nonetheless, (Cacheiro, 2018; Díaz, 2013) also state that the use of ICT by students brings disadvantages, among which, is easy access to distractions. These results are related to the work because it shows the different uses that are given to technology during the classes. Whether the use is related to the class or not, this can influence the positive or negative development of the learning and teaching process.

→ Habits:

Consequently, the students were asked to mention the technological resources they have used at the University. The students frequently used technological devices and applications. In table three is shown the most common devices applications used by students in their academic environment.
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Figure 3. Most common devices and applications used by students

According to the information obtained, 56 students said that they used the video beam and computers the most in their classes. It was observed that only the students of classes 3 and 4 used video beams and computers to make presentations. Nevertheless, by comparing the information obtained by the survey with the observations, we can see that the most used device by students is the mobile phone. Through the mobile phone students accessed to diverse sources of information and communication, such as the digital book, Google services or social media.

Concerning the applications, the most used were Google Classroom, Gmail, Google Drive, Google Docs, and Google Translate. However, during the observations, it was only possible to corroborate the use of Google Classroom (tasks set by the teacher and the Foreign Language Program) and Google Translate (search of vocabulary and translations). Furthermore, through the observation was seen that students also use applications such as Word Reference, reader of digital files and digital dictionaries.

Additionally, it was observed that the habits of students towards the class in general was not adequate. Just a few students participated in the class, and it was usually the same
two or three students. Besides, most of the students were constantly distracted with their mobile phones or chatting with their companions.

2. Attitudes and habits outside the classroom

Ninety-nine percent of the students considered important to know about the use of ICT. However, although most students (92%) answered that they frequently used ICT outside the classroom, a minority (8%) never used it.

In the same way, the students were asked to mention the technological tools they used to develop the activities of the class. The most named were devices (computers and mobile phones), applications (Google Translate and Google Classroom), web pages (online dictionaries and Reverso), and office tools (PowerPoint and Word).

Furthermore, students were asked about the students’ ability in office tools, information and communication tools and language learning applications. Concerning the office tools, the level of knowledge of Word, Excel, Access, PowerPoint or Prezi was qualified. It was evidenced that 73 out of 74 students have high ability in Word; 44 out of 74 have high ability in Excel; 44 out of 73 have low ability in Access, one student did not know about Access; and 72 out of 74 have high ability in PowerPoint or Prezi.

Regarding the information and communication tools, the categories were E-mail, internet browser, Database, and Google Drive. The answers showed that all students have a high ability in the use E-mail tools (Outlook, Gmail, Yahoo!, etc.); 67 out of 73 have a high ability in the use of internet browser (Google Chrome, Mozilla, Firefox, etc.), one of the
students did not answer; 49 out of 73 have a high ability in the use of database, one of them did not know about databases; lastly, 72 out of 74 have high ability in the use of google drive.

Finally, the categories of Tandem, Duolingo, Memrise, and Bussu were in the qualification of students' abilities in applications for language learning. These applications were taken at random among all applications for language learning. 57 out of 74 responded that their ability in Tandem is low; 64 out of 74 have low ability in Duolingo; 56 out of 74 have high ability in Memrise; and 54 out of 74 have low ability in Bussu.

Then, students were asked to mention other applications they knew and use to learn a foreign language besides Memrise, Bussu, Tandem, and Duolingo. However, among the students' answers, there were also web pages of which they make use of for their learning. Students named 28 applications and web pages that they used to develop their learning of a foreign language. Nevertheless, the applications that were most named were Hello Talk and Rosetta stone. On the other hand, the web pages most named by the students were Conjuger and Reverso.

Each of these questions was asked to know about students' thoughts, frequency and uses of ICT by students. Additionally, the results exposed in this section show that the attitudes and habits of students toward ICT outside the classroom are positive. On the one hand, the majority of students consider important to have knowledge about ICT and because of that, the students use them frequently to develop and improve their skills in a foreign language. On the other hand, students have high level in the use of office tools and information and communication tools. Despite the low-level students have in the use of the
applications of Foreign Language learning pointed out in the survey, the students indicated that there were different applications they were used to use to practice foreign languages outside the classroom.

4.2. English VII course teachers’ opinion about the use of ICT in the teaching of English

The professors’ opinions about the use of ICT in the teaching of English were collected with an interview addressed to three teachers of English VII of the foreign language program at Santiago de Cali University. In the interview, the teachers were asked about the use and knowledge they had concerning the Information and Communication Technologies (ICT), and the usefulness of those resources. Besides, the professors were asked about the technological tools they used and how they used them in their class performance. Finally, they expressed their opinion about the advantages and disadvantages that these new resources could bring to teaching and learning. Furthermore, the interview showed some of the challenges the university has to face in order to improve the language teaching process. Below we present the results of the interviews in terms of motivation, the advantages, and disadvantages of using technology, the usefulness of ICT tools and the interaction outside the classroom.

**Motivation:**
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According to the teachers’ opinion about the use of technological tools in order to perform language lessons, they agreed that technology is an element that is useful for students to feel motivated. For example, professors one and two also linked the student’s motivation with the dynamism and the participation of the classes, inferring that it is an element that makes the classes more active. Also, professor number three added that: “teachers must be updated in the use of technologies because every day there are new tools to develop a class or activities that can reinforce the students’ learning.” (Professor 3, Interview, 2019). It means that teachers must know how to use technology in their class performance because sometimes students have more experience than their teachers in the use of certain technological elements.

Finally, the teachers pointed out the importance to use technological resources in their classes because they are a useful requirement in the development of students' abilities. Thus, allowing students to have more creativity, look for ways and skills to solve problems and also developing communicative skills, among others. For example, professor number one said: “Technology is a good tool for me because we can make didactic support more pleasant and to think about new learning strategies and approaches for students” (Professor 1, Interview, 2019). In addition, professor number two highlighted that: “Every lesson should have some technological components” (Professor 2, Interview, 2019). Thereby, professors deducted that technology can bring new strategies as long as professors know how to use them appropriately and do not take dependence on technology in every class.
In this sense, other authors have explained the relationship between technology and motivation. For example, Ayari, Ayari, & Ayari, (2012), argue that some of the actions that motivate students are:

- Trying to use different technologies (in class to keep students alert, such as videos, software and interactive games).
- Performing the class by integrating different subjects like History, geography, among others in the class content.
- Continuously get student’s feedback on your course content, delivering, activities, etc. (p.4)

Therefore, integrating ICT during the classes, professors will arouse motivation in their students, implementing different activities individually and in groups developing a collaborative work environment. Hence, students can develop and/or improve abilities such as listening, speaking, reading and writing. For this research, technology allowed the professor to integrate activities, such as question and answer activities about a topic projected by the video beam or reviewing and getting familiar words about some audio. In this way, the participants of this study were motivated in learning the different topics that the teachers explained. At the same time, generating confidence in the students to participate in the activities.

- **Advantages of using technology:**

  The teachers also exposed the advantages that can be found in the use of information and communication technologies (ICT) for the development of a class or lesson. For instance, professor number two said: “The applications that students get to use in the real
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world, they can use them in their own classrooms.” (Professor 2, Interview, 2019). It means that students can see different ways to use those technological resources in classes and professors can teach any subject in a practical way with more information. Additionally, teacher number three argued that: “Using new activities in classes influenced the motivation of students.” (Professor 3, Interview, 2019). For example, sometimes the students did not pay attention to the slides with any activity, but when the teacher looked for a video or didactic game on the internet, we could notice the interest in the class. In this way, teachers number two and three agreed that ICT brings a lot of updated information to integrate with their lesson plans in order to present topics clearly, allowing students to understand better.

Moreover, teacher one argued that: “There is a variety of material with interesting activities on the internet that allows students to develop their skills.” (Professor 1, Interview, 2019). For example, oral comprehension can be complemented with audios of conversations or songs related to the syllabus topics. Hence, students can adapt to listen to English language broadcasting. Moreover, the internet offers texts that can be used to work collaboratively. These technological resources promote motivation in the English language classroom. Finally, teacher number one also added that: “Projecting videos, the students can identify vocabulary and even solve some problems of some situations referring to the same video.” (Professor 1, Interview, 2019). Thus, generating a pleasant atmosphere where students can express their opinions and knowledge together with their own classmates.

In this sense, some authors such as (Días, 2000; Palomo et al, 2006) have argued about the advantages that ICT has brought into the educational field. For example, Palomo
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et al., (2006) suggest that “some of the advantages of ICT are the immediate access to new sources of information and resources” (p.15). In the same way, Días, (2000) says that “the creation and production of information through the various office or online resources and access to programs that allow remote communication such as e-mail, chats, video calls, among others” (p.4). In our case, professors defined the advantages of technology as a useful and motivational platform where they could find and get material with a variety of activities and information on all kinds of topics. In this way, the professors in our study could explain and support their lessons with those elements in order to improve students’ skills and feel interested and motivated to learn.

- Some disadvantages of using technology:

Concerning the disadvantages in the use of ICT tools in classrooms, teachers two and three mentioned the poor internet access that there is in the classrooms. Given the importance of the internet to integrate the different materials such as activities, songs, videos, among others the lack of internet access is an issue to solve. For example, professor number one said: “It cannot always use its own data or to use student’s internet data to access to the internet in the classrooms to do some activities.” (Professor 1, Interview, 2019). In this case, there must be proper internet access because the professor had to change the direction of the class and redo new activities at the last moment not allowing students to deconcentrate with the topic. Another point mentioned by professors numbers one and two was the monotone or dependent that can become a class with the use of technology on a daily basis.
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For instance, the professor number one pointed out that: “Using ICT in classes every day it becomes something monotonous.” (Professor 1, Interview, 2019). Inferring that students also liked to have traditional classes with explanations and activities where students had to elaborate or write sentences on the blackboard. At the same time, professor number two expressed that: “ Sometimes technology can cause some problems if you are depending on, so I try to not put everything onto technology” (Professor 2, Interview, 2019). In this case, the professor number one tried to explain that some teachers must have a backup plan in their activities in case the internet or some technological resource fails suddenly, to be able to continue developing the class. The teachers also mentioned that there must be a balance in the use of technology in their lesson plans.

Therefore, different authors such as (Cacheiro, 2018; Carter et al., 2017; Díaz, 2013) have presented some disadvantages to the use of technology in education. For example, Cacheiro (2018), points out that “some disadvantages posed by ICT are the technical problems such as blackouts, viruses, lack of connectivity, where it is required an alternative plan be drawn up and the lack of knowledge and/or lack of ICT training”. In addition, Díaz (2013) argues that “sometimes professors are very dependent on technology, and if something fails they cannot develop the class” (p.5). In our study, the professors agreed that some of the disadvantages of technology in education are the lack of teacher training in the use of ICT tools because sometimes the professors do not know how to develop and integrate activities or to explain a topic with technological support. At the same time, the professors added that technology can become a monotonous tool which is something negative for teaching and learning because it is necessary to alternate activities and explanations to avoid the monotony in the classes.
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Similarly, Carter, Greenberg, and Walker (2016) study, analyzed the effects of the implementation and the use of ICT tools in the classroom. In this way, the authors found that student’s grades decreased because of the unrestricted use of ICT. Thereby, professors must create strategies with the use of electronic devices to avoid causing distractions in students during the classes. In this research, the professors mentioned that technological devices can cause problems for students if teachers do not know how to integrate ICT tools and provide clear instructions. Furthermore, the interviewed professors added that there must be proper management on the use of electronic devices during the activities.

However, in order to deepen more about the usefulness of technology in the educational field, the interview addressed to teachers will give more information about how teachers considered technology useful in classes, as discussed below.

- **The usefulness of ICT tools:**

  The teachers explained why did they like to use ICT in their class performance and what is its usefulness. First, teacher number one said that “ICT is really useful because it is a tool that complements the different activities of the class and there is a variety of material where professors can download.” (Professor 1, Interview, 2019). For example, some of the activities that professors can unload from the internet allow them to reinforce a topic and/or develop a class more active and pleasant. At the same time, professors can share their own activities or material to help other teachers. Second, the professor number three mentioned that “It had an easy manage with those resources in their classes.” (Professor 3, Interview, 2019). It means that professor three found a convenient to integrate and to develop
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technological devices into their class performance. In addition, professor number two said: “I feel the classrooms set up to use technology and it is easy because technology adds another dimension to learning” (Professor 2, Interview, 2019). Thereby, professor number two focused to mention that integrating technology in their classes allowed teachers to have dynamism in different activities.

Finally, teacher number three also emphasized that teachers need more training with the use of electronic devices since there were teachers within the program who found it difficult to use some resources in their class performance. For example, (García, 1989; Organización de Estados Iberoamericanos, 2010), agree that “teacher training must be continuous to allow teachers’ professional development and to facilitate the adaptation to the continuous changes, as well as, contribute to students’ performance”. Therefore, teachers must continue the formation in order to adapt to the new challenges of education. Unfortunately, in some cases, professors forget this need and neglect the pedagogical role of technology in the classroom.

In the same vein, other authors such as (Comi et al., 2017; Sangrà & González, 2010) have expressed their opinions about the usefulness of ICT in the educational field. For example, Sangrà and González (2010) have argued that “the impact of ICT was understood as an innovation on increasing the quality of education in the school center, and the degree of involvement of the entire staff” (p.6). In the same way, professors can produce comfortable and motivational spaces where students feel free to express their opinions about the lessons. In our case, the professors expressed that ICT tools are useful because they provide a myriad of available material ready to be downloaded and apply in class. In
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addition, professors added that ICT is useful because professors have the possibility to publish their own material to help other teachers to reinforce their activities or explanations, generating collaborative virtual work.

According to Comi et al. (2017), teachers have to explain to their students about the usefulness of ICT to access to valid and helpful information. In this case, professors need to use properly the ICT in order to develop communicative skills in their students. In our particular case, the professors explained that it is necessary to know how to guide and manage the use of electronic devices. Thereby, students will not get distracted from the activities and also avoid causing problems, for example, web pages with viruses that can damage the electronic devices. In this way, it will be possible to generate a pleasant atmosphere within the classroom.

- Interaction outside the classrooms:

The teachers were also asked about the application they used to be communicated with their students outside the classroom. For example, the three teachers mentioned that Gmail and Google Classroom are the main' application to interact with their students, either to send a task or exercises about any topic. Also, teacher number three added: “I also use Google Drive as a means to communicate with my students.” (Professor 3, Interview, 2019). For example, Google Drive allowed the professor number three sharing information such as tasks, links to review the topic they are learning and even the slides that the professor used to develop the class. In addition, teacher number one said: “sometimes WhatsApp is useful for me in an emergency because I could send a message to the class
Integrating ICT in teaching a foreign language

representative” (Professor 1, Interview, 2019). For example, the professor used this application if it had to change or to move to a different classroom in the last minute or had to be absent from the class for any reason.

In general, the professors of the language program used those applications to send information to the students about any eventuality at the university or to assign some virtual exercises and homework to develop in their homes. At the same time, at the end of each semester cycle teachers send the grades or publish them online, thereby, the students have access whenever they need to review.

In this way, some authors such as (King, Petrenchik, Law, & Hurley, 2009; OECD, 2016) have shown the importance of the interaction between professors and students outside of the educational environment. For example, King et al. (2009), argued that “ICT outside schools offers children opportunities that go beyond competence development by allowing them to experience a sense of belonging to a group or community as who they are as individuals” (p.18). This technology-based interaction with ICT tools outside the classrooms allows students to face and solve real-life issues. Consequently, the OECD (2015), says that “learning with and about ICT may well take place outside of school and also can play a key role in ensuring that everyone can use these technologies and benefit from them, bridging the divide between rich and poor” (p. 52).

In our case, the professors mentioned that it is important to keep constant communication with the students even out of the classroom. The professors of our study said that they used online applications such as Gmail, Google Drive, and WhatsApp in order to send activities or tasks to reinforce the lessons studied in class.
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Finally, in general terms, the interviewed professors opined that ICT is a useful tool to motivate students in the classroom. Moreover, the professors of our study said that ICT supports their lessons with a variety of material to improve student’s learning. At the same time, the professors expressed that it is important to be communicated with their students outside the classroom in order to reinforce the topics seen in class. Nevertheless, the opinions of the interviewed professors must be expanded with the information collected through the observations in the four courses of English Integrated Skills VII. Therefore, in the following section, it will be analyzed the use of ICT in order to develop a class by the professors of the course of English Integrated Skills VII at Santiago de Cali University.

4.3. The use of ICT by the teachers in English VII classes

The information about the management of ICT by professors was obtained through an interview and observations. It is important to bear in mind that ICT was used during all the classes observed. Some uses of ICT during the 24 classes observed has to do with the employment of Office tools (word, power point, excel) and technological devices (computer, speaker, projector) and digital resources (programs, online sites). To deepen into the use of these technologies, the frequency, type of use and purpose of ICT in the English teaching will be analyzed. The analysis of the ICT usage is divided in two sections: devices and digital resources.
Figure 4. Devices used by professors and its frequency

In this first stage, Figure 4 shows us the frequency with which the technological devices (projector, computer, speaker, mobile and USB) were used by the professors during the 24 observed classes. For example, we can see that the projector was used 22 classes during the three weeks of observation. Then, Figure 4 indicates us that the use of ICT was usually present in the development of each lesson. This is a good finding since it was observed that all professors implemented ICT in their classes.

In this part, the professors expressed that they use to integrate ICT in their lessons. Additionally, professor number three said that “the ICT's frequency was one per week” (Professor 3, Interview, 2019). However, it was evident during the observations that the use of ICT was more frequent than what the professor said in the interview. For example, during the observations number 1 and 3 it was shown that the professor used office tools (word, power point) and a program (Cambridge English Empower) to develop the classes and do activities based on the topics that were being carried out. Additionally, the theory says that “learning through technology has become a solution to academic problems and therefore needs to be fully implemented as far as the teaching and learning of the English language”
Integrating ICT in teaching a foreign language

(Amah, 2016, p.8). This is why in our observations, we could witness that professors used ICT in most of their classes.

For instance, professor number two said that “ICT was useful at least one hour every session of the classes; grouping the students and doing activities for a certain time and then followed with explanations on the board” (Professor 2, Interview, 2019). During the observations it was noticed that the professor frequently used technology in his classes. This means that, the professor’s idea about ICT usage agreed with his teaching practices. However, despite the fact that technology was implemented for student learning, the professor did not use it in a way that attracted the attention of the students. Therefore, on many occasions we noted that there was no motivation or participation on the part of the students in the classes. Based on the theory, (Díaz, 2000; Palomo et al., 2006; Tesouro & Puiggalí, 2006) say that ICT should motivate and build confidence in students, as well as increase positive attitude during classes. In other words, the use of ICTs should encourage students to participate in classes and pay attention during them.

Furthermore, we will focus on the analysis of the most frequently used devices and their types of use. Later, the purpose of these devices in English teaching will be discussed.

→ Types of use

It must be noted that it is not enough to use technology frequently in class. The technology must be used with a purpose and with a pedagogical intention. For this reason, in
this section we will study the type of activities that professors did when using technology and discuss the implications of this type of use on the development of the class.

![Figure 5: Uses of the Computer](image5)

![Figure 6: Uses of the Projector](image6)
Integrating ICT in teaching a foreign language

As it can be seen in Figure 5 and 6, the most used technological devices are the computer and the projector. Analyzing the data, we can see that these devices have numerous affordances, which helped the professors to develop their classes. However, the most frequent uses of these two technological devices are to open and project the Cambridge English Empower virtual book and the Power Point office tool. Based on this finding, we can discuss the conception that professors have about technology and the role of those devices in their lessons. Thus, Figure 5 and 6 show that ICT play a passive and limited role in the English teaching.

Professors 1 and 2 argued in the interview that “the use of ICT adds another dynamic and dimension to teaching” (professor 1, interview, 2019). Also, that “applying the ICT in different exercises and activities, made the classes more enjoyable” (Professor 2, interview, 2019). However, based on the observations, we found that although the classes were developed with ICT, they became routinary due to the invariable use that professors gave to the devices during the classes. For example, professors in most of the classes used the projector only to show the virtual book and it stayed that way sometimes for two hours of class. This is why the role of technological devices was passive for students. Consequently, professors did not use them for things like, the development of lessons with more content breadth and variation of activities, in which students put into practice what they learned.

Likewise, this devices’ passive role caused lack of motivation on the students in most of the observed classes. Nonetheless, it should be noted that this is not entirely professors’ fault because on many other occasions, the students did not show the best
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disposition and some of them were using their mobiles to distract themselves during the classes.

According with the theory, “ICT should merge with new pedagogies and encourage dynamic classes at the social level, stimulating cooperative interaction, collaborative learning and group work” (UNESCO, 2008, p.7). This means that the correct use of ICT helps to create an environment in which, the students are encouraged to participate and learn thanks to the different technologies that teachers employ to develop their class.

On the other hand, we can infer that the professors had a limited vision of technology within these seven English courses. For example, Figure 4 and 5 show us that the only two most frequent activities of the technology were opening and projecting PowerPoint slides and the Cambridge English Empower virtual book.

Based on the above and the observations, we realize that although teachers use ICT in their classes, there is still lack of knowledge in order to explore a deeper view of technology use in the classroom. It must be noted that the professors participating in this research are aware of this challenge, and they call attention to this lack of training. This is why in the interviews, professor two agree that “they should have more training in ICT” (Professor 1, interview, 2019) and professor three adds that with the ICT training “they can know how to use and implement the resources it offers in their different classes” (Professor 3, interview, 2019). In addition, the theory says that teacher training must be continuous to allow teachers’ professional development and to facilitate the adaptation to the continuous changes, as well as, contribute to students’ performance (García, 1989; OEI, 2010).
After having analyzed the frequency, type of use and purpose of the devices in the English teaching. We will show the same analysis but based on the digital resources.

3. Digital resources

Figure 7 shows the different digital resources that were used during the 24 teacher’s observations. Professor 2 points out that “ICT is a valuable resource in the development of a class. That is why I make frequent use of ICT in my classes” (Professor 2, Interview 2019). Particularly, Figure 7 let us see the frequency of use of Cambridge English Empower (CEE henceforth), office tools (PowerPoint, Word, and Excel), Google Services (Gmail, Classroom, and Drive), digital file reader (PDF), audio player (VCL Media Player), and websites (Statista.com, Cambridge Dictionary, Englisch-hilfen).

Based on the observations, it can be seen that the teachers of the four classes observed constantly use digital resources for the development of their classes. Nevertheless,
Integrating ICT in teaching a foreign language

although teachers use technological tools with great potential, the use of these resources is limited. Besides, it can be seen in Figure 6 that teachers use various digital resources but the highest frequencies of use are limited to the internet, CEE, and PowerPoint. For that reason, in the section below, we will focus on the individual uses of the three most used digital resources during the 24 observations. Additionally, the purpose of those digital resources in English teaching will be discussed.

→ Types of use:

Although teachers were aware of the multiple applications of technology, in this case, they were just focused on the internet, CEE, and PowerPoint as shown in Figure 7. As mentioned earlier, this section will emphasize the frequency of use and the purpose of the most used digital resources during the observations.

Firstly, the internet was a digital tool with most of the presence in English classes. It was 17 times used by teachers in their classes as shown in Figure 7. It is important to keep in mind that the internet is a wireless information network that allows access to different services, resources and tools in cyberspace (Martínez, 2015). Figure 7 shows the diverse sources used by teachers in their classes. Google services and various web pages had a minimal appearance in each class. Moreover, regardless the great use of the internet, the functions fulfilled by this digital resource in these classes were limited and repetitive. However, Professor 3 explain that it is difficult to implement activities by means of internet because of the lack of connectivity (Professor 3, Interview 2019).
Secondly, it is necessary to highlight that CEE digital book had a great role during the development of the classes. Figure 7 shows that the frequency of use of CEE was 11 times during the time of data collection. On the other hand, Figure 8 shows that the digital book was mostly used for the development of activities. Nevertheless, it is important to note that the three teachers had different support techniques. For example, Professor 3 printed activities related to the topic and grouped students to do it. For teacher 2 was the support of the lessons using the board (explanations of specific points). In the case of teacher 1, it was the support of the topics with videos. However, Professor 1's classroom had sound issues. In this case, the video beam provided the sound. Besides, the loud sound of air conditioning interfered with listening activities.

Notwithstanding the support techniques, the book continued to be one of the main characters during the classes. According to Parcerisa, (2007), the use of the textbook is one of the didactic materials with the greatest incidence in classrooms and is the resource by excellence of the teachers. Nevertheless, the use of the book should be supported by
additional activities and depending on the needs of the student (Cockcroft, 1985). As a result, it was observed that the excessive use of the book generated dispersion, low participation and lack of attention.

![Figure 9. Uses of PowerPoint](image)

Finally, teacher 3 mostly used PowerPoint and it was 9 times used as seen in Figure 7. However, Professors 1 and 3 agreed to use this application to explain a topic. Figure 9 shows that PowerPoint was used to contextualize the topics (general explanation of the subject) and explain the activities to be carried out (explanation of qualification criteria, times of activities, characteristics, etc.). In addition, teacher 2 said that “... students should investigate and make presentations using ICT” (Professor 2, Interview 2019). By comparing the information provided by the Professor 2 with the observations, it was possible to demonstrate the use of PowerPoint by the students in presentations. (Dano, 2015) points out that PowerPoint used appropriately, becomes a powerful tool since it allows integrating diverse multimedia features. Nonetheless, according to the observations, teachers and students used PowerPoint in a basic level.
This study analyzed how some university professors at Universidad Santiago de Cali integrated ICT in their language lessons. Likewise this study focused on the attitudes and habits that students of the courses of English seven had about the use of ICT in foreign language learning process inside and outside the classroom. Additionally, this study sought to know about the teachers’ opinion regarding the application of ICT in the teaching of English and their use of technology in their lessons.

Concerning the attitudes and habits of the students regarding the use of ICT within and outside the classroom, it can be concluded that they do not expand the several possibilities that technology and internet offer because they focused only on very limited classroom applications. This behavior and conception of the students was a challenge that language professors and institutions should attend. Based on observations and analysis, we realize that professors allowed students to use technology inappropriately. So as a result, we observed that there is no good management of the classes by some professors and this made less optimal the development and learning during the classes. However, there was a better attitude and habit on the part of students when they used ICT outside of the class. This behavior appeared because some students were aware of the individual learning that they must have outside of class to improve their language skills. It is also necessary to emphasize the experience and knowledge that students have about ICT, and how this tool helped them in the formation and development of their English skills in order to integrate technology as a key element that allowed a better language learning experience.
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According to the opinions of the interviewed professors regarding the use of ICT in the teaching of English, they opined that technological tools are useful to motivate students in their learning process. Moreover, the professors said that technology allows them to get a wide range of educational material in order to support their activities and explanations in their class performance. At the same time, the interviewed professors pointed out that it is important to have knowledge about the use of technological tools in education because teacher training is urgently required. Finally, the professors of our study mentioned that technological devices allow students and professors to have communication outside the institutions in order to reinforce the lessons studied in classes which also permit them to send additional information to their students concerning the class.

Regarding the use of ICT by professors in English VII classes, we can conclude that there was a great usage of technological devices and digital resources in each class. Nevertheless, the technological infrastructure of the classrooms hindered the effectiveness of ICT usages in the classes. Hence, it is necessary to improve the technological infrastructure of the classrooms for better use of time and to enhance the learning and teaching process. Furthermore, there was a great variation of digital resources used by professors. However, the lack of professors training in technology made difficult for them to fully take advantage of the numerous digital resources that exist for more immeasurable English teaching based on the use of ICT. Lastly, reduced connectivity brings challenges for professors when they propose alternative techniques of supports in classes.

In general terms, despite the frequent presence of technology in the observed lessons, the professors and students neglected several additional alternatives that
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technology offers, this caused that language learning was only articulated with technology only to follow the digital book and to present some slides about the topics of the class. Therefore, language teachers need to go beyond the simple presentation of material and adopt a more active perspective of technological integration in the English classroom.

CHAPTER 6: RECOMMENDATIONS

According to the results obtained in our research about the integration of ICT in the teaching of a foreign language, the following recommendations are suggested. Firstly, universities should implement training courses for professors regarding the use of technologies for the development of the classes. In the context of our research, some professors mentioned that usually, language teachers have difficulties in the exploitation of technological tools in their classes. Secondly, it is suggested to invest in technological equipment for the language classrooms. This investment will allow students and professors to teach and to learn in different ways using different alternatives. At the same time, some classrooms in schools or universities do not have complete some technological devices such as speakers, computers, video projectors or complementary pieces such as the video projector cable that allows to connect to the computer or a CPU. The lack of these devices limits the pedagogical action of teachers and the myriad of possibilities in the English class. In the same way, institutions should invest in frequent maintenance on the electronic equipment.

Thirdly, it is recommended that professors implement activities using different ICT tools and complementary materials in order to motivate and awaken interest in students
Integrating ICT in teaching a foreign language
during their learning process. This recommendation is mentioned, because many times the
students use their mobile devices as an object of distraction during their classes and then
they do not understand anything about what the professor said or explained. Finally, it is
suggested that future researchers highlight the importance of applying technological
devices and understand the paramount role of technology in the development of
communicative skills. Future studies should focus on larger populations and the use of
technology in other courses besides languages.
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ANNEXES

1. Annex 1: Data collection tool

Use of ICT at the Santiago De Cali University and its applicability in English classes

TEACHERS INTERVIEW

CONCEPTION:

➢ Do teachers need to know about the use of technological tools in order to improve the lessons?
   YES ( ) NO ( ) Why?

➢ How important is the use of technological resources, as didactic support in the teaching processes?

➢ Do you consider that professors in the Program of Foreign Languages are well trained in the use of ICT?

FREQUENCY

➢ Do you plan your lessons thinking about the integration of ICT?
   YES ( ) NO ( )

➢ How often do you use technological resources to support your teaching work?

TYPES OF TECHNOLOGY

➢ Which ICT tools do you integrate to develop your English lessons?
➢ Which means of communication do you use to interact with your students outside the classroom? Why?

➢ Which Apps and gadgets do you use the most when getting ready and teaching the classes?

PURPOSE

➢ What are the advantages of using ICT in the classroom?

➢ What are the disadvantages of using ICT in the English classroom?

➢ Why do you use ICT in classes?

INFRASTRUCTURE

➢ Do you think the University has the necessary technological infrastructure?

   YES ( ) NO ( )

➢ Do you consider if there is a vision that includes the use of ICT as a key tool for the current projection to improve language teaching practices at the University?

➢ How important is the use of technological resources, as didactic support in the teaching processes?

➢ How often do you use technological resources to support your teaching work?

➢ Which ICT tools do you integrate to develop your English lessons?

➢ Which means of communication do you use to interact with your students outside the classroom? Why?

➢ Which Apps and gadgets do you use the most when getting ready and teaching the classes?

➢ Why do you use ICT in classes?
2. Annex 2: Data Collection Tool

Student’s observations

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<th># Of women</th>
<th># of men</th>
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<th>Computer</th>
<th>Note</th>
<th>General notes</th>
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3. Annex 3: Data Collection Tool

Teacher’s observations

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<th>Computer</th>
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<th>Speakers</th>
<th>Internet</th>
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<th>Baker</th>
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</table>
**Conventions:**
1. Office tools management
2. Web tools management

4. Annex 4: Data Collection Tool

**Student’s survey**

**A. PERSONAL INFORMATION:**

1) Age: ____

2) Sex:
   - Male ( )
   - Female ( )

3) Current semester: ____

**B. ACADEMIC USE OF ICT**

4) ¿Are you familiar with the term ICT?
   - Yes ( )
   - No ( )

5) Do you use the internet during your classes for academic purposes?
   - Yes ( )
   - No ( )

6) How frequently do you use technological tools in academic activities outside the classroom?
   - Never ( )
   - Hardly ever ( )
   - Sometimes ( )
Often ( )
Always ( )

7) Mention the technological tools that you use to improve your skills outside the classroom.
________________________________________________________________________________
________________________________________________________________________________

8) Are you aware of the technological resources that the University provides for academic development?
Yes ( ) No ( )

9) If your previous response was affirmative, please list the technological resources you have used.
________________________________________________________________________________
________________________________________________________________________________
________________________________________________________________________________

C. TECHNOLOGICAL INFRASTRUCTURE

10) Do you think the University has an adequate technological infrastructure?
Yes ( ) No ( )

11) Mark with an X which of the following technological resources are available in your classroom:

<table>
<thead>
<tr>
<th>Resource</th>
<th>Y</th>
<th>N</th>
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<tr>
<td>Computer or CPU</td>
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<td>Sound system</td>
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<tr>
<td>Internet access</td>
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12) Rate from 1 to 5 the following items:

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<tr>
<th>Resource</th>
<th>1= Lowest</th>
<th>5= Highest</th>
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13) Rate the current condition of the technological resources provided by the university.
Deficient ( )
D. PERSONAL ABILITIES IN THE USE OF ICT.

14) Do you consider it important to know about the use of technological tools?
Yes ( )  No ( )

15) Rate your ability in the use of the following software:

1= No ability 5= Expert

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16) Rate your ability in the use of the following computer and communication tools:

1= No ability 5= Expert

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<td>Google Drive</td>
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17) Rate your ability in the use of the following language learning Apps:

1= No ability 5= Expert

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</tbody>
</table>

18) Do you know of any other apps or social networks associated with language learning? Which ones?
E. TECHNICAL SUPPORT:

19) Read the following technical support options and then rate them from 1 to 5.

Attention: Service given by the workers in charge of the audiovisual classrooms.
Response time: The time you have to wait for the problem to be solved.
Problem solution: Adequacy of the solution.
Maintenance: The condition of the technological tools.

1= Lowest  5= Highest

<table>
<thead>
<tr>
<th>Attention</th>
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<tr>
<td>Delivery time</td>
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<tr>
<td>Problem solution</td>
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<td>Maintenance</td>
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5. Annex 5: consent format

FORMAT OF INFORMED CONSENT FOR PARTICIPATION IN INVESTIGATIONS

INVESTIGATION: Integrating ICT in Teaching a Foreign Language

Santiago de Cali, March 2019

I, ________________________________ once informed about the purposes, objectives and procedures that will be carried out in this research work; understanding that there is no risk for me or my colleagues. I authorize Valeria Carrillo, Shirley Melchor and Alejandro Narváez, students of the Bachelor’s Degree in Foreign Languages English - French the use and analysis of written information and in turn interviews through audio recordings, to collect data in the class “Integrated Skills classes in English VII” for the 2019A semester.
Additionally, I was informed that this investigation is carried out anonymously and that the information and results obtained from it will be treated confidentially and kept under the responsibility of the researchers.

I certify that this document has been read and understood by me in its entirety freely and spontaneously ______________________________

Thank you so much,